



# *Your Reliable Power Partner*

## Standard LED Driver Manufacturer

May  
2021



# INDEX

 : Premium series  
 : The best cost-performance series  
**C.P** : Constant Power Mode  
**C.C** : Constant Current Mode  
**C.V** : Constant Voltage Mode

## Plastic Case (Non PFC)

|    |                                                                                                             |       |
|----|-------------------------------------------------------------------------------------------------------------|-------|
| AP | C.V mode<br>APV-08/12/16/25/35<br>APV-08E/12E/16E<br>C.C mode<br>APC-08/12/16/25/35<br>APC-08E/12E/16E      | 7~9   |
| LP | C.V mode<br>LPL-18, LPH-18, LPVL-150<br>LPV-20/35/60/100/150<br>C.C mode<br>LPHC-18<br>LPC-20/35/60/100/150 | 10~13 |

## Plastic Case (with PFC+Cable)

|                                                                                         |                                                                                                       |       |
|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|-------|
| NPF    | C.V+C.C mode<br>NPF-40/60/90(D)<br>NPF-120(D)/200(V)                                                  | 15~16 |
| LPF                                                                                     | C.V+C.C mode<br>LPF-16(D)/25(D)/40(D)<br>LPF-60(D)/90(D)                                              | 17~18 |
| PWM  | C.V mode. PWM style output<br>PWM-40<br>PWM-60/90(DA/DA2)<br>PWM-120/200(DA/DA2)<br>PWM-60/120/200IOT | 19~20 |
| PWM-KN                                                                                  | C.V mode PWM style output<br>PWM-60/120/200KN                                                         | 19~20 |
| ODLV                                                                                    | C.V mode. PWM style output<br>ODLV-45(A)/65(A)                                                        | 21    |
| ODLC                                                                                    | C.C mode<br>ODLC-45(A)/65(A)<br>ODLC-45(DA)/65(DA)                                                    | 22    |
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| PCD                                                                                     | C.C mode. AC Phase-cut Dim<br>PCD-16/25/40/60                                                         | 24    |
| PLN                                                                                     | C.C mode<br>PLN-20/30/45/60<br>C.V+C.C mode<br>PLN-100                                                | 25    |
| HLN                                                                                     | C.V+C.C mode<br>HLN-40H/60H/80H                                                                       | 26    |

|     |                                                |       |
|-----|------------------------------------------------|-------|
| OWA | C.V+C.C mode<br>OWA-60/90E/U<br>OWA-120/200E/U | 27~28 |
| GSV | C.V mode.<br>GSV30/60                          | 29    |

## Plastic Case with Terminal Block (with PFC)

|         |                                                                                                 |       |
|---------|-------------------------------------------------------------------------------------------------|-------|
| SLD     | C.V+C.C mode<br>SLD-50/80                                                                       | 31    |
| LDC     | C.P mode<br>LDC-35(DA)<br>LDC-55(DA/DA2)/80(DA)                                                 | 32    |
| LCM     | C.C mode<br>LCM-25/40/60(DA/DA2/IOT)<br>LCM-40EO/60EO<br>LCM-40U(DA)/60U(DA)<br>LCM-40UEO/60UEO | 33~34 |
| LCM-KN  | C.C mode. KNX LED Driver<br>LCM-25/40/60-KN                                                     | 35    |
| IDLV    | C.V mode. PWM style output<br>IDLV-25/45/65(A)                                                  | 36    |
| IDLC    | C.C mode<br>IDLC-25/45/65(A),<br>IDLC-45/65-DA                                                  | 37    |
| PLM(-E) | C.C mode<br>PLM-12/25(E)                                                                        | 38    |
| PLC     | C.C mode<br>PLC-30/45/60<br>C.V+C.C mode<br>PLC-100                                             | 39    |

## Metal Case (with PFC)

|                                                                                         |                                                                       |       |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-------|
| XLG  | C.P mode<br>XLG-25/50/75/100(I)<br>XLG-150/200/240(I)                 | 41~43 |
| ELG                                                                                     | C.V+C.C mode<br>ELG-75/100/150/200<br>ELG-240/300                     | 44~46 |
| ELG-C                                                                                   | C.C mode<br>ELG-75/100/150/200-C<br>ELG-240-C<br>ELGT-150-C(class II) | 47~49 |

|                                                                                           |                                                                                                  |       |
|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------|
| ELGC                                                                                      | C.P mode<br>ELGC-300                                                                             | 49    |
| HLG    | C.V+C.C mode<br>HLG-40/60H<br>HLG-80/100/120H<br>HLG-150/185/240H<br>HLG-320/480/600H            | 51~55 |
| HLG-C  | C.C mode<br>HLG-60/80/120H-C<br>HLG-185/240H-C<br>HLG-320/480H-C                                 | 56~58 |
| HVG                                                                                       | C.V+C.C mode<br>HVG-65/100<br>HVG-150/240<br>HVG-320/480                                         | 59~61 |
| HVGC                                                                                      | C.C mode<br>HVGC-65/100/150<br>HVGC-240/320<br>C.P mode<br>HVGC-480/650(ADA/DA)<br>HVGC-1000(DA) | 62~65 |
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## Circular Metal Case (with PFC)

|                                                                                           |                                                                           |       |
|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|-------|
| XBG                                                                                       | C.P mode<br>XBG-100/160/240                                               | 68    |
| HBG  | C.C mode<br>HBG-60/100(DA)<br>C.V+C.C mode<br>HBG-160(DA)/200(DA)/240(DA) | 69~70 |
| HBGC                                                                                      | C.P mode<br>HBGC-300(ADA)                                                 | 71    |

## Metal Case

|     |                                              |    |
|-----|----------------------------------------------|----|
| ERP | C.V mode<br>ERP-200/350(Non PFC)<br>ERPF-400 | 72 |
|-----|----------------------------------------------|----|

## PCB Type (with PFC)

|       |                                                                   |    |
|-------|-------------------------------------------------------------------|----|
| HBG-P | C.C mode<br>HBG-60P/100P(DA)<br>C.V+C.C mode<br>HBG-160P(DA)/240P | 74 |
|-------|-------------------------------------------------------------------|----|

# New Products Overview

|      |                                                     |    |
|------|-----------------------------------------------------|----|
| IDPV | C.V mode PWM style output<br>IDPV-25(A)/45(A)/65(A) | 75 |
| IDPC | C.C mode<br>IDPC-25(A)/45(A)/65(A)<br>IDPC-45/65-DA | 76 |
| PLP  | C.C mode<br>PLP-30/45/60                            | 77 |
| HLP  | C.C mode<br>HLP-40H/60H/80H                         | 78 |

## DC-DC LED Driver

|                     |                                                           |       |
|---------------------|-----------------------------------------------------------|-------|
| DC-DC<br>LED Driver | C.C mode<br>LDH-25, LDH-45 (DA), LDH-65<br>NLDD-350~1400H | 80-85 |
|                     | LDDS-250~1000H                                            |       |
|                     | LDD-300~1500H                                             |       |
|                     | LDB-300~600L                                              |       |
|                     | LDD-350~1400H-DA<br>LDD-300~1500L                         |       |

## DC House

|                     |         |       |
|---------------------|---------|-------|
| DC-DC<br>LED Driver | NHDD-40 | 86~87 |
|---------------------|---------|-------|

## Accessory & Controller

|                                        |    |
|----------------------------------------|----|
| SPD-10-320S, SPD-10S, SPD-20/20HP      | 88 |
| ICL-16R/L Inrush current limiter       | 89 |
| PIR-045 Motion sensor                  | 90 |
| DAP-04(S01) DALI to PWM converter      | 91 |
| SDP-001 Smart Timer Dimming programmer | 91 |

## DALI-2 Digital lighting System

|                              |    |
|------------------------------|----|
| DLP-04 DALI Bus Power Supply | 93 |
| LCM-25/40/60DA2              | 93 |
| PWM-60/90/120/200DA2         | 93 |
| DLC-02                       | 94 |



|                  |       |
|------------------|-------|
| LCM-25/40/60KN   | 96~98 |
| PWM-60/120/200KN |       |
| DLC-02KN         |       |
| KDA-64 /KAA      |       |

|                      |                     |    |
|----------------------|---------------------|----|
| KNX System Component | KNX-20E-640         | 99 |
|                      | KNX-40E-1280        |    |
|                      | KSI-01U             |    |
|                      | KSR-01IP<br>KSC-01L |    |

|                            |         |
|----------------------------|---------|
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| Waterproof Connector       | 110     |

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## NPF/PWM/OWA

### 200W Plastic Case with PFC

- Constant Voltage output (PWM/OWA series)
- Constant Current + Constant Voltage mode (NPF series)
- Design with IP67
- Class II design
- 5 years warranty

### APPLICATIONS

LED strip lighting  
Indoor LED lighting  
LED decorative lighting  
Industrial field PC adaptor  
Portable Battery charger



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## LCM/PWM DALI-2 SERIES

### LCM Series 25/40/60W

### PWM Series 60/90/120/200W

- Built-in DALI-2 & push Dimming
- Constant Current output(LCM series)
- Constant Voltage output(PWM series)
- Class II power unit, no F.G.
- 5 years warranty(PWM series)
- 3 years warranty(LCM series)

### APPLICATIONS

Indoor LED lighting  
LED panel lighting  
LED decorative lighting  
LED architecture lighting



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## NLDD-H/LDDS-H

### DC-DC LED Driver Step down convertor

- Constant current output ;
- Wide output LED forward voltage
- Comply with BS EN61347 and BS EN55015 regulation
- Protections: Short circuit / Over temperature
- Built-in PWM and remote ON/OFF control

### APPLICATIONS

DC battery source lighting  
Portable lighting  
Commercial lighting  
DC 48V Track lighting  
For class III application



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## DLC-02 SERIES DALI-2 Controller

- DALI-2 multi-master application controller
- Two independent DALI Bus channels with built in bus power supply
- Built in 250V/10Ax4 relay
- Simplify configuration, Plug and Play
- Setting via web browser or PC

### APPLICATIONS

Office lighting  
Smart home lighting  
Luxury villa lighting  
LED indoor lighting  
Building automation system



# Quick Selection Map

AC/DC

AC/DC

NON-PFC

C.V

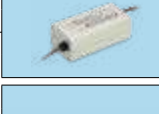
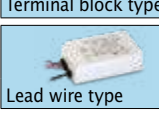
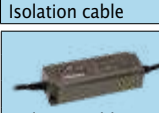
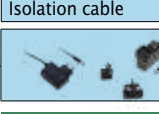
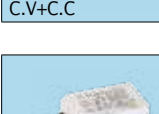
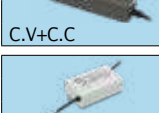
C.C

Plastic Case

PFC

C.V

C.C  
or  
C.V+C.C

|                         | Series                     | Dimension (Lx Wx H) | Page  |
|----------------------------------------------------------------------------------------------------------|----------------------------|---------------------|-------|
|                                                                                                          | APV-8                      | 60x 30x 23.5 mm     | 7     |
|                                                                                                          | APV-12/16                  | 77x 40x 29 mm       |       |
|                                                                                                          | APV-25/35                  | 84x 57x 29.5 mm     |       |
|                         | Series                     | Dimension (Lx Wx H) | Page  |
|                                                                                                          | APV-8E                     | 60x 30x 23.5 mm     | 9     |
|                                                                                                          | APV-12E/16E                | 77x 40x 29 mm       |       |
|                         | Series                     | Dimension (Lx Wx H) | Page  |
|                                                                                                          | LPL-18, LPH-18             | 140x 30x 22 mm      | 10~11 |
|                                                                                                          | LPV-20                     | 118x 35x 26 mm      |       |
|                                                                                                          | LPV-35                     | 148x 40x 30 mm      |       |
|                                                                                                          | LPV-60                     | 162.5x 42.5x 32 mm  |       |
|                                                                                                          | LPV-100                    | 190x 52x 37 mm      |       |
|                                                                                                          | LPV-150                    | 191x 63x 37.5 mm    |       |
|                                                                                                          | LPVL-150                   | 191x 63x 37.5 mm    |       |
|                         | Series                     | Dimension (Lx Wx H) | Page  |
|                                                                                                          | APC-8(E)                   | 60x 30x 23.5 mm     | 8~9   |
|                                                                                                          | APC-12/16(E)               | 77x 40x 29 mm       |       |
|                                                                                                          | APC-25/35                  | 84x 57x 29.5 mm     |       |
|                         | Series                     | Dimension (Lx Wx H) | Page  |
|                                                                                                          | LPHC-18                    | 140x 30x 22 mm      | 12~13 |
|                                                                                                          | LPC-20                     | 118x 35x 26 mm      |       |
|                                                                                                          | LPC-35                     | 148x 40x 30 mm      |       |
|                                                                                                          | LPC-60                     | 162.5x 42.5x 32 mm  |       |
|                                                                                                          | LPC-100                    | 190x 52x 37 mm      |       |
|                                                                                                          | LPC-150                    | 191x 63x 37.5 mm    |       |
| <br>C.V+C.C             | Series                     | Dimension (Lx Wx H) | Page  |
|                                                                                                          | OWA-60E/U                  | 130x 53x 35 mm      | 27    |
| <br>Terminal block type | Series                     | Dimension (Lx Wx H) | Page  |
|                                                                                                          | IDLV-25(A)                 | 110x 75x 22 mm      | 36    |
|                                                                                                          | IDLV-45(A)                 | 120 x 75 x 25 mm    |       |
|                                                                                                          | IDLV-65(A)                 | 130 x 75 x 25 mm    |       |
| <br>Lead wire type     | Series                     | Dimension (Lx Wx H) | Page  |
|                                                                                                          | ODLV-45(A)                 | 111x 77x 28.5 mm    | 21    |
|                                                                                                          | ODLV-65(A)                 | 121x 77x 28.5 mm    |       |
| <br>Isolation cable   | Series                     | Dimension (Lx Wx H) | Page  |
|                                                                                                          | PWM-40/60(DA/DA2)          | 150x 53x 35 mm      | 19~20 |
|                                                                                                          | PWM-90(DA/DA2)             | 171x 63x 37.5 mm    |       |
|                                                                                                          | PWM-120(DA/DA2)            | 191x 63x 37.5 mm    |       |
|                                                                                                          | PWM-200(DA/DA2) <b>NEW</b> | 195x 68x 39.5 mm    |       |
| <br>Isolation cable   | Series                     | Dimension (Lx Wx H) | Page  |
|                                                                                                          | PWM-60KN <b>NEW</b>        | 150x 53x 35 mm      | 19~20 |
|                                                                                                          | PWM-120KN <b>NEW</b>       | 191x 63x 37.5 mm    |       |
|                                                                                                          | PWM-200KN <b>NEW</b>       | 195x 68x 39.5 mm    |       |
| <br>C.V+C.C           | Series                     | Dimension (Lx Wx H) | Page  |
|                                                                                                          | GSV30/60 <b>NEW</b>        | 75.5x 32x 47.5 mm   | 29    |
| Input and output with cable                                                                              |                            |                     |       |
| <br>C.V+C.C           | Series                     | Dimension (Lx Wx H) | Page  |
|                                                                                                          | NPF-40/60(D)               | 150x 53x 35 mm      | 15~16 |
|                                                                                                          | NPF-90(D)                  | 171x 63x 37.5 mm    |       |
|                                                                                                          | NPF-120(D)                 | 191x 63x 37.5 mm    |       |
|                                                                                                          | NPF-200(V) <b>NEW</b>      | 195x 68x 39.5 mm    |       |
| <br>C.V+C.C           | Series                     | Dimension (Lx Wx H) | Page  |
|                                                                                                          | LPF-16/25(D)               | 148x 40x 32 mm      | 17~18 |
|                                                                                                          | LPF-40/60(D)               | 162.5x 43x 32 mm    |       |
|                                                                                                          | LPF-90(D)                  | 161x 61x 36 mm      |       |
| <br>C.V+C.C           | Series                     | Dimension (Lx Wx H) | Page  |
|                                                                                                          | ODLC-45(A)                 | 111x 77x 28.5 mm    | 22    |
|                                                                                                          | ODLC-45DA                  | 111x 77x 28.5 mm    |       |
|                                                                                                          | ODLC-65(A)                 | 121x 77x 28.5 mm    |       |
|                                                                                                          | ODLC-65DA                  | 121x 77x 28.5 mm    |       |
| <br>C.V+C.C           | Series                     | Dimension (Lx Wx H) | Page  |
|                                                                                                          | OWA-90E/U                  | 171x 63x 37.5 mm    | 27~28 |
|                                                                                                          | OWA-120E/U                 | 191x 63x 37.5 mm    |       |
|                                                                                                          | OWA-200E/U <b>NEW</b>      | 195x 68x 39.5 mm    |       |
| <br>C.V+C.C           | Series                     | Dimension (Lx Wx H) | Page  |
|                                                                                                          | PLD-16/25                  | 84x 57x 29.5 mm     | 23    |
|                                                                                                          | PLD-40/60                  | 128x 60x 31.5 mm    |       |
| <br>C.V+C.C           | Series                     | Dimension (Lx Wx H) | Page  |
|                                                                                                          | PCD-16/25                  | 84x 57x 29.5 mm     | 24    |
|                                                                                                          | PCD-40/60                  | 128x 60x 31.5 mm    |       |

C.P: Constant Power Mode  
C.C: Constant Current Mode  
C.V: Constant Voltage Mode

# Quick Selection Map

AC/DC

AC/DC

Plastic Case

PFC

C.C  
or  
C.V+C.C

## Input and output with cable

|  | Series      | Dimension (Lx Wx H) | Page |
|-----------------------------------------------------------------------------------|-------------|---------------------|------|
|                                                                                   | PLN-20      | 148.5x 38.5x 28 mm  | 25   |
|                                                                                   | PLN-30      | 145x 47x 30 mm      |      |
|                                                                                   | PLN-45/60   | 181x 61.5x 35 mm    |      |
|                                                                                   | PLN-100     | 200x 70.5x 35 mm    |      |
|  | Series      | Dimension (Lx Wx H) | Page |
|                                                                                   | HLN-40H/60H | 161x 61.5x 35 mm    | 26   |
|                                                                                   | HLN-80H     | 181x 61.5x 35 mm    |      |
|  | Series      | Dimension (Dx H)    | Page |
|                                                                                   | HBG-60      | φ110x 60.5          | 69   |

## Input and output with terminal block

|    | Series                   | Dimension (Lx Wx H) | Page  |
|-------------------------------------------------------------------------------------|--------------------------|---------------------|-------|
|                                                                                     | SLD-50                   | 280x 30x 16.8mm     | 31    |
|                                                                                     | SLD-80                   | 320x 30x 16.8mm     |       |
|    | Series                   | Dimension (Lx Wx H) | Page  |
|                                                                                     | IDLC-25(A)               | 110x 75x 22         | 37    |
|                                                                                     | IDLC-45(A)               | 120x 75x 25 mm      |       |
|                                                                                     | IDLC-45-DA               |                     |       |
|                                                                                     | IDLC-65(A)               | 130x 75x 25 mm      |       |
| IDLC-65-DA                                                                          |                          |                     |       |
|    | Series                   | Dimension (Lx Wx H) | Page  |
|                                                                                     | PLM-12/25(E)             | 145x 38x 22 mm      | 38    |
|   | Series                   | Dimension (Lx Wx H) | Page  |
|                                                                                     | LCM-25(DA/IOT/KN/DA2)    | 105x 68x 23 mm      | 33~35 |
|                                                                                     | LCM-40/60(DA/IOT/KN/DA2) | 123.5x 81.5x 23 mm  |       |
|                                                                                     | LCM-40EO/60EO            | 123.5x 81.5x 23 mm  |       |
|                                                                                     | LCM-40U/60U(DA)          |                     |       |
|                                                                                     | LCM-40UEO/60UEO          |                     |       |
|                                                                                     |                          |                     |       |
|  | Series                   | Dimension (Lx Wx H) | Page  |
|                                                                                     | PLC-30                   | 160x 46x 30 mm      | 39    |
|                                                                                     | PLC-45/60                | 181.5x 62x 35 mm    |       |
|                                                                                     | PL C-100                 | 200.5x 69.5x 35 mm  |       |
|                                                                                     |                          |                     |       |

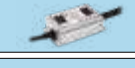
|  | Series      | Dimension (Lx Wx H) | Page  |
|-------------------------------------------------------------------------------------|-------------|---------------------|-------|
|                                                                                     | ELG-75(DA)  | 180x 63x 35.5 mm    | 44~46 |
|                                                                                     | ELG-100(DA) | 199x 63x 35.5 mm    |       |
|                                                                                     | ELG-150(DA) | 219x 63x 35.5 mm    |       |
|                                                                                     | ELG-200(DA) | 244x 71x 37.5 mm    |       |
|                                                                                     | ELG-240(DA) | 246x 77x 39.5 mm    |       |

|  | Series        | Dimension (Lx Wx H)  | Page  |
|-------------------------------------------------------------------------------------|---------------|----------------------|-------|
|                                                                                     | HLG-40H/60H   | 171x 61.5x 36.8 mm   | 51~55 |
|                                                                                     | HLG-80H       | 195.6x 61.5x 38.8 mm |       |
|                                                                                     | HLG-100H/120H | 220x 68x 38.8 mm     |       |
|                                                                                     | HLG-150H/185H | 228x 68x 38.8 mm     |       |
|                                                                                     | HLG-240H      | 244.2x 68x 38.8 mm   |       |
|                                                                                     | HLG-320H      | 252x 90x 43.8 mm     |       |
|                                                                                     | HLG-480H      | 262x 125x 43.8 mm    |       |
|                                                                                     | HLG-600H      | 280x 144x 48.5 mm    |       |

|  | Series  | Dimension (Lx Wx H) | Page  |
|-------------------------------------------------------------------------------------|---------|---------------------|-------|
|                                                                                     | HVG-65  | 189x 61.5x 36.8 mm  | 59~61 |
|                                                                                     | HVG-100 | 236x 68x 38.8 mm    |       |
|                                                                                     | HVG-150 | 245x 68x 38.8 mm    |       |
|                                                                                     | HVG-240 | 254.2x 68x 38.8 mm  |       |
|                                                                                     | HVG-320 | 262x 90x 43.8 mm    |       |
|                                                                                     | HVG-480 | 262x 125x 43.8 mm   |       |

|  | Series      | Dimension (Dx H) | Page  |
|-------------------------------------------------------------------------------------|-------------|------------------|-------|
|                                                                                     | HBG-100(DA) | φ130x 66.5 mm    | 69~70 |
|                                                                                     | HBG-160(DA) | φ151.68x 66.5    |       |
|                                                                                     | HBG-200(DA) |                  |       |
|                                                                                     | HBG-240(DA) |                  |       |

| <br>C.V | Series           | Dimension (Lx Wx H) | Page |
|--------------------------------------------------------------------------------------------|------------------|---------------------|------|
|                                                                                            | ERP-200(NON PFC) | 220x 110x 40 mm     | 72   |
|                                                                                            | ERP-350(NON PFC) | 220.4x 130x 48 mm   |      |
|                                                                                            | ERP-400          |                     |      |

|  | Series    | Dimension (Lx Wx H) | Page |
|-------------------------------------------------------------------------------------|-----------|---------------------|------|
|                                                                                     | XLG-25/50 | 105x 63x 30 mm      | 41   |

|  | Series               | Dimension (Lx Wx H) | Page  |
|-------------------------------------------------------------------------------------|----------------------|---------------------|-------|
|                                                                                     | XLG-75/100           | 140x 63x 30 mm      | 42~43 |
|                                                                                     | XLG-150              | 180x 63x 35 mm      |       |
|                                                                                     | XLG-200              | 199x 63x 35 mm      |       |
|                                                                                     | XLG-240              | 219x 63x 30 mm      |       |
|                                                                                     | DC 12V/24V Available |                     |       |

Metal Case

PFC

C.V+C.C

Metal Case

PFC

C.C or C.P

C.P: Constant Power Mode  
C.C: Constant Current Mode  
C.V: Constant Voltage Mode

# Quick Selection Map

AC/DC

AC/DC

Metal Case

PFC

C.C or C.P

|  | Series        | Dimension (Lx Wx H) | Page  |
|-----------------------------------------------------------------------------------|---------------|---------------------|-------|
|                                                                                   | ELG-75-C(DA)  | 180x 63x 35.5 mm    | 47~49 |
|                                                                                   | ELG-100-C(DA) | 199x 63x 35.5 mm    |       |
|                                                                                   | ELG-150-C(DA) | 219x 63x 35.5 mm    |       |
|                                                                                   | ELGT-150-C    |                     |       |
|                                                                                   | ELG-200-C(DA) | 244x 71x 37.5 mm    |       |
|                                                                                   | ELG-240-C(DA) |                     |       |
|                                                                                   | ELGC-300(ADA) | 246x 77x 39.5 mm    |       |

|  | Series          | Dimension (Lx Wx H)  | Page  |
|-----------------------------------------------------------------------------------|-----------------|----------------------|-------|
|                                                                                   | HLG-60H-C       | 171x 61.5x 36.8 mm   | 56~58 |
|                                                                                   | HLG-80H-C       | 195.6x 61.5x 38.8 mm |       |
|                                                                                   | HLG-120H-C      | 220x 68x 38.8 mm     |       |
|                                                                                   | HLG-185H-C      | 228x 68x 38.8 mm     |       |
|                                                                                   | HLG-240H-C      | 244.2x 68x 38.8 mm   |       |
|                                                                                   | HLG-320H-C(ADA) | 252x 90x 43.8 mm     |       |
|                                                                                   | HLG-480H-C      | 262x 125x 43.8 mm    |       |

|  | Series        | Dimension (Lx Wx H) | Page  |
|-----------------------------------------------------------------------------------|---------------|---------------------|-------|
|                                                                                   | HVGC-65       | 189x 61.5x 36.8 mm  | 62~65 |
|                                                                                   | HVGC-100      | 236x 68x 38.8 mm    |       |
|                                                                                   | HVGC-150      | 245x 68x 38.8 mm    |       |
|                                                                                   | HVGC-240      | 254.2x 68x 38.8 mm  |       |
|                                                                                   | HVGC-320      | 262x 90x 43.8 mm    |       |
|                                                                                   | HVGC-480(ADA) | 262x 125x 43.8 mm   |       |
|                                                                                   | HVGC-650(DA)  | 280x 144x 48.5mm    |       |
|                                                                                   | HVGC-1000(DA) | 310x 144x 48.5mm    |       |

|  | Series | Dimension (Lx Wx H) | Page |
|------------------------------------------------------------------------------------|--------|---------------------|------|
|                                                                                    | FDL-65 | 151x 53x 31.5 mm    | 65   |

|  | Series  | Dimension (Dx H) | Page |
|-------------------------------------------------------------------------------------|---------|------------------|------|
|                                                                                     | XBG-100 | φ151.5x 60 mm    | 68   |
|                                                                                     | XBG-160 | φ130x 56 mm      |      |
|                                                                                     | XBG-240 | φ191x 63 mm      |      |

|  | Series        | Dimension (Dx H) | Page |
|-------------------------------------------------------------------------------------|---------------|------------------|------|
|                                                                                     | HBGC-300(ADA) | φ191.5x 69 mm    | 71   |

|  | Series         | Dimension (Lx Wx H) | Page |
|-------------------------------------------------------------------------------------|----------------|---------------------|------|
|                                                                                     | LDC-35(DA)     | 280x 30x 21 mm      | 32   |
|                                                                                     | LDC-55(DA/DA2) | 320x 30x 21 mm      |      |
|                                                                                     | LDC-80(DA)     | 360x 30x 21 mm      |      |

PCB Type

PFC

C.V

C.C

|  | Series     | Dimension (Lx Wx H)  | Page |
|-------------------------------------------------------------------------------------|------------|----------------------|------|
|                                                                                     | IDPV-25(A) | 114.5x 72.5x 20 mm   | 75   |
|                                                                                     | IDPV-45(A) | 120 x 66.5 x 20.5 mm |      |
|                                                                                     | IDPV-65(A) | 130 x 67.5 x 20.5 mm |      |

|  | Series       | Dimension (Dx H) | Page |
|-------------------------------------------------------------------------------------|--------------|------------------|------|
|                                                                                     | HBG-60-P     | φ99x 26          | 74   |
|                                                                                     | HBG-100P(DA) | φ104x 34         |      |
|                                                                                     | HBG-160P(DA) | φ124.6x 34       |      |
|                                                                                     | HBG-240P     | φ144x 31         |      |

|  | Series     | Dimension (Lx Wx H)  | Page |
|-------------------------------------------------------------------------------------|------------|----------------------|------|
|                                                                                     | IDPC-25(A) | 114.5x 72.5x 20 mm   | 76   |
|                                                                                     | IDPC-45(A) | 120 x 66.5 x 20.5 mm |      |
|                                                                                     | IDPC-45-DA |                      |      |
|                                                                                     | IDPC-65(A) | 130 x 67.5 x 20.5 mm |      |
|                                                                                     | IDPC-65-DA |                      |      |

|  | Series    | Dimension (Lx Wx H)  | Page |
|-------------------------------------------------------------------------------------|-----------|----------------------|------|
|                                                                                     | PLP-30    | 101.6x 50.8x 26.6 mm | 77   |
|                                                                                     | PLP-45/60 | 101.6x 50.8x 29.6 mm |      |

|  | Series      | Dimension (Lx Wx H) | Page |
|-------------------------------------------------------------------------------------|-------------|---------------------|------|
|                                                                                     | HLP-40H/60H | 147x 53x 27 mm      | 78   |
|                                                                                     | HLP-80H     | 167x 53x 29.5 mm    |      |

C.P: Constant Power Mode  
C.C: Constant Current Mode  
C.V: Constant Voltage Mode

# Quick Selection Map

DC/DC

## DC/DC

### Plastic Case

Step-up  
LED Driver

C.C

| Series     | Dimension (Lx Wx H) | Page  |
|------------|---------------------|-------|
| LDH-25     | 52.4x 27.2x 24 mm   | 80~81 |
| LDH-45(DA) | 75x 53x 22.7 mm     |       |
| LDH-65     | 75x 53x 22.7 mm     |       |

Step-down  
LED Driver

C.C

| Series                    | Dimension (Lx Wx H) | Page  |
|---------------------------|---------------------|-------|
| NLDD-350~1400H <b>NEW</b> | 32.1x 20.5x 12.5 mm | 82~87 |
| LDDS-250~1000H <b>NEW</b> | 47x 12x 7 mm        |       |
| LDD-300~1500H             | 31.8x 20.3x 12.2 mm |       |
| LDD-300~700L              | 22.6x 9.9x 8.9 mm   |       |
| LDD-1000~1500L            | 31.8x 20.3x 12.2 mm |       |
| NHDD-40 <b>NEW</b>        | 31.2x 20.5x 12.5 mm |       |

| Series            | Dimension (Lx Wx H) | Page |
|-------------------|---------------------|------|
| LDD-350~1400H-DA  | 40.6x 23.5x 10.1 mm | 84   |
| LDD-350~1400H-WDA |                     |      |

Buck-boost  
LED Driver

C.C

| Series         | Dimension (Lx Wx H) | Page |
|----------------|---------------------|------|
| LDB-300~600L/W | 31.8x 20.3x 12.2 mm | 83   |

### ACCESSORIES

Surge Protection Device

| Series      | Dimension (Lx Wx H)   | Page |
|-------------|-----------------------|------|
| SPD-20      | 90x 70x 50 mm         | 88   |
| SPD-20HP    | 71.6x 67.7x 32 mm     |      |
| SPD-10-320S | 85x 37x 40 mm         |      |
| SPD-10S     | 56.76 x 46.36 x 26 mm |      |

Inrush Current Limiter

| Series  | Dimension (Lx Wx H) | Page |
|---------|---------------------|------|
| ICL-16R | 35x 90x 54.5 mm     | 89   |
| ICL-16L | 175x 42x 24 mm      |      |

Motion Sensor

| Series  | Dimension (Dx H) | Page |
|---------|------------------|------|
| PIR-045 | 60*71.3mm        | 89   |

DALI to PWM Converter

| Series             | Dimension (Lx Wx H) | Page |
|--------------------|---------------------|------|
| DAP-04, DAP-04-S01 | 165x 46x 23 mm      | 90   |

Smart Timer Dimming

| Series  | Dimension (Lx Wx H) | Page |
|---------|---------------------|------|
| SDP-001 | 165x 46x 23 mm      | 91   |

C.P: Constant Power Mode  
C.C: Constant Current Mode  
C.V: Constant Voltage Mode

# Quick Selection Map

DC/DC

## Building Automation System

### DALI-2 Product Solution

DALI Bus Power



| Series  | Dimension (Lx Wx H) | Page |
|---------|---------------------|------|
| DLP-04L | 145x 38x 22 mm      | 93   |
| DLP-04R | 35x 90x 54.5 mm     |      |

DALI Constant Current Mode LED Driver



| Series                  | Dimension (Lx Wx H) | Page |
|-------------------------|---------------------|------|
| LCM-25DA2 <b>NEW</b>    | 105x 68x 23 mm      | 93   |
| LCM-40/60DA2 <b>NEW</b> | 123.5x 81.5x 23 mm  |      |

DALI Constant Voltage Mode LED Driver



| Series                | Dimension (Lx Wx H) | Page |
|-----------------------|---------------------|------|
| PWM-60DA2 <b>NEW</b>  | 150x 53x 35 mm      | 93   |
| PWM-90DA2 <b>NEW</b>  | 171x 63x 37.5 mm    |      |
| PWM-120DA2 <b>NEW</b> | 191x 63x 37.5 mm    |      |
| PWM-200DA2 <b>NEW</b> | 195x 68x 39.5 mm    |      |

DALI-2 Controller



| Series            | Dimension (Lx Wx H) | Page |
|-------------------|---------------------|------|
| DLC-02 <b>NEW</b> | 144x 90x 58mm       | 94   |

### KNX Product Solution

KNX Constant Current Mode LED Driver



| Series      | Dimension (Lx Wx H) | Page |
|-------------|---------------------|------|
| LCM-25KN    | 105x 68x 23mm       | 97   |
| LCM-40/60KN | 123.5x 81.5x 23mm   |      |

KNX Constant Voltage Mode LED Driver



| Series               | Dimension (Lx Wx H) | Page |
|----------------------|---------------------|------|
| PWM-60KN             | 150x 53x 35mm       | 97   |
| PWM-120KN            | 191x 63x 37.5 mm    |      |
| PWM-200KN <b>NEW</b> | 195x 68x 39.5 mm    |      |

KNX to DALI Gateway



| Series               | Dimension (Lx Wx H) | Page |
|----------------------|---------------------|------|
| DLC-02-KN <b>NEW</b> | 144x 90x 58mm       | 98   |

KNX LED actuator / dimmer



| Series   | Dimension (Lx Wx H) | Page |
|----------|---------------------|------|
| KAA-4R4V | 90x 72x 57 mm       | 98   |

KNX Universal Actuator



| Series | Dimension (Lx Wx H) | Page |
|--------|---------------------|------|
| KAA-8R | 90x 72x 57 mm       | 98   |

KNX System component



| Series                   | Dimension (Lx Wx H) | Page |
|--------------------------|---------------------|------|
| KNX-20E-640              | 52.5x 90x 54.5mm    | 99   |
| KNX-40E-1280             | 72x 90x 57mm        |      |
| KSI-01U/KSR-01IP/KSC-01L | 36x 90x 71mm        |      |

C.P: Constant Power Mode  
C.C: Constant Current Mode  
C.V: Constant Voltage Mode

# Plastic Case

Non PFC+Lead wire

- 7 AP Series (8~35W)
- 9 AP-E Series (8~16W)
- 10 LP Series (18~150W)

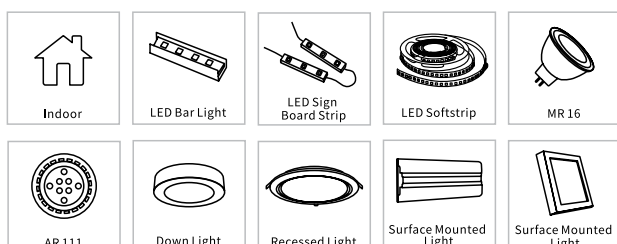


3BROTHERS  
CERTIFIED PARTNER

The AP and LP series are the entry-level products with constant voltage and constant current mode choices . Most DC 12V and 24V can be used with general light bar/light strip or advertising light box application. Moreover waterproof function is available for LP series .

Other constant current application can be used according to the COB LED or SMD LED specifications selected. Currently, the Driver current range can cover from 250/350/500/700/1050/1400mA to maximum 3150 mA (150W) for all kinds of indoor lighting applications.

## Application



# AP series 8~35W

## Features

- Constant voltage mode
- Universal AC input / Full range
- No load power consumption <0.5W for APV-8
- Withstand 300VAC surge input for 5 seconds (APV-25/35)
- Fully isolated plastic case with IP42 level
- Isolation class II, no F.G.
- Class 2 power unit / Pass LPS (except for APV-8)
- Economic, high reliability
- Suitable for LED strip applications
- Protections: Short circuit / Overload / Over voltage
- 2 years warranty

|                                                                                                     | APV-8                                                                                                                                                                      | APV-12/16                                                                                              | APV-25/35                                                                                                                  |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <div>INPUT</div>   |                                                                                           |                      |                                         |
| <div>OUTPUT</div>  |                                                                                                                                                                            |                                                                                                        |                                                                                                                            |
| AC input voltage range                                                                              | 90~264VAC ; 127~370VDC                                                                                                                                                     |                                                                                                        |                                                                                                                            |
| AC inrush current (max.)                                                                            | Cold start, 70A at 230VAC                                                                                                                                                  | APV-12: Cold start, 70A at 230VAC<br>APV-16: Cold start, 50A at 230VAC                                 | Cold start, 45A at 230VAC                                                                                                  |
| Overload protection                                                                                 | >105% rated output power (110%~160% for APV-35) hiccup mode, auto-recovery                                                                                                 |                                                                                                        |                                                                                                                            |
| Over voltage protection                                                                             | 115%~135% rated output voltage                                                                                                                                             | 110%~145% rated output voltage                                                                         |                                                                                                                            |
| Withstand voltage                                                                                   | I/P-O/P: 3.75kVAC                                                                                                                                                          |                                                                                                        | I/P-O/P: 3kVAC                                                                                                             |
| Working temperature                                                                                 | -30~+70°C (refer to output derating curve)                                                                                                                                 |                                                                                                        |                                                                                                                            |
| Vibration                                                                                           | 10~500Hz, 2G 10 minutes /1 cycle, period for 60 minutes each along X, Y, Z axes                                                                                            |                                                                                                        |                                                                                                                            |
| Safety standards                                                                                    | UL8750, BS EN61347-2-13 (LVD);<br>BIS IS15885(except for 5V);<br>EAC TP TC 004 approved;<br>BS EN62368-1 (LVD) ,<br>BS EN61347-1,-2-13; GB19510.14,<br>GB19510.1(optional) | UL8750, ENEC BS EN61347-1/2-13;<br>GB19510.14, GB19510.1, EAC TP TC<br>004; BIS IS15885(except for 5V) | UL8750, EAC TP TC 004 approved,<br>BIS IS15885(except for 15V, 36V);<br>BS EN62368-1 (LVD)                                 |
| EMC standards                                                                                       | BS EN55024, BS EN55032, BS EN61000-3-2 class A,<br>BS EN61000-3-3, EAC TP TC 020,<br>BS EN61000-4-2,3,4,5,6,8,11, BS EN61547; GB17743,<br>GB17625.1(optional)              |                                                                                                        | BS EN55024, BS EN55032 classB,<br>BS EN61000-3-2 class A,<br>BS EN61000-3-3, EAC TP TC 020,<br>BS EN61000-4-2,3,4,5,6,8,11 |
| Connection                                                                                          | Input                                                                                                                                                                      | UL rated, 18AWGx2C (15cm)                                                                              |                                                                                                                            |
|                                                                                                     | Output                                                                                                                                                                     | UL rated, 20AWGx2C (15cm)                                                                              |                                                                                                                            |
| Dimension (LxWxH)(mm)                                                                               | 60x 30x 23.5                                                                                                                                                               | 77x 40x 29                                                                                             | 84x 57x 29.5                                                                                                               |

### APV-8 Series

| Model No. | Output       | Tol. | R&N   | Effi. |
|-----------|--------------|------|-------|-------|
| APV-8-5   | 5V, 0~1.4A   | ±5%  | 250mV | 74%   |
| APV-8-12  | 12V, 0~0.67A | ±5%  | 250mV | 80%   |
| APV-8-24  | 24V, 0~0.34A | ±5%  | 300mV | 81%   |

### APV-12 Series

| Model No. | Output      | Tol. | R&N   | Effi. |
|-----------|-------------|------|-------|-------|
| APV-12-5  | 5V, 0~2A    | ±5%  | 100mV | 76%   |
| APV-12-12 | 12V, 0~1A   | ±5%  | 120mV | 82%   |
| APV-12-15 | 15V, 0~0.8A | ±5%  | 120mV | 82%   |
| APV-12-24 | 24V, 0~0.5A | ±5%  | 150mV | 84%   |

### APV-16 Series

| Model No. | Output       | Tol. | R&N   | Effi. |
|-----------|--------------|------|-------|-------|
| APV-16-5  | 5V, 0~2.6A   | ±5%  | 100mV | 76%   |
| APV-16-12 | 12V, 0~1.25A | ±5%  | 120mV | 80%   |
| APV-16-15 | 15V, 0~1.00A | ±5%  | 120mV | 81%   |
| APV-16-24 | 24V, 0~0.67A | ±5%  | 150mV | 83%   |

### APV-25 Series

| Model No. | Output       | Tol. | R&N   | Effi. |
|-----------|--------------|------|-------|-------|
| APV-25-5  | 5V, 0~3.5A   | ±5%  | 120mV | 75.5% |
| APV-25-12 | 12V, 0~2.1A  | ±5%  | 150mV | 82.0% |
| APV-25-15 | 15V, 0~1.68A | ±5%  | 150mV | 83.0% |
| APV-25-24 | 24V, 0~1.05A | ±5%  | 150mV | 83.0% |
| APV-25-36 | 36V, 0~0.7A  | ±5%  | 150mV | 84.0% |

### APV-35 Series

| Model No. | Output      | Tol. | R&N   | Effi. |
|-----------|-------------|------|-------|-------|
| APV-35-5  | 5V, 0~5A    | ±5%  | 120mV | 76.5% |
| APV-35-12 | 12V, 0~3A   | ±5%  | 150mV | 83.0% |
| APV-35-15 | 15V, 0~2.4A | ±5%  | 150mV | 84.0% |
| APV-35-24 | 24V, 0~1.5A | ±5%  | 180mV | 84.0% |
| APV-35-36 | 36V, 0~1.0A | ±5%  | 180mV | 85.0% |

Note: 1. These products are not intended for lighting applications in the EU. (In the EU NPF/LPF/XLG series are recommended)  
2. For CCC certificate type, please contact MEAN WELL for details.

# AP series 8~35W

## Features

- **Constant current mode**
- Universal AC input / Full range
- No load power consumption <0.5W for APC-8
- Withstand 300VAC surge input for 5 seconds (APC-25/35)
- Fully isolated plastic case with IP42 level
- Isolation class II, no F.G.
- Class 2 power unit / Pass LPS  
(except for APC-8, APC-25-350 and APC-35-350/500)
- Economic, high reliability
- Small and compact size
- Suitable for LED strip applications
- Protections:  
Short circuit / Over voltage (except for APC-8)
- 2 years warranty

|                                                                                                     | APC-8                                                                                                                                      | APC-12/16                                                                                                                  | APC-25/35                                                                                                                  |
|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <div>INPUT</div>   |                                                           |                                          |                                         |
| <div>OUTPUT</div>  |                                                                                                                                            |                                                                                                                            |                                                                                                                            |
| AC input voltage range                                                                              | 90~264VAC ; 127~370VDC                                                                                                                     |                                                                                                                            |                                                                                                                            |
| AC inrush current (max.)                                                                            | Cold start,<br>70A at 230VAC                                                                                                               | APC-12: Cold start, 70A at 230VAC<br>APC-16: Cold start, 45A at 230VAC                                                     | Cold start, 45A at 230VAC                                                                                                  |
| Over voltage protection                                                                             | None                                                                                                                                       | 110%~145% rated output voltage                                                                                             |                                                                                                                            |
| Withstand voltage                                                                                   | I/P-O/P: 3.75kVAC                                                                                                                          |                                                                                                                            | I/P-O/P: 3kVAC                                                                                                             |
| Working temperature                                                                                 | -30~+70°C (refer to output derating curve)                                                                                                 |                                                                                                                            |                                                                                                                            |
| Vibration                                                                                           | 10~500Hz, 2G 10 minutes /1 cycle, period for 60 minutes each along X, Y, Z axes                                                            |                                                                                                                            |                                                                                                                            |
| Safety standards                                                                                    | UL8750, EAC TP TC 004,<br>BIS 15885 approved;<br>BSEN62368-1(LVD), EN61347-1,<br>BS EN61347-2-13 (LVD);<br>GB19510.14, GB19510.1(optional) | UL8750, UL1310, EAC TP TC 004,<br>BIS 15885 approved;<br>Design refer to TUV EN61347-1;<br>GB19510.14, GB19510.1(optional) | UL8750 & UL1310(except for APC-25-350 & APC-35-350/500), EAC TP TC 004, BIS IS15885 approved, BS EN62368-1(LVD)            |
| EMC standards                                                                                       | BS EN61000-3-2 class A, BS EN61000-3-3, BS EN55032, BS EN55024<br>BS EN61000-4-2,3,4,5,6,8,11, EAC TP TC 020;<br>B17743/17625.1(optional)  |                                                                                                                            | BS EN55032 class B, BS EN55024<br>BS EN61000-3-2 class A,<br>BS EN61000-3-3, EAC TP TC 020,<br>BS EN61000-4-2,3,4,5,6,8,11 |
| Connection                                                                                          | Input                                                                                                                                      | UL rated, 18AWGx2C (15cm)                                                                                                  |                                                                                                                            |
|                                                                                                     | Output                                                                                                                                     | UL rated, 20AWGx2C (15cm)                                                                                                  |                                                                                                                            |
| Dimension (LxWxH)(mm)                                                                               | 60x 30x 23.5                                                                                                                               | 77x 40x 29                                                                                                                 | 84x 57x 29.5                                                                                                               |

### APC-8 Series



| Model No. | Output        | Tol. | R&N   | Effi. |
|-----------|---------------|------|-------|-------|
| APC-8-250 | 16~32V, 250mA | ±8%  | 350mV | 82.5% |
| APC-8-350 | 11~23V, 350mA | ±8%  | 300mV | 81.5% |
| APC-8-500 | 8~16V, 500mA  | ±8%  | 300mV | 81%   |
| APC-8-700 | 6~11V, 700mA  | ±8%  | 250mV | 80%   |

### APC-12 Series



| Model No.  | Output       | Tol. | R&N   | Effi. |
|------------|--------------|------|-------|-------|
| APC-12-350 | 9~36V, 350mA | ±8%  | 300mV | 82%   |
| APC-12-700 | 9~18V, 700mA | ±8%  | 250mV | 80%   |

### APC-16 Series



| Model No.  | Output        | Tol. | R&N   | Effi. |
|------------|---------------|------|-------|-------|
| APC-16-350 | 12~48V, 350mA | ±8%  | 300mV | 84%   |
| APC-16-700 | 9~24V, 700mA  | ±8%  | 250mV | 83%   |

### APC-25 Series



| Model No.   | Output        | Tol. | R&N   | Effi. |
|-------------|---------------|------|-------|-------|
| APC-25-350  | 25~70V, 350mA | ±8%  | 300mV | 83%   |
| APC-25-500  | 15~50V, 500mA | ±8%  | 300mV | 83%   |
| APC-25-700  | 11~36V, 700mA | ±8%  | 300mV | 83%   |
| APC-25-1050 | 9~24V, 1050mA | ±8%  | 300mV | 83%   |

### APC-35 Series



| Model No.   | Output         | Tol. | R&N   | Effi. |
|-------------|----------------|------|-------|-------|
| APC-35-350  | 28~100V, 350mA | ±8%  | 350mV | 84%   |
| APC-35-500  | 25~70V, 500mA  | ±8%  | 350mV | 84%   |
| APC-35-700  | 15~50V, 700mA  | ±8%  | 350mV | 84%   |
| APC-35-1050 | 11~33V, 1050mA | ±8%  | 350mV | 84%   |

Note: 1. These products are not intended for lighting applications in the EU. (In the EU NPF/LPF/XLG series are recommended)  
2. For CCC certificate type, please contact MEAN WELL for details.

# AP-E series 8~16W

## Features

- Constant voltage mode for APV-E series
- Constant current mode for APC-E series
- 180~264VAC input only
- No load power consumption < 0.5W
- Fully isolated plastic case
- Isolation class II, no F.G.
- Meet EN6100-3-2 Harmonics current
- Economic, high reliability
- Suitable for LED luminaire and strip application
- Protections:  
Short circuit / Overload (APV-E series only) / Over voltage (except for APC-8E)
- 2 years warranty

| APV/APC-8E                                                                        |        | APV/APC-12E/16E                                                                                            |
|-----------------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------------------------------|
|  |        |                          |
| AC input voltage range                                                            |        | 180 ~ 264VAC ; 254 ~ 370VDC                                                                                |
| AC inrush current (max.)                                                          |        | Cold start, 70A at 230VAC (50A for APV-16E, 45A for APC-16E)                                               |
| Over voltage protection                                                           |        | 115%~135% rated output voltage (except for APC-8E)                                                         |
| Withstand voltage                                                                 |        | I/P-O/P: 3.75kVAC                                                                                          |
| Working temperature                                                               |        | -30~+70°C (refer to output derating curve)                                                                 |
| Vibration                                                                         |        | 10~500Hz, 2G 10 minutes /1 cycle, period for 60 minutes each along X, Y, Z axes                            |
| Safety standards                                                                  |        | ENEC BS EN61347-1, BS EN61347-2-13, BS EN62384, EAC TP TC 004 approved                                     |
| EMC standards                                                                     |        | BS EN55015, BS EN61000-3-2 class A, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, EAC TP TC 020 |
| Connection                                                                        | Input  | H03VVH2-F 0.75mm <sup>2</sup> x2C (15cm)                                                                   |
|                                                                                   | Output | UL rated, 20AWGx2C (15cm)                                                                                  |
| Dimension (LxWxH)(mm)                                                             |        | 60x 30x 23.5                                                                                               |

## APV-8E Series



| Model No. | Output       | Tol. | R&N   | Effi. |
|-----------|--------------|------|-------|-------|
| APV-8E-5  | 5V, 0~1.4A   | ±5%  | 250mV | 74.0% |
| APV-8E-12 | 12V, 0~0.67A | ±5%  | 250mV | 77.5% |
| APV-8E-24 | 24V, 0~0.34A | ±5%  | 300mV | 78.5% |

## APV-12E Series



| Model No.  | Output      | Tol. | R&N   | Effi. |
|------------|-------------|------|-------|-------|
| APV-12E-5  | 5V, 0~2A    | ±5%  | 100mV | 75.0% |
| APV-12E-12 | 12V, 0~1A   | ±5%  | 120mV | 81.0% |
| APV-12E-15 | 15V, 0~0.8A | ±5%  | 120mV | 81.0% |
| APV-12E-24 | 24V, 0~0.5A | ±5%  | 150mV | 83.0% |

## APV-16E Series



| Model No.  | Output       | Tol. | R&N   | Effi. |
|------------|--------------|------|-------|-------|
| APV-16E-5  | 5V, 0~2.6A   | ±5%  | 100mV | 75.0% |
| APV-16E-12 | 12V, 0~1.25A | ±5%  | 120mV | 79.0% |
| APV-16E-15 | 15V, 0~1A    | ±5%  | 120mV | 80.0% |
| APV-16E-24 | 24V, 0~0.67A | ±5%  | 150mV | 82.0% |

## APC-8E Series



| Model No.  | Output        | Tol. | R&N   | Effi. |
|------------|---------------|------|-------|-------|
| APC-8E-250 | 16~32V, 250mA | ±8%  | 350mV | 81.5% |
| APC-8E-350 | 11~23V, 350mA | ±8%  | 300mV | 80.5% |
| APC-8E-500 | 8~16V, 500mA  | ±8%  | 300mV | 79.0% |
| APC-8E-700 | 6~11V, 700mA  | ±8%  | 250mV | 77.5% |

## APC-12E Series



| Model No.   | Output       | Tol. | R&N   | Effi. |
|-------------|--------------|------|-------|-------|
| APC-12E-350 | 9~36V, 350mA | ±8%  | 300mV | 81.0% |
| APC-12E-700 | 9~18V, 700mA | ±8%  | 250mV | 79.0% |

## APC-16E Series



| Model No.   | Output        | Tol. | R&N   | Effi. |
|-------------|---------------|------|-------|-------|
| APC-16E-350 | 12~48V, 350mA | ±8%  | 300mV | 83.0% |
| APC-16E-700 | 9~24V, 700mA  | ±8%  | 250mV | 82.0% |

Note: These series can be used for LED lighting luminaires and MR16/AR111 application

# LP series 18~35W

## Features

- **Constant voltage mode**
  - LPL-18: 90~132VAC input only
  - LPH-18: 180~264VAC input only
  - LPV: 90~264VAC input
- Withstand 300VAC surge input for 5 seconds (LPV-20/35)
- **Fully encapsulated with IP67 level**
- Isolation class II, no F.G.
- Class 2 power unit / Pass LPS
- Economic, high reliability
- Suitable for LED-based decorative/architectural lighting, LED stage, theater lighting, and LED electronic displays
- Protections: Short circuit / Overload / Over voltage / Over temperature (LPH-18/LPL-18 only)
- 2 years warranty

|                                                                                                                                                                                                                              |                                                                                   | LPL-18                                                                                                                                           | LPH-18                                                                             | LPV-20                                                                                                                | LPV-35                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------------|
| <div>INPUT</div> <div></div> <div>OUTPUT</div> <div></div> |  |                                                                                                                                                  |  |                                    |                           |
|                                                                                                                                                                                                                              | AC input voltage range                                                            |                                                                                                                                                  | 90~132VAC                                                                          | 180~264VAC                                                                                                            | 90~264VAC                 |
|                                                                                                                                                                                                                              | AC inrush current (max.)                                                          |                                                                                                                                                  | Cold start, 40A at 115VAC                                                          | Cold start, 50A at 230VAC                                                                                             | Cold start, 70A at 230VAC |
| Overload Protection                                                                                                                                                                                                          | Range                                                                             | >105%                                                                                                                                            |                                                                                    | 110%~150%                                                                                                             |                           |
|                                                                                                                                                                                                                              | Type                                                                              | Hiccup mode, auto-recovery                                                                                                                       |                                                                                    |                                                                                                                       |                           |
| Over voltage protection                                                                                                                                                                                                      |                                                                                   | 115%~135% rated output voltage                                                                                                                   |                                                                                    |                                                                                                                       |                           |
| Withstand voltage                                                                                                                                                                                                            |                                                                                   | I/P-O/P: 3kVAC                                                                                                                                   |                                                                                    |                                                                                                                       |                           |
| Working temperature                                                                                                                                                                                                          |                                                                                   | -30~+70℃                                                                                                                                         |                                                                                    |                                                                                                                       | -30~+65℃                  |
| Vibration                                                                                                                                                                                                                    |                                                                                   | 10~500Hz, 2G 10 minutes /1 cycle, period for 60 minutes each along X, Y, Z axes                                                                  |                                                                                    |                                                                                                                       |                           |
| Safety standards                                                                                                                                                                                                             |                                                                                   | TUV BS EN62368-1, EAC TP TC 004, BIS IS15885 (except for LPL-18, LPH-18-36) approved for LPH-18                                                  |                                                                                    | LPV-20: TUV BS EN62368-1, UL879, UL1310, EAC TP TC 004 approved<br>LPV-35: UL1310, IEC62368-1, EAC TP TC 004 approved |                           |
| EMC standards                                                                                                                                                                                                                |                                                                                   | BS EN55032 class B, BS EN61000-3-2 class A, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, EAC TP TC 020, BS EN55024, FCC part 15 class B (LPL-18) |                                                                                    |                                                                                                                       |                           |
| Connection                                                                                                                                                                                                                   | Input                                                                             | UL rated,18AWGx2C (30cm)                                                                                                                         |                                                                                    | UL rated, 18AWGx2C (60cm)                                                                                             | UL rated, 18AWGx2C (60cm) |
|                                                                                                                                                                                                                              | Output                                                                            |                                                                                                                                                  |                                                                                    |                                                                                                                       | UL rated, 16AWGx2C (60cm) |
| Dimension (LxWxH)(mm)                                                                                                                                                                                                        |                                                                                   | 140x 30x 22                                                                                                                                      |                                                                                    | 118x 35x 26                                                                                                           | 148x 40x 30               |

### LPL-18 Series



| Model No. | Output       | Tol. | R&N   | Effi. |
|-----------|--------------|------|-------|-------|
| LPL-18-12 | 12V, 0~1.5A  | ±3%  | 120mV | 80%   |
| LPL-18-24 | 24V, 0~0.75A | ±3%  | 150mV | 83%   |
| LPL-18-36 | 36V, 0~0.5A  | ±3%  | 200mV | 84%   |

### LPH-18 Series



| Model No. | Output       | Tol. | R&N   | Effi. |
|-----------|--------------|------|-------|-------|
| LPH-18-12 | 12V, 0~1.5A  | ±3%  | 120mV | 77%   |
| LPH-18-24 | 24V, 0~0.75A | ±3%  | 150mV | 82%   |
| LPH-18-36 | 36V, 0~0.5A  | ±3%  | 200mV | 83%   |

### LPV-20 Series



| Model No. | Output       | Tol. | R&N   | Effi. |
|-----------|--------------|------|-------|-------|
| LPV-20-5  | 5V, 0~3A     | ±5%  | 80mV  | 77%   |
| LPV-20-12 | 12V, 0~1.67A | ±5%  | 120mV | 81%   |
| LPV-20-15 | 15V, 0~1.33A | ±5%  | 120mV | 83%   |
| LPV-20-24 | 24V, 0~0.84A | ±5%  | 150mV | 83%   |

### LPV-35 Series



| Model No. | Output             | Tol. | R&N   | Effi. |
|-----------|--------------------|------|-------|-------|
| LPV-35-5  | 5V, 0~5A (peak 6A) | ±6%  | 80mV  | 77%   |
| LPV-35-12 | 12V, 0~3A          | ±5%  | 120mV | 84%   |
| LPV-35-15 | 15V, 0~2.4A        | ±5%  | 120mV | 84%   |
| LPV-35-24 | 24V, 0~1.5A        | ±5%  | 150mV | 85%   |
| LPV-35-36 | 36V, 0~1A          | ±5%  | 150mV | 85%   |

Note: These products are not intended for lighting applications in the EU.( In the EU NPF/LPF/XLG series are recommended)

# LP series 60~150W

## Features

- Constant voltage mode
- LPV-60/100: 90~264VAC input  
LPV-150: 180~305VAC input only  
LPVL-150: 90~132VAC input only
- Withstand 300VAC surge input for 5 seconds (LPV-60/100)
- Fully encapsulated with IP67 level
- Isolation class II, no F.G.
- Class 2 power unit / Pass LPS (LPV-60-12/15/24/36/48 only)
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires (LPVL-150 only)
- Economic, high reliability
- Suitable for LED-based decorative/architectural lighting, LED stage, theater lighting, and LED electronic displays
- Protections: Short circuit / Overload / Over voltage / Over temperature (LPV-150, LPVL-150 only)
- 2 years warranty

|                                                                                                        |        | LPV-60                                                                                                                                           | LPV-100                                                                            | LPV-150<br>LPVL-150                                                                 |
|--------------------------------------------------------------------------------------------------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <div>INPUT</div> <div>LPV-60/100LPV/LPVL-150</div> <div>OUTPUT</div> <div>LPV-60/100LPV/LPVL-150</div> |        |                                                                 |  |  |
| AC input voltage range                                                                                 |        | 90~264VAC; 127~370VDC                                                                                                                            |                                                                                    | LPV-150: 180~305VAC; 254~431VDC<br>LPVL-150: 90~132VAC                              |
| AC inrush current (max.)                                                                               |        | Cold start, 60A at 230VAC                                                                                                                        | Cold start, 75A at 230VAC                                                          | LPV-150: Cold start, 60A at 230VAC<br>LPVL-150: Cold start, 75A at 115VAC           |
| Overload protection                                                                                    |        | 110%~150% hiccup mode, auto-recovery                                                                                                             |                                                                                    |                                                                                     |
| Over voltage protection                                                                                |        | 115%~135% rated output voltage                                                                                                                   |                                                                                    |                                                                                     |
| Withstand voltage                                                                                      |        | I/P-O/P: 3kVAC                                                                                                                                   |                                                                                    |                                                                                     |
| Working temperature                                                                                    |        | -30~+70℃                                                                                                                                         | -25~+70℃                                                                           | -25~+65℃                                                                            |
| Vibration                                                                                              |        | 10~500Hz, 2G 10 minutes /1 cycle, period for 60 minutes each along X, Y, Z axes                                                                  |                                                                                    |                                                                                     |
| Safety standards                                                                                       |        | UL879 (except for LPV-60-5), UL1310 (except for LPV-60-5), IEC62368-1, EAC TP TC 004 approved                                                    | UL8750, UL879, EAC TP TC 004 approved; IEC62368-1                                  |                                                                                     |
| EMC standards                                                                                          |        | BS EN55032 class B, BS EN61000-3-2 class A, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, EAC TP TC 020 FCC part 15 for LPVL-150 only, BS EN55024 |                                                                                    |                                                                                     |
| Connection                                                                                             | Input  | UL rated, 18AWGx2C (60cm)                                                                                                                        | UL rated, 18AWGx2C (30cm)                                                          | UL rated, SJTW 18AWGx2C (30cm)                                                      |
|                                                                                                        | Output | UL rated, 16AWGx2C (60cm)                                                                                                                        | UL rated, 14AWGx2C (30cm)                                                          | UL rated, SJTW 14AWGx2C (30cm)                                                      |
| Dimension (LxWxH)(mm)                                                                                  |        | 162.5x 42.5x 32                                                                                                                                  | 190x 52x 37                                                                        | 191x 63x 37.5                                                                       |

## LPV-60 Series



| Model No. | Output       | Tol. | R&N   | Effi. |
|-----------|--------------|------|-------|-------|
| LPV-60-5  | 5V, 0~8A     | ±8%  | 80mV  | 76%   |
| LPV-60-12 | 12V, 0~5A    | ±5%  | 120mV | 83%   |
| LPV-60-15 | 15V, 0~4A    | ±5%  | 120mV | 83%   |
| LPV-60-24 | 24V, 0~2.5A  | ±5%  | 150mV | 86%   |
| LPV-60-36 | 36V, 0~1.67A | ±5%  | 150mV | 86%   |
| LPV-60-48 | 48V, 0~1.25A | ±5%  | 150mV | 86%   |

## LPV-100 Series



| Model No.  | Output      | Tol. | R&N   | Effi. |
|------------|-------------|------|-------|-------|
| LPV-100-5  | 5V, 0~12A   | ±8%  | 80mV  | 80%   |
| LPV-100-12 | 12V, 0~8.5A | ±5%  | 120mV | 85%   |
| LPV-100-15 | 15V, 0~6.7A | ±5%  | 120mV | 87%   |

| Model No.  | Output      | Tol. | R&N   | Effi. |
|------------|-------------|------|-------|-------|
| LPV-100-24 | 24V, 0~4.2A | ±5%  | 150mV | 88%   |
| LPV-100-36 | 36V, 0~2.8A | ±5%  | 150mV | 88%   |
| LPV-100-48 | 48V, 0~2.1A | ±5%  | 150mV | 89%   |

## LPV/LPVL-150 Series



| Model No.  | Output      | Tol. | R&N   | Effi. |
|------------|-------------|------|-------|-------|
| LPV-150-12 | 12V, 0~10A  | ±5%  | 200mV | 87%   |
| LPV-150-15 | 15V, 0~8A   | ±5%  | 200mV | 88%   |
| LPV-150-24 | 24V, 0~6.3A | ±5%  | 200mV | 89%   |
| LPV-150-36 | 36V, 0~4.2A | ±5%  | 200mV | 89%   |
| LPV-150-48 | 48V, 0~3.2A | ±5%  | 200mV | 90%   |

□ = Blank, L ;  
Blank: AC input range 180~305VAC, L: AC input range 90~132VAC

Note: These products are not intended for lighting applications in the EU. (In the EU NPF/LPF/XLG series are recommended)

# LP series 18~35W

## Features

- **Constant current mode**
- LPHC-18: 180~264VAC input only  
LPC-20/35: 90~264VAC input
- Withstand 300VAC surge input for 5 seconds (only for LPC-20/35)
- **Fully encapsulated with IP67 level**
- Isolation class II, no F.G.
- Class 2 power unit / Pass LPS
- Economic, high reliability
- Suitable for LED-based decorative / architectural lighting, LED stage, theater lighting, and LED electronic displays
- Protections: Short circuit / Over voltage / Over temperature (except for LPC-20/35)
- 2 years warranty



|                          |        | LPHC-18                                                                                                            | LPC-20                                                                                                             | LPC-35                    |
|--------------------------|--------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|---------------------------|
| AC input voltage range   |        | 180~264VAC                                                                                                         | 90~264VAC                                                                                                          |                           |
| AC inrush current (max.) |        | Cold start, 50A at 230VAC                                                                                          | Cold start, 70A at 230VAC                                                                                          | Cold start, 55A at 230VAC |
| Over voltage protection  |        | 105%~135% rated output voltage                                                                                     |                                                                                                                    |                           |
| Withstand voltage        |        | I/P-O/P: 3kVAC                                                                                                     |                                                                                                                    |                           |
| Working temperature      |        | -30~+70°C                                                                                                          |                                                                                                                    |                           |
| Vibration                |        | 10~500Hz, 2G 10 minutes /1 cycle, period for 60 minutes each along X, Y, Z axes                                    |                                                                                                                    |                           |
| Safety standards         |        | TUV BS EN62368-1, EAC TP TC 004                                                                                    | LPC-20: UL1310, UL879, TUV BS EN62368-1, EAC TP TC 004 approved<br>LPC-35: UL1310, EAC TP TC 004 approved          |                           |
| EMC standards            |        | BS EN55032 class A, BS EN55024, BS EN61000-3-2 class A, BS EN61000-3-3, EAC TP TC 020, BS EN61000-4-2,3,4,5,6,8,11 | BS EN55032 class B, BS EN55024, BS EN61000-3-2 class A, BS EN61000-3-3, EAC TP TC 020, BS EN61000-4-2,3,4,5,6,8,11 |                           |
| Connection               | Input  | UL rated, 18AWGx2C (30cm)                                                                                          | UL rated, 18AWGx2C (60cm)                                                                                          | UL rated, 18AWGx2C (60cm) |
|                          | Output |                                                                                                                    |                                                                                                                    | UL rated, 16AWGx2C (60cm) |
| Dimension (LxWxH)(mm)    |        | 140x 30x 22                                                                                                        | 118x 35x 26                                                                                                        | 148x 40x 30               |

## LPHC-18 Series



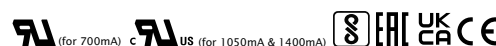
| Model No.   | Output       | Io Tol. | R&N   | Effi. |
|-------------|--------------|---------|-------|-------|
| LPHC-18-350 | 6~48V, 350mA | ±8%     | 300mV | 80%   |
| LPHC-18-700 | 6~25V, 700mA | ±8%     | 250mV | 80%   |

## LPC-20 Series



| Model No.  | Output       | Io Tol. | R&N   | Effi. |
|------------|--------------|---------|-------|-------|
| LPC-20-350 | 9~48V, 350mA | ±5%     | 200mV | 83%   |
| LPC-20-700 | 9~30V, 700mA | ±5%     | 200mV | 83%   |

## LPC-35 Series



| Model No.   | Output        | Io Tol. | R&N   | Effi. |
|-------------|---------------|---------|-------|-------|
| LPC-35-700  | 9~48V, 700mA  | ±5%     | 200mV | 85%   |
| LPC-35-1050 | 9~30V, 1050mA | ±5%     | 200mV | 85%   |
| LPC-35-1400 | 9~24V, 1400mA | ±5%     | 200mV | 85%   |

Note: These products are not intended for lighting applications in the EU.( In the EU NPF/LPF/XLG series are recommended)

# LP series 60~150W

## Features

- **Constant current mode**
- LPC-60/100: 90~264VAC input  
LPC-150: 180~305VAC input only
- High efficiency up to 90%
- **Fully encapsulated with IP67 level**
- Isolation class II, no F.G.
- Class 2 power unit / Pass LPS (LPC-60)
- Economic, high reliability
- Suitable for LED-based decorative / architectural lighting, LED stage, theater lighting, and LED electronic displays
- Protections: Short circuit / Over voltage / Over temperature (LPC-150 only)
- 2 years warranty

|                                                                                        |        | LPC-60                                                                                                             | LPC-100                                                                            | LPC-150                                                                             |
|----------------------------------------------------------------------------------------|--------|--------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <div>INPUT</div> <div>60W / 100W150W</div> <div>OUTPUT</div> <div>60W / 100W150W</div> |        |                                   |  |  |
| AC input voltage range                                                                 |        | 90~264VAC; 127~370VDC                                                                                              |                                                                                    | 180~305VAC; 254~431VDC                                                              |
| AC inrush current (max.)                                                               |        | Cold start, 60A at 230VAC                                                                                          | Cold start, 75A at 230VAC                                                          | Cold start, 40A at 230VAC                                                           |
| Over voltage protection                                                                |        | 105%~135%                                                                                                          | 110%~135%                                                                          |                                                                                     |
| Withstand voltage                                                                      |        | I/P-O/P: 3kVAC                                                                                                     |                                                                                    |                                                                                     |
| Working temperature                                                                    |        | -30~+70℃                                                                                                           | -25~+50℃                                                                           | -25~+50℃                                                                            |
| Vibration                                                                              |        | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes                                            |                                                                                    |                                                                                     |
| Safety standards                                                                       |        | IEC62368-1, UL1310, EAC TP TC 004 approved                                                                         | IEC62368-1, EAC TP TC 004 approved                                                 | BS EN62368-1(LVD), EAC TP TC 004 approved                                           |
| EMC standards                                                                          |        | BS EN55032 class B, BS EN55024, BS EN61000-3-2 class A, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, EAC TP TC 020 |                                                                                    |                                                                                     |
| Connection                                                                             | Input  | UL rated, 18AWG x2C (60cm)                                                                                         | UL rated, 18AWG x2C (30cm)                                                         | UL rated, SJTW 18AWG x2C (30cm)                                                     |
|                                                                                        | Output | UL rated, 16AWG x2C (60cm)                                                                                         | UL rated, 18AWG x2C (30cm)                                                         | UL rated, SJTW 18AWG x2C (30cm)                                                     |
| Dimension (LxWxH)(mm)                                                                  |        | 162.5x 42.5x 32                                                                                                    | 190x 52x 37                                                                        | 191x 63x 37.5                                                                       |

## LPC-60 Series



| Model No.   | Output        | Io Tol. | R&N   | Effi. |
|-------------|---------------|---------|-------|-------|
| LPC-60-1050 | 9~48V, 1050mA | ±5%     | 200mV | 87%   |
| LPC-60-1400 | 9~42V, 1400mA | ±5%     | 200mV | 85%   |
| LPC-60-1750 | 9~34V, 1750mA | ±5%     | 200mV | 87%   |

## LPC-100 Series



| Model No.    | Output          | Io Tol. | R&N  | Effi. |
|--------------|-----------------|---------|------|-------|
| LPC-100-350  | 143~286V, 350mA | ±5%     | 1.5V | 90%   |
| LPC-100-500  | 100~200V, 500mA | ±5%     | 1.5V | 90%   |
| LPC-100-700  | 72~143V, 700mA  | ±5%     | 1.0V | 90%   |
| LPC-100-1050 | 48~96V, 1050mA  | ±5%     | 1.0V | 90%   |
| LPC-100-1400 | 36~72V, 1400mA  | ±5%     | 1.0V | 89.5% |
| LPC-100-1750 | 29~58V, 1750mA  | ±5%     | 1.0V | 89.5% |
| LPC-100-2100 | 24~48V, 2100mA  | ±5%     | 1.0V | 89%   |

## LPC-150 Series



| Model No.    | Output          | Io Tol. | R&N  | Effi. |
|--------------|-----------------|---------|------|-------|
| LPC-150-350  | 215~430V, 350mA | ±5%     | 2.0V | 90%   |
| LPC-150-500  | 150~300V, 500mA | ±5%     | 1.5V | 90%   |
| LPC-150-700  | 107~215V, 700mA | ±5%     | 1.0V | 90%   |
| LPC-150-1050 | 72~144V, 1050mA | ±5%     | 1.0V | 90%   |
| LPC-150-1400 | 54~108V, 1400mA | ±5%     | 1.0V | 90%   |
| LPC-150-1750 | 43~86V, 1750mA  | ±5%     | 1.0V | 90%   |
| LPC-150-2100 | 36~72V, 2100mA  | ±5%     | 1.0V | 90%   |
| LPC-150-2450 | 31~62V, 2450mA  | ±5%     | 1.0V | 90%   |
| LPC-150-2800 | 27~54V, 2800mA  | ±5%     | 1.0V | 90%   |
| LPC-150-3150 | 24~48V, 3150mA  | ±5%     | 1.0V | 90%   |

Note: These products are not intended for lighting applications in the EU.( In the EU NPF/LPF/XLG series are recommended)

# Plastic Case

with PFC + Cable

- 15 NPF Series (40~200W)
- 17 LPF Series (16~90W)
- 19 PWM Series (40~200W)
- 21 ODLV Series (45~65W)
- 22 ODLC Series (45~65W)
- 23 PLD Series (16~60W)
- 24 PCD Series (16~60W)
- 25 PLN Series (20~100W)
- 26 HLN Series (40~80W)
- 27 OWA Series (60~200W)
- 29 GSV Series (30~60W)

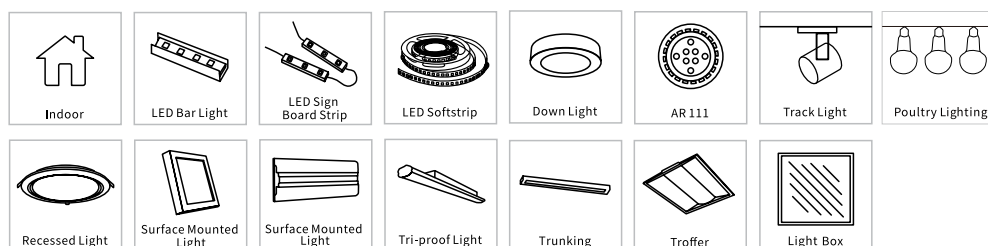


**OPTOTECH**

CERTIFIED PARTNER

MEAN WELL provides various kinds of LED drivers for indoor lighting luminaires. In general, LED drivers with plastic housing can be categorized into independent and built-in types. For example, NPF, LPF, PWM and OWA series feature the waterproof function and can be used externally as an independent driver control gear or built-in with luminaires, especially for high humidity or semi-outdoor environment. While, ODLC/ODLV/PLD/PCD series are for built-in indoor design luminaries, such as recessed light/down light/Canopy luminaires. The above-mentioned LED drivers are equipped with 0-10V dimming, DALI dimming or PWM style output dimming function respectively. Furthermore, if auxiliary power is needed for intelligent control products, ODLC/ODLV-45/60 series is a perfect fit.

## Application



# NPF series 40~90W

## Features

- Constant voltage+constant current modes (D-Type: Constant current mode only)
- Universal AC input (90 to 305VAC) / Full range
- High efficiency up to 90%
- No load power consumption <0.15W (<0.5W for D-Type)
- Fully isolated plastic case with IP67 level
- Isolation class II, no F.G.
- Class 2 power unit [except for NPF-90(D)-12/15 & NPF-120(D)]
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires [except for NPF-90(D)]
- D-Type: Built-in 3 in 1 dimming function (0~10VDC, PWM signal or resistance)
- IP67 Suitable for dry, damp, and wet location
- Protections: Short circuit / Over current / Over voltage / Over temperature
- 5 years warranty

| INPUT                                                                            |        | OUTPUT<br>(NPF-40D/60D)                                                                            | NPF-40(D)/60(D)                                                                                                                                        |                                                                                                | NPF-90(D)                                                                          |  |
|----------------------------------------------------------------------------------|--------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--|
|  |        |                   |                                                                       |                                                                                                |  |  |
| OUTPUT<br>(NPF-40/60/90/120)                                                     |        | OUTPUT<br>(NPF-90D/120D)                                                                           |                                                                                                                                                        |                                                                                                |                                                                                    |  |
|  |        |                   |                                                                                                                                                        |                                                                                                |                                                                                    |  |
| AC input voltage range                                                           |        |                                                                                                    | 90~305VAC; 127~431VDC                                                                                                                                  |                                                                                                |                                                                                    |  |
| AC inrush current (max.)                                                         |        |                                                                                                    | Cold start, 50A at 230VAC                                                                                                                              |                                                                                                | Cold start, 60A at 230VAC                                                          |  |
| Over current protection                                                          |        |                                                                                                    | 95%~108% constant current limiting, auto-recovery                                                                                                      |                                                                                                |                                                                                    |  |
| Over voltage protection                                                          |        |                                                                                                    | 110%~140% rated output voltage                                                                                                                         |                                                                                                |                                                                                    |  |
| Over temp. protection                                                            |        |                                                                                                    | Shut down o/p voltage, re-power on to recover                                                                                                          |                                                                                                |                                                                                    |  |
| Setup, rise, hold up time                                                        |        |                                                                                                    | 500ms, 80ms, 16ms at full load and 230VAC                                                                                                              |                                                                                                |                                                                                    |  |
| Total harmonic distortion                                                        |        |                                                                                                    | THD<20%                                                                                                                                                |                                                                                                |                                                                                    |  |
| Withstand voltage                                                                |        |                                                                                                    | I/P-O/P: 3.75kVAC                                                                                                                                      |                                                                                                |                                                                                    |  |
| Working temperature                                                              |        |                                                                                                    | Tcase= -40~+85°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                               |                                                                                                |                                                                                    |  |
| Safety standards                                                                 |        |                                                                                                    | UL8750, ENEC BS EN61347-1, BS EN61347-2-13, BS EN62384 approved, GB19510.14, GB19510.1, EAC TP TC 004, <b>UL879</b> [for NPF-40(D)/60(D) 12V,24V only] |                                                                                                |                                                                                    |  |
| EMC standards                                                                    |        |                                                                                                    | BS EN55015, BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, GB17743, GB17625.1, EAC TP TC 020                         |                                                                                                |                                                                                    |  |
| Connection                                                                       | Input  | UL rated, SJTW 18AWGx2C (30cm)                                                                     |                                                                                                                                                        |                                                                                                |                                                                                    |  |
|                                                                                  | Output | NPF-40/60:<br>SVT 18AWGx 2C (30cm)<br>NPF-40D/60D:<br>UL2464 18AWG x2C (30cm)+<br>22AWG x2C (30cm) |                                                                                                                                                        | NPF-90:<br>SJTW 16AWGx2C (30cm)<br>NPF-90D:<br>SJTW 16AWGx2C (30cm)+<br>UL2464 18AWGx2C (30cm) |                                                                                    |  |
| Dimension (LxWxH) (mm)                                                           |        |                                                                                                    | 150x 53x 35                                                                                                                                            |                                                                                                | 171x 63x 37.5                                                                      |  |

## NPF-40 Series

| Model No.   | Output       | Tol. | R&N   | Io Ripple (D-Type) | Effi. |
|-------------|--------------|------|-------|--------------------|-------|
| NPF-40□-12○ | 12V, 0~3.34A | ±4%  | 150mV | 5%                 | 86%   |
| NPF-40□-15○ | 15V, 0~2.67A | ±4%  | 150mV | 5%                 | 87%   |
| NPF-40□-20○ | 20V, 0~2A    | ±4%  | 150mV | 5%                 | 88%   |
| NPF-40□-24○ | 24V, 0~1.67A | ±3%  | 150mV | 5%                 | 89%   |
| NPF-40□-30○ | 30V, 0~1.34A | ±3%  | 200mV | 5%                 | 89%   |
| NPF-40□-36○ | 36V, 0~1.12A | ±2%  | 200mV | 5%                 | 90%   |
| NPF-40□-42○ | 42V, 0~0.96A | ±1%  | 200mV | 5%                 | 90%   |
| NPF-40□-48○ | 48V, 0~0.84A | ±1%  | 200mV | 5%                 | 90%   |
| NPF-40□-54○ | 54V, 0~0.76A | ±1%  | 350mV | 5%                 | 90%   |

## NPF-60 Series

| Model No.   | Output      | Tol. | R&N   | Io Ripple (D-Type) | Effi. |
|-------------|-------------|------|-------|--------------------|-------|
| NPF-60□-12○ | 12V, 0~5A   | ±4%  | 150mV | 5%                 | 86%   |
| NPF-60□-15○ | 15V, 0~4A   | ±4%  | 150mV | 5%                 | 87%   |
| NPF-60□-20○ | 20V, 0~3A   | ±4%  | 150mV | 5%                 | 88%   |
| NPF-60□-24○ | 24V, 0~2.5A | ±3%  | 150mV | 5%                 | 89%   |

| Model No.   | Output       | Tol. | R&N   | Io Ripple (D-Type) | Effi. |
|-------------|--------------|------|-------|--------------------|-------|
| NPF-60□-30○ | 30V, 0~2A    | ±3%  | 200mV | 5%                 | 90%   |
| NPF-60□-36○ | 36V, 0~1.67A | ±2%  | 200mV | 5%                 | 90%   |
| NPF-60□-42○ | 42V, 0~1.43A | ±1%  | 200mV | 5%                 | 90%   |
| NPF-60□-48○ | 48V, 0~1.25A | ±1%  | 200mV | 5%                 | 90%   |
| NPF-60□-54○ | 54V, 0~1.12A | ±1%  | 350mV | 5%                 | 90%   |

## NPF-90 Series

| Model No.   | Output       | Tol. | R&N   | Io Ripple (D-Type) | Effi. |
|-------------|--------------|------|-------|--------------------|-------|
| NPF-90□-12○ | 12V, 0~7.5A  | ±4%  | 150mV | 5%                 | 88%   |
| NPF-90□-15○ | 15V, 0~6A    | ±4%  | 150mV | 5%                 | 89%   |
| NPF-90□-20○ | 20V, 0~4.5A  | ±4%  | 150mV | 5%                 | 90%   |
| NPF-90□-24○ | 24V, 0~3.75A | ±3%  | 150mV | 5%                 | 90%   |
| NPF-90□-30○ | 30V, 0~3A    | ±3%  | 200mV | 5%                 | 89%   |
| NPF-90□-36○ | 36V, 0~2.5A  | ±2%  | 200mV | 5%                 | 90%   |
| NPF-90□-42○ | 42V, 0~2.15A | ±1%  | 250mV | 5%                 | 90%   |
| NPF-90□-48○ | 48V, 0~1.88A | ±1%  | 250mV | 5%                 | 90%   |
| NPF-90□-54○ | 54V, 0~1.67A | ±1%  | 350mV | 5%                 | 90%   |

Note: □ = Blank, D ; Blank: without dimming function , D: with dimming function

# NPF series 120~200W

## Features

- (Constant voltage+constant current modes)  
(D-Type:Constant current mode dimming)  
(V-Type:Constant voltage mode dimming)
- Universal AC input (90 to 305VAC) / Full range
- High efficiency up to 94%
- No load power consumption <0.15W (<0.5W for D-Type)
- Fully isolated plastic case with IP67 level
- Isolation class II, no F.G.
- Class 2 power unit [except for NPF-90(D)-12/15 & NPF-120(D)]
- Type HL LED Driver for use in Class I, location luminaires [except for NPF-90(D)]
- D-Type or V-Type: Built-in 3 in 1 dimming function (0~10VDC, PWM signal or resistance)
- BE-Type: Built-in 3 in 1 dimming function (0~10VDC, PWM signal or resistance) and 12V/200mA auxiliary output for 120W only
- IP67 Suitable for dry, damp, and wet location
- Protections:  
Short circuit / Over current / Over voltage / Over temperature
- 5 years warranty

| INPUT                        |        | OUTPUT<br>(NPF-40D/60D)                                                                                                                 |  | NPF-120(D)                                                                                                                                                                                                     |  | NPF-200(V)                                |  |
|------------------------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------|--|
| ACL<br>ACN                   |        |                                                                                                                                         |  |                                                                                                                                                                                                                |  |                                           |  |
| OUTPUT<br>(NPF-40/60/90/120) |        | OUTPUT<br>(NPF-90D/120D)                                                                                                                |  |                                                                                                                                                                                                                |  |                                           |  |
|                              |        |                                                                                                                                         |  |                                                                                                                                                                                                                |  |                                           |  |
| AC input voltage range       |        |                                                                                                                                         |  | 90~305VAC; 127~431VDC                                                                                                                                                                                          |  | 100~305VAC; 142~431VDC                    |  |
| AC inrush current (max.)     |        |                                                                                                                                         |  | Cold start, 60A at 230VAC                                                                                                                                                                                      |  | Cold start, 65A at 230VAC                 |  |
| Over current protection      |        |                                                                                                                                         |  | 95%~108% constant current limiting, auto-recovery                                                                                                                                                              |  |                                           |  |
| Over voltage protection      |        |                                                                                                                                         |  | 110%~140% rated output voltage                                                                                                                                                                                 |  |                                           |  |
| Over temp. protection        |        |                                                                                                                                         |  | Shut down o/p voltage, re-power on to recover                                                                                                                                                                  |  |                                           |  |
| Setup, rise, hold up time    |        |                                                                                                                                         |  | 500ms, 80ms, 16ms at full load and 230VAC                                                                                                                                                                      |  | 500ms, 80ms, 10ms at full load and 230VAC |  |
| Total harmonic distortion    |        |                                                                                                                                         |  | THD<20%                                                                                                                                                                                                        |  |                                           |  |
| Withstand voltage            |        |                                                                                                                                         |  | I/P-O/P: 3.75kVAC                                                                                                                                                                                              |  |                                           |  |
| Working temperature          |        |                                                                                                                                         |  | Tcase= -40~+90°C                                                                                                                                                                                               |  |                                           |  |
| Safety standards             |        |                                                                                                                                         |  | UL8750, ENEC BS EN61347-1, BS EN61347-2-13, BS EN62384 approved, GB19510.14, GB19510.1, EAC TP TC 004, CSA C22.2 No. 250.13-12(only for NPF-200 series), Design refer to BS EN60335-1(only for NPF-200 series) |  |                                           |  |
| EMC standards                |        |                                                                                                                                         |  | BS EN55015, BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, GB17743, GB17625.1, EAC TP TC 020                                                                                 |  |                                           |  |
| Connection                   | Input  | UL rated, SJTW 18AWGx2C (30cm)                                                                                                          |  | UL rated, SJOW 17AWGX2C&H05RN-F 2X1.0mm <sup>2</sup>                                                                                                                                                           |  |                                           |  |
|                              | Output | NPF-120:<br>SJTW 14AWGx2C (30cm)<br>NPF-120D:<br>SJTW 14AWGx2C (30cm)+<br>UL2464 18AWGx2C (30cm)<br>[UL2464 22AWGx3C(30cm) for BE-Type] |  | NPF-200:<br>SJOW 14AWG*2C for 12V<br>NPF-200V:<br>SJOW 17AWGX2C&H05RN-F 2x1.0mm <sup>2</sup><br>UL2464 20AWGx2C (30cm)                                                                                         |  |                                           |  |
| Dimension (LxWxH) (mm)       |        |                                                                                                                                         |  | 191x 63x 37.5                                                                                                                                                                                                  |  | 195x 68x 39.5                             |  |

## NPF-120 Series

| Model No.    | Output      | Tol. | R&N   | Io Ripple (D-Type) | Effi. |
|--------------|-------------|------|-------|--------------------|-------|
| NPF-120□-12△ | 12V, 0~10A  | ±4%  | 150mV | 5%                 | 87.5% |
| NPF-120□-15△ | 15V, 0~8A   | ±4%  | 150mV | 5%                 | 88%   |
| NPF-120□-20△ | 20V, 0~6A   | ±4%  | 150mV | 5%                 | 89%   |
| NPF-120□-24△ | 24V, 0~5A   | ±4%  | 150mV | 5%                 | 89.5% |
| NPF-120□-30△ | 30V, 0~4A   | ±3%  | 200mV | 5%                 | 89%   |
| NPF-120□-36△ | 36V, 0~3.4A | ±2%  | 200mV | 5%                 | 89.5% |
| NPF-120□-42△ | 42V, 0~2.9A | ±1%  | 250mV | 5%                 | 89.5% |
| NPF-120□-48△ | 48V, 0~2.5A | ±1%  | 250mV | 5%                 | 90%   |
| NPF-120□-54△ | 54V, 0~2.3A | ±1%  | 350mV | 5%                 | 90%   |

Note: □ = Blank, D ; Blank: without dimming function, D: with dimming function  
△ = Blank, BE ; Blank: without auxiliary output, BE: D-Type with auxiliary function

## NPF-200 Series

| Model No.   | Output       | Tol. | R&N   | Io Ripple (D-Type) | Effi. |
|-------------|--------------|------|-------|--------------------|-------|
| NPF-200□-12 | 12V, 0~15A   | ±4%  | 150mV | 5%                 | 92%   |
| NPF-200□-24 | 24V, 0~8.3A  | ±4%  | 150mV | 5%                 | 93%   |
| NPF-200□-36 | 36V, 0~5.55A | ±2%  | 200mV | 5%                 | 94%   |
| NPF-200□-42 | 42V, 0~4.75A | ±1%  | 250mV | 5%                 | 94%   |
| NPF-200□-48 | 48V, 0~4.17A | ±1%  | 250mV | 5%                 | 94%   |
| NPF-200□-54 | 54V, 0~3.17A | ±1%  | 350mV | 5%                 | 94%   |

Note: 1. □ = Blank, V ; Blank: without dimming function, V: Constant voltage dimming  
2. V-Type : Suitable for Poultry lighting or LED strip

# LPF series 16~40W

## Features

- Constant voltage+constant current modes (D-Type: Constant current mode only)
- Universal AC input (90 to 305VAC) / Full range
- Isolation class II, no F.G.
- Class 2 power unit
- Fully encapsulated with IP67 level [optional for LPF-16(D)]
- Built-in 3 in 1 dimming function (1~10VDC, PWM signal or resistance) for D type
- Suitable for LED lighting with independent applications
- IP67 Suitable for dry, damp, and wet location
- Protections: Short circuit / Over current / Over voltage / Over temperature
- 5 years warranty

|                           |                                                                                   | LPF-16(D)/25(D)                                                                                                                                                                                                | LPF-40(D)                                                                                |                                                                                   |
|---------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <b>INPUT</b>              |  |                                                                                                                               |       |                                                                                   |
|                           | <b>OUTPUT</b><br>(Non-Dimming Models)                                             |                                                                                                                                                                                                                |                                                                                          |  |
|                           | <b>OUTPUT</b><br>(Dimming Models)                                                 |                                                                                                                                                                                                                |                                                                                          |  |
| AC input voltage range    |                                                                                   | 90~305VAC ; 127~431VDC                                                                                                                                                                                         |                                                                                          |                                                                                   |
| AC inrush current (max.)  |                                                                                   | LPF-16(D): Cold start, 45A at 230VAC<br>LPF-25(D): Cold start, 50A at 230VAC                                                                                                                                   | Cold start, 50A                                                                          |                                                                                   |
| Over current protection   |                                                                                   | 95% ~108% constant current, auto-recovery                                                                                                                                                                      |                                                                                          |                                                                                   |
| Over voltage protection   |                                                                                   | 110%~150% rated output voltage                                                                                                                                                                                 |                                                                                          |                                                                                   |
| Setup, rise, hold up time |                                                                                   | 500ms, 80ms, 16ms at full load and 230VAC                                                                                                                                                                      |                                                                                          |                                                                                   |
| Withstand voltage         |                                                                                   | I/P - O/P: 3.75kVAC                                                                                                                                                                                            |                                                                                          |                                                                                   |
| Working temperature       |                                                                                   | Tcase= -35~+70°C<br>(refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                                                                                    | Tcase= -40~+80°C<br>(refer to "OUTPUT LOAD vs TEMPERATURE")                              |                                                                                   |
| Safety standards          |                                                                                   | UL8750, ENEC BS EN61347-1, BS EN61347-2-13, BS EN62384, PSE J61347-1, J61347-2-13 (except for D-Type), EAC TP TC 004, GB19510.14, GB19510.1 approved; TUV BS EN61347-1, BS EN61347-2-13 approved for LPF-40(D) |                                                                                          |                                                                                   |
| EMC standards             |                                                                                   | BS EN55015, BS EN61547, BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, EAC TP TC 020, GB17743, GB17625.1                                                                                 |                                                                                          |                                                                                   |
| Connection                | Input                                                                             | UL rated, SJTW 18AWGx2C (30cm)                                                                                                                                                                                 |                                                                                          |                                                                                   |
|                           | Output                                                                            | LPF-16/25: UL rated, SVT 18AWGx2C (30cm)<br>LPF-16D/25D: UL rated, SJTW 18AWGx4C (30cm)                                                                                                                        | LPF-40: UL rated, SVT 18AWGx2C (30cm)<br>LPF-40D: UL2464, 18AWGx2C(30cm)+22AWGx2C (30cm) |                                                                                   |
| Dimension (LxWxH)(mm)     |                                                                                   | 148x 40x 32                                                                                                                                                                                                    | 162.5x 43x 32                                                                            |                                                                                   |

## LPF-16 Series

| Model No. | Output       | Tol. | R&N   | Effi. |
|-----------|--------------|------|-------|-------|
| LPF-16-12 | 12V, 0~1.34A | ±5%  | 150mV | 83.0% |
| LPF-16-15 | 15V, 0~1.07A | ±5%  | 150mV | 83.0% |
| LPF-16-20 | 20V, 0~0.80A | ±5%  | 150mV | 84.5% |
| LPF-16-24 | 24V, 0~0.67A | ±5%  | 150mV | 84.5% |
| LPF-16-30 | 30V, 0~0.54A | ±5%  | 200mV | 84.5% |
| LPF-16-36 | 36V, 0~0.45A | ±5%  | 250mV | 85.0% |
| LPF-16-42 | 42V, 0~0.39A | ±5%  | 250mV | 85.0% |
| LPF-16-48 | 48V, 0~0.34A | ±5%  | 250mV | 85.0% |
| LPF-16-54 | 54V, 0~0.30A | ±5%  | 350mV | 84.5% |

□ = Blank, D ; Blank: without dimming function, D: with dimming function

## LPF-25 Series

| Model No. | Output       | Tol. | R&N   | Effi. |
|-----------|--------------|------|-------|-------|
| LPF-25-12 | 12V, 0~2.10A | ±4%  | 150mV | 84.0% |
| LPF-25-15 | 15V, 0~1.67A | ±4%  | 150mV | 84.0% |
| LPF-25-20 | 20V, 0~1.25A | ±4%  | 150mV | 85.0% |
| LPF-25-24 | 24V, 0~1.05A | ±4%  | 150mV | 85.5% |

| Model No. | Output       | Tol. | R&N   | Effi. |
|-----------|--------------|------|-------|-------|
| LPF-25-30 | 30V, 0~0.84A | ±4%  | 200mV | 85.5% |
| LPF-25-36 | 36V, 0~0.70A | ±4%  | 250mV | 85.5% |
| LPF-25-42 | 42V, 0~0.60A | ±4%  | 250mV | 85.5% |
| LPF-25-48 | 48V, 0~0.53A | ±4%  | 250mV | 86.0% |
| LPF-25-54 | 54V, 0~0.47A | ±4%  | 350mV | 86.0% |

□ = Blank, D ; Blank: without dimming function, D: with dimming function

## LPF-40 Series

| Model No. | Output       | Tol. | R&N   | Effi. |
|-----------|--------------|------|-------|-------|
| LPF-40-12 | 12V, 0~3.34A | ±4%  | 150mV | 84.0% |
| LPF-40-15 | 15V, 0~2.67A | ±4%  | 150mV | 85.0% |
| LPF-40-20 | 20V, 0~2.00A | ±4%  | 150mV | 86.0% |
| LPF-40-24 | 24V, 0~1.67A | ±4%  | 150mV | 87.0% |
| LPF-40-30 | 30V, 0~1.34A | ±4%  | 200mV | 88.0% |
| LPF-40-36 | 36V, 0~1.12A | ±4%  | 250mV | 88.0% |
| LPF-40-42 | 42V, 0~0.96A | ±4%  | 250mV | 88.5% |
| LPF-40-48 | 48V, 0~0.84A | ±4%  | 250mV | 89.0% |
| LPF-40-54 | 54V, 0~0.76A | ±4%  | 350mV | 89.0% |

□ = Blank, D ; Blank: without dimming function, D: with dimming function

Note: LPF series upgraded with global certificate cable for Non-Dimming types.

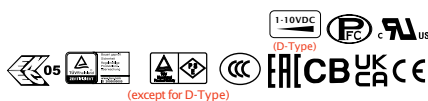
# LPF series 60~90W

## Features

- Constant voltage+constant current modes (D-Type: Constant current mode only)
- LPF: 90~305VAC input  
LPFH: 200~400VAC input
- Fully isolated plastic case with IP67 level
- Isolation class II, no F.G.
- Class 2 power unit
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires [LPF-90(D) only]
- Built-in 3 in 1 dimming function (1~10VDC, PWM signal or resistance) for D-Type
- Suitable for LED lighting with independent applications
- IP67 Suitable for dry, damp, and wet location
- Protections: Short circuit / Over current / Over voltage / Over temperature
- 5 years warranty

|                                |                                                                                   | LPF-60(D)                                                                                                                                          | LPF-90(D)                                                                           |
|--------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| INPUT                          |  |                                                                   |  |
| OUTPUT<br>(Non-Dimming Models) |  |                                                                                                                                                    |                                                                                     |
| OUTPUT<br>(Dimming Models)     |  |                                                                                                                                                    |                                                                                     |
| AC input voltage range         |                                                                                   | 90~305VAC ; 127~431VDC                                                                                                                             |                                                                                     |
| AC inrush current (max.)       |                                                                                   | Cold start, 55A at 230VAC                                                                                                                          | Cold start, 70A at 230VAC                                                           |
| Over current protection        |                                                                                   | 95% ~108% constant current, auto-recovery                                                                                                          |                                                                                     |
| Over voltage protection        |                                                                                   | 110%~150% rated output voltage                                                                                                                     |                                                                                     |
| Setup, rise, hold up time      |                                                                                   | 500ms, 80ms, 16ms at full load and 230VAC                                                                                                          | 500ms, 200ms, 16ms at full load and 230VAC                                          |
| Withstand voltage              |                                                                                   | I/P - O/P: 3.75kVAC                                                                                                                                |                                                                                     |
| Working temperature            |                                                                                   | Tcase= -40~+80°C                                                                                                                                   | Tcase= -40~+70°C                                                                    |
| Safety standards               |                                                                                   | UL8750, ENEC and TUV BS EN61347-1, BS EN61347-2-13, EAC TP TC 004, BS EN62384, PSE J61347-1, J61347-2-13(except for D-Type), GB19510.14, GB19510.1 |                                                                                     |
| EMC standards                  |                                                                                   | BS EN55015, BS EN61547, BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, GB17743, GB17625.1, EAC TP TC 020                     |                                                                                     |
| Connection                     | Input                                                                             | UL rated, SJTW 18AWGx2C (30cm)                                                                                                                     |                                                                                     |
|                                | Output                                                                            | LPF-60:<br>UL rated, SVT 18AWGx2C (30cm)<br>LPF-60D: UL2464<br>18AWGx2C(30cm)+22AWGx2C (30cm)                                                      | LPF-90:<br>UL rated, SVT 18AWGx2C (30cm)<br>LPF-90D:<br>UL2464 18AWGx4C (30cm)      |
| Dimension (LxWxH)(mm)          |                                                                                   | 162.5x 43x 32                                                                                                                                      | 161x 61x 36                                                                         |

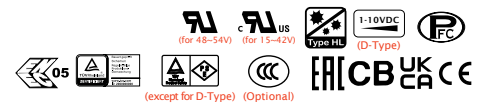
## LPF-60 Series



| Model No.    | Output       | Tol. | R&N   | Effi. |
|--------------|--------------|------|-------|-------|
| LPF-60 □ -12 | 12V, 0~5.00A | ±4%  | 150mV | 86%   |
| LPF-60 □ -15 | 15V, 0~4.00A | ±4%  | 150mV | 87%   |
| LPF-60 □ -20 | 20V, 0~3.00A | ±4%  | 150mV | 88%   |
| LPF-60 □ -24 | 24V, 0~2.50A | ±4%  | 150mV | 89%   |
| LPF-60 □ -30 | 30V, 0~2.00A | ±4%  | 200mV | 90%   |
| LPF-60 □ -36 | 36V, 0~1.67A | ±4%  | 250mV | 90%   |
| LPF-60 □ -42 | 42V, 0~1.43A | ±4%  | 250mV | 90%   |
| LPF-60 □ -48 | 48V, 0~1.25A | ±4%  | 250mV | 90%   |
| LPF-60 □ -54 | 54V, 0~1.12A | ±4%  | 350mV | 90%   |

□ = Blank, D ; Blank: without dimming function , D: with dimming function

## LPF-90 Series



| Model No.    | Output       | Tol. | R&N   | Effi. |
|--------------|--------------|------|-------|-------|
| LPF-90 □ -15 | 15V, 0~5.00A | ±4%  | 150mV | 89.0% |
| LPF-90 □ -20 | 20V, 0~4.50A | ±4%  | 150mV | 89.5% |
| LPF-90 □ -24 | 24V, 0~3.75A | ±4%  | 150mV | 90.0% |
| LPF-90 □ -30 | 30V, 0~3.00A | ±4%  | 200mV | 90.5% |
| LPF-90 □ -36 | 36V, 0~2.50A | ±4%  | 200mV | 90.5% |
| LPF-90 □ -42 | 42V, 0~2.15A | ±4%  | 200mV | 90.5% |
| LPF-90 □ -48 | 48V, 0~1.88A | ±4%  | 200mV | 90.5% |
| LPF-90 □ -54 | 54V, 0~1.67A | ±4%  | 200mV | 90.5% |

□ = Blank, D ; Blank: without dimming function , D: with dimming function

Note: LPF series upgraded with global certificate cable for Non-Dimming types.

# PWM series 40~90W

## Features

- Constant voltage PWM style output mode
- Universal AC input (90 to 305VAC) / Full range
- High efficiency up to 90.5%
- No load power consumption <0.5W
- Fully isolated plastic case with IP67 level
- Isolation class II, no F.G.
- Class 2 power unit (except for PWM-90-12 & PWM-120)
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires (except for PWM-90)
- Built-in 3 in 1 dimming function (0~10VDC, PWM signal or resistance)
- Built-in DALI/DALI-2(for PWM-60/90)/IOT/Bluetooth mesh interface (except for PWM-40)
- IP67 Suitable for dry, damp, and wet location
- Suitable for LED strip lighting
- Protections:  
Short circuit / Overload / Over voltage / Over temp.
- 5 years warranty

|                               | PWM-40                                                                                                                                                                                                                                                                                                                                                                                                                                                | NEW PWM-60(DA/DA2/IOT)<br>PWM-60-KN          | PWM-90<br>NEW PWM-90(DA/DA2)                                                                                                                                   |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>INPUT</b>                  | ACN<br>ACL                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                              |                                                                                                                                                                |
| <b>OUTPUT</b><br>(PWM-40/60)  | DIM+<br>DIM-<br>Vo-<br>Vo+                                                                                                                                                                                                                                                                                                                                                                                                                            |                                              |                                                                                                                                                                |
| <b>OUTPUT</b><br>(PWM-90/120) | DIM+/DA+<br>DIM-/DA-<br>Vo-<br>Vo+                                                                                                                                                                                                                                                                                                                                                                                                                    |                                              |                                                                                                                                                                |
| AC input voltage range        | 90~305VAC; 127~431VDC                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                              |                                                                                                                                                                |
| AC inrush current (max.)      | Cold start, 50A at 230VAC                                                                                                                                                                                                                                                                                                                                                                                                                             |                                              | Cold start, 60A at 230VAC                                                                                                                                      |
| Overload protection           | 108%~130% hiccup mode, auto-recovery                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              |                                                                                                                                                                |
| Over voltage protection       | 113%~142% rated output voltage (116%~142% rated output voltage for PWM-60-KN)                                                                                                                                                                                                                                                                                                                                                                         |                                              |                                                                                                                                                                |
| Over temp. protection         | Shut down o/p voltage, re-power on to recover                                                                                                                                                                                                                                                                                                                                                                                                         |                                              |                                                                                                                                                                |
| Setup time                    | 500ms / 115VAC or 230VAC                                                                                                                                                                                                                                                                                                                                                                                                                              |                                              |                                                                                                                                                                |
| Total harmonic distortion     | THD<20%                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                              |                                                                                                                                                                |
| PWM output frequency          | 1.47kHz (200~4000Hz user changable via ETS for PWM-60-KN)                                                                                                                                                                                                                                                                                                                                                                                             |                                              |                                                                                                                                                                |
| Withstand voltage             | I/P-O/P: 3.75kVAC                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                              |                                                                                                                                                                |
| Working temperature           | Tcase= -40~+85°C(-35~+85°C for PWM-60-KN) (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                                                                                                                                                                                                                                                                                                     |                                              | Tcase= -40~+90°C                                                                                                                                               |
| Safety standards              | UL8750(except for DA-Type & PWM-60-KN), UL879( PWM-40/60-12/24 only), CSA C22.2 No.250.13-12 (except for PWM-60-KN); ENEC BS EN61347-1,BS EN61347-2-13 independent,BS EN62384, IP67 (except for PWM-60-KN),BIS IS 15885 (for 12,24,48, Blank Type only), EAC TP TC 004, GB19510.1,GB19510.14 approved; Design refer to BS EN60335-1(except for PWM-60-KN),According to BS EN61347-2-13 appendix J suitable for emergency installations(except PWM-40) |                                              |                                                                                                                                                                |
| EMC standards                 | BS EN55015, BS EN61000-3-2 Class C (@load≥60%) ; BS EN61000-3-3,GB17743 and GB17625.1, EAC TP TC 020, BS EN61000-4-2,3,4,5,6,8,11; BS EN61547, light industry level (surge immunity Line-Line 2KV)                                                                                                                                                                                                                                                    |                                              |                                                                                                                                                                |
| Connection                    | Input                                                                                                                                                                                                                                                                                                                                                                                                                                                 | UL rated, SJTW 18AWGx2C (30cm)               |                                                                                                                                                                |
|                               | Output                                                                                                                                                                                                                                                                                                                                                                                                                                                | UL2464 18AWG x2C (30cm)+<br>22AWG x2C (30cm) | PWM-60(DA): UL2464 18AWG x2C (30cm)+22AWG x2C (30cm)<br>PWM-60-KN: UL2464 18AWG x2C (30cm)+20AWG x2C (35cm)<br>SJTW 16AWGx2C (30cm)+<br>UL2464 18AWGx2C (30cm) |
| Dimension (LxWxH) (mm)        | 150x 53x 35                                                                                                                                                                                                                                                                                                                                                                                                                                           | 150x 53x 35                                  | 171x 63x 37.5                                                                                                                                                  |

## PWM-40 Series

| Model No. | Output       | Tol. | Effi. |
|-----------|--------------|------|-------|
| PWM-40-12 | 12V, 0~3.34A | ±4%  | 86.0% |
| PWM-40-24 | 24V, 0~1.67A | ±3%  | 89.0% |
| PWM-40-36 | 36V, 0~1.12A | ±2%  | 90.0% |
| PWM-40-48 | 48V, 0~0.84A | ±1%  | 90.0% |

## PWM-60 Series

| Model No. | Output       | Tol. | Effi. |
|-----------|--------------|------|-------|
| PWM-60-12 | 12V, 0~5A    | ±4%  | 86.0% |
| PWM-60-24 | 24V, 0~2.5A  | ±3%  | 89.0% |
| PWM-60-36 | 36V, 0~1.67A | ±2%  | 90.0% |
| PWM-60-48 | 48V, 0~1.25A | ±1%  | 90.0% |

## PWM-60-KN Series

| Model No. | Output      | Tol. | Effi. |
|-----------|-------------|------|-------|
| PWM-60-12 | 12V, 0~5A   | ±4%  | 86.0% |
| PWM-60-24 | 24V, 0~2.5A | ±3%  | 89.0% |

□ = KN, KNBST; KN: KNX control technology  
KNBST: KNX control technology with BST14 connector

## PWM-90 Series

| Model No. | Output       | Tol. | Effi. |
|-----------|--------------|------|-------|
| PWM-90-12 | 12V, 0~7.5A  | ±4%  | 88.0% |
| PWM-90-24 | 24V, 0~3.75A | ±3%  | 90.5% |
| PWM-90-36 | 36V, 0~2.5A  | ±2%  | 90.5% |
| PWM-90-48 | 48V, 0~1.88A | ±1%  | 90.5% |

○ = Blank, DA, IoT; Blank: with 3 in 1 dimming function, DA: with DALI/Bluetooth mesh function (12V/24V only)

# PWM series 120~200W

## Features

- Constant voltage PWM style output mode
- Universal AC input (90 to 305VAC) / Full range
- High efficiency up to 94%
- No load power consumption <0.5W
- Fully isolated plastic case with IP67 level
- Isolation class II, no F.G.
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires
- Built-in 3 in 1 dimming function (0~10VDC, PWM signal or resistance)
- Built-in DALI/DALI-2 Push Dim/KNX/IOT/Bluetooth mesh Dimming
- IP67 Suitable for dry, damp, and wet location
- Suitable for LED strip lighting
- Protections: Short circuit / Overload / Over voltage / Over temp.
- 5 years warranty

|                                                                                                                 |        | PWM-120(DA/DA2/IOT)<br>PWM-120-KN                                                                                                                                                                                                                                                                                                                                                                            | PWM-200(DA/DA2/IOT)<br>PWM-200-KN                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>INPUT</b><br>               |        |                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                              |
| <b>OUTPUT</b><br>               |        |                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                              |
| <b>OUTPUT (PWM-90/120)</b><br> |        |                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                              |
| AC input voltage range                                                                                          |        | 90~305VAC; 127~431VDC                                                                                                                                                                                                                                                                                                                                                                                        | 100~305VAC; 141~431VDC                                                                                                                                                       |
| AC inrush current (max.)                                                                                        |        | Cold start, 60A at 230VAC                                                                                                                                                                                                                                                                                                                                                                                    | Cold start, 65A at 230VAC                                                                                                                                                    |
| Overload protection                                                                                             |        | PWM-120(DA): 108%~120% hiccup mode, auto-recovery<br>PWM-120-KN: 108%~130% hiccup mode, auto-recovery                                                                                                                                                                                                                                                                                                        | 108%~135% hiccup mode, auto-recovery                                                                                                                                         |
| Over voltage protection                                                                                         |        | 113%~142% rated output voltage                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                              |
| Over temp. protection                                                                                           |        | Shut down o/p voltage, re-power on to recover                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                              |
| Setup time                                                                                                      |        | 500ms / 115VAC or 230VAC                                                                                                                                                                                                                                                                                                                                                                                     | 500ms / 230VAC                                                                                                                                                               |
| Total harmonic distortion                                                                                       |        | THD<20%                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                              |
| PWM output frequency                                                                                            |        | 1.47kHz                                                                                                                                                                                                                                                                                                                                                                                                      | 4kHz                                                                                                                                                                         |
|                                                                                                                 |        | PWM-KN Series: 200~4000Hz user changable via ETS for PWM-KN Series                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                              |
| Withstand voltage                                                                                               |        | I/P-O/P: 3.75kVAC; I/P-DA: 1.5KVAC; O/P-DA: 1.5KVAC                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                              |
| Working temperature                                                                                             |        | Tcase= -40~+90°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                              |
| Safety standards                                                                                                |        | UL8750( except for PWM-120-12DA-Type & PWM-120-KN), CSA C22.2 No. 250.13-12(except for PWM-120-KN); ENEC BS EN61347-1, BS EN62384, BS EN61347-2-13 independent, IP67(except for PWM-120-KN), BIS IS15885(for PWM-120-12,24only), EAC TP TC 004, GB19510.1, GB19510.14 approved; Design refer to BS EN60335-1; According to BS EN61347-2-13 appendix J suitable for emergency installations for DA2 type only |                                                                                                                                                                              |
| EMC standards                                                                                                   |        | BS EN55015, BS EN61000-3-2 Class C (@load≥60%) ; BS EN61000-3-3, GB17743 and GB17625.1, EAC TP TC 020, BS EN61000-4-2, 3, 4, 5, 6, 8, 11; BS EN61547, light industry level (surge immunity Line-Line 2KV)                                                                                                                                                                                                    |                                                                                                                                                                              |
| Connection                                                                                                      | Input  | Blank-Type/PWM-KN Series:<br>UL rated, SJTW 18AWGx2C (30cm)<br>DA-Type:<br>SJOW 17AWGx2C (30cm) & H05RN-F 1.0mm <sup>2</sup>                                                                                                                                                                                                                                                                                 | SJOW 17AWGx2C (30cm) & H05RN-F 2x1.0mm <sup>2</sup>                                                                                                                          |
|                                                                                                                 | Output | Blank-Type: SJTW 14AWGx2C (30cm)+<br>UL2464 18AWGx2C (30cm)<br>DA-Type: SJOW 17AWGx2C (30cm) &<br>H05RN-F 1.0mm <sup>2</sup> +UL2464 18AWGx2C (30cm)<br>PWM-KN Series: SJOW 17AWGx2C (30cm)+<br>UL2464 20AWGx2C (35cm)                                                                                                                                                                                       | UL2464 20AWGx2C (35cm)+SJOW 17AWGx2C (30cm) & H05RN-F 1.0mm <sup>2</sup> for 24V/36V/48V<br>UL2464 20AWGx2C (35cm)+SJOW 14AWGx2C (30cm) & H05RN-F 1.0mm <sup>2</sup> for 12V |
| Dimension (LxWxH) (mm)                                                                                          |        | 191x 63x 37.5                                                                                                                                                                                                                                                                                                                                                                                                | 195x 68x 39.5                                                                                                                                                                |



| Model No.    | Output      | Tol. | Effi. |
|--------------|-------------|------|-------|
| PWM-120-12 ○ | 12V, 0~10A  | ±4%  | 88.0% |
| PWM-120-24 ○ | 24V, 0~5A   | ±4%  | 90.0% |
| PWM-120-36   | 36V, 0~3.4A | ±2%  | 90.0% |
| PWM-120-48   | 48V, 0~2.5A | ±1%  | 90.5% |

| Model No.    | Output       | Tol. | Effi. |
|--------------|--------------|------|-------|
| PWM-200-12 ○ | 12V, 0~16.6A | ±4%  | 92.0% |
| PWM-200-24 ○ | 24V, 0~8.3A  | ±4%  | 93.0% |
| PWM-200-36 ○ | 36V, 0~5.5A  | ±2%  | 93.5% |
| PWM-200-48 ○ | 48V, 0~4.16A | ±1%  | 94%   |

○ = Blank, DA, DA2, IoT, KN, KNBST;  
 Blank: with 3 in 1 dimming function, DA/DA2: with DALI function, IoT: with Bluetooth mesh, KN: KNX control technology,  
 KNBST: KNX control technology with BST14 connector

# ODLV series 45~65W

## Features

- Constant voltage PWM style output mode
- ODLV-45: 90~295VAC input  
ODLV-65: 180~295VAC input only
- No load power consumption<0.5W (Blank-Type)
- High efficiency up to 90%
- Fully encapsulated with IP67 level
- Isolation class II, no FG
- Built-in 2 in 1 dimming (0~10VDC or PWM signal)
- Built-in 12V/50mA auxiliary output (A-Type)
- Suitable for LED strip lighting
- Protection: Short circuit / Over current
- 3 years warranty

| INPUT                                                                             |                 | ODLV-45(A)                                                                                                                                 | ODLV-65(A)                                                                          |
|-----------------------------------------------------------------------------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |                 |                                                           |  |
| OUTPUT (Blank-Type)                                                               | OUTPUT (A-Type) |                                                                                                                                            |                                                                                     |
| Vo-                                                                               | AUX-            |                                                                                                                                            |                                                                                     |
| Vo+                                                                               | AUX+            |                                                                                                                                            |                                                                                     |
| DIM-                                                                              | Vo-             |                                                                                                                                            |                                                                                     |
| DIM+                                                                              | Vo+             |                                                                                                                                            |                                                                                     |
|                                                                                   | DIM-            |                                                                                                                                            |                                                                                     |
|                                                                                   | DIM+            |                                                                                                                                            |                                                                                     |
| AC input voltage range                                                            |                 | 90 ~ 295VAC                                                                                                                                | 180 ~ 295VAC                                                                        |
| AC inrush current (max.)                                                          |                 | Cold start, 30A at 230VAC                                                                                                                  |                                                                                     |
| Setup time                                                                        |                 | 500ms / 230VAC                                                                                                                             |                                                                                     |
| Short circuit protection                                                          |                 | Shut down O/P voltage, re-power on to recovery                                                                                             |                                                                                     |
| PWM dimming signal                                                                |                 | 10V PWM signal, frequency range 300Hz~3kHz                                                                                                 |                                                                                     |
| Total harmonic distortion                                                         |                 | THD<20%                                                                                                                                    |                                                                                     |
| Withstand voltage                                                                 |                 | I/P-O/P: 3.75KVAC                                                                                                                          |                                                                                     |
| Working temperature                                                               |                 | Tcase= -20~+85°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                   |                                                                                     |
| Safety standards                                                                  |                 | UL8750, ENEC BS EN61347-1, BS EN61347-2-13, BS EN62384, GB19510.14, GB19510.1, BIS IS15885(for 12V, 24V, 48V only), EAC TP TC 004 approved |                                                                                     |
| EMC standards                                                                     |                 | BS EN55015, BS EN61000-3-2 Class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, GB17743, GB17625.1, EAC TP TC 020             |                                                                                     |
| Connection                                                                        | Input           | SVT 18AWGx2C (20cm)                                                                                                                        |                                                                                     |
|                                                                                   | Output          | Blank-Type: UL1007 18AWGx2C(20cm) + UL1007 22AWGx2C(15cm)<br>A-Type: UL1007 18AWGx2C(20cm) + UL1007 22AWGx2C(15cm) + UL1007 22AWGx2C(15cm) |                                                                                     |
| Dimension (LxWxH) mm                                                              |                 | 111 x 77 x 28.5                                                                                                                            | 121 x 77 x 28.5                                                                     |

## ► PWM Series with Multi-Dimming Functions:



### PWM-60/90/120/200 Series

**Multi-Dimming Function LED Driver and Wireless IoT Solutions**

- 0-10V
- PWM
- Resistance
- Push Dimming
- DALI / DALI-2
- KNX
- Bluetooth Mesh
- WiFi.....and so on



Building Lighting with Bluetooth Mesh Solution

3rd Party APPs

Note: Please refer to page 19-20 for PWM Series

## ODLV-45/45A Series

| Model No.   | Output       | Tol. | Effi. |
|-------------|--------------|------|-------|
| ODLV-45□-12 | 12V, 0~3A    | ±10% | 84%   |
| ODLV-45□-24 | 24V, 0~1.88A | ±10% | 86%   |
| ODLV-45□-36 | 36V, 0~1.25A | ±10% | 88%   |
| ODLV-45□-48 | 48V, 0~0.94A | ±10% | 88%   |
| ODLV-45□-60 | 60V, 0~0.75A | ±10% | 90%   |

□ = Blank/A; Blank: without auxiliary output, A: with auxiliary function

## ODLV-65/65A Series

| Model No.   | Output       | Tol. | Effi. |
|-------------|--------------|------|-------|
| ODLV-65□-12 | 12V, 0~4.2A  | ±10% | 85%   |
| ODLV-65□-24 | 24V, 0~2.4A  | ±10% | 87%   |
| ODLV-65□-36 | 36V, 0~1.8A  | ±10% | 88%   |
| ODLV-65□-48 | 48V, 0~1.35A | ±10% | 89%   |
| ODLV-65□-60 | 60V, 0~1.08A | ±10% | 90%   |

□ = Blank/A; Blank: without auxiliary output, A: with auxiliary function

# ODLC series 45~65W

## Features

- Constant Current mode
- Flicker free design
- ODLC-45: 90~295VAC input, ODLC-65: 180~295VAC input
- No load power consumption <0.5W (Blank/DA-Type)
- Fully encapsulated with IP67 level
- Isolation class II, no FG
- Built-in DALI interface (ODLC-45/65-DA)
- Built-in 2 in 1 dimming (0~10VDC or PWM signal)
- Built-in 12V/50mA auxiliary output (A-Type)
- Suitable for LED lighting applications
- Protection: Short circuit / Over current
- 3 years warranty

| INPUT                                                                             |        | ODLC-45(A)&ODLC-45DA                                                                                                                          | ODLC-65(A)&ODLC-65DA |
|-----------------------------------------------------------------------------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
|  |        |                                                              |                      |
| OUTPUT (Blank/DA-Type)                                                            |        |                                                            |                      |
| <b>OUTPUT (Blank/DA-Type)</b><br>Vo-<br>Vo+<br>DIM-/DA-<br>DIM+/DA+               |        | <b>OUTPUT (A-Type)</b><br>AUX-<br>AUX+<br>Vo-<br>Vo+<br>DIM-<br>DIM+                                                                          |                      |
| AC input voltage range                                                            |        | 90 ~ 295VAC                                                                                                                                   | 180 ~ 295VAC         |
| AC inrush current (max.)                                                          |        | Cold start, 30A at 230VAC                                                                                                                     |                      |
| Setup time                                                                        |        | 500ms / 230VAC                                                                                                                                |                      |
| PWM dimming signal                                                                |        | 10V PWM signal, frequency range 300Hz~3kHz                                                                                                    |                      |
| Total harmonic distortion                                                         |        | THD<20%                                                                                                                                       |                      |
| Short circuit protection                                                          |        | Hiccup mode, auto-recovery                                                                                                                    |                      |
| Withstand voltage                                                                 |        | I/P-O/P: 3.75KVAC                                                                                                                             |                      |
| Working temperature                                                               |        | Tcase= -20~+85°C                                                                                                                              |                      |
| Safety standards                                                                  |        | UL8750, ENEC BS EN61347-1, BS EN61347-2-13, BS EN62384, GB19510.14, GB19510.1, EAC TP TC 004,BIS 15885 (refer to spec for models) approved    |                      |
| DALI standards                                                                    |        | IEC 62386-101, 102 (DA-Type only)                                                                                                             |                      |
| EMC standards                                                                     |        | BS EN55015, BS EN61000-3-2 Class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, GB17743, GB17625.1, EAC TP TC 020                |                      |
| Connection                                                                        | Input  | SVT 18AWGx2C (20cm)                                                                                                                           |                      |
|                                                                                   | Output | Blank/DA-Type: UL1007 18AWGx2C(20cm) + UL1007 22AWGx2C(15cm)<br>A-Type: UL1007 18AWGx2C(20cm) + UL1007 22AWGx2C(15cm) + UL1007 22AWGx2C(15cm) |                      |
| Dimension (LxWxH) mm                                                              |        | 111 x 77 x 28.5                                                                                                                               | 121 x 77 x 28.5      |

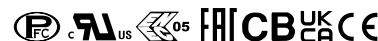
## ODLC-45 Series



| Model No.      | Output           | Tol. | Effi. |
|----------------|------------------|------|-------|
| ODLC-45□-350○  | 57 ~ 95V, 350mA  | ±7%  | 86%   |
| ODLC-45□-500○  | 54 ~ 90V, 500mA  | ±7%  | 85%   |
| ODLC-45□-700○  | 38 ~ 64V, 700mA  | ±7%  | 85%   |
| ODLC-45□-1050○ | 26 ~ 43V, 1050mA | ±7%  | 84%   |
| ODLC-45□-1400○ | 19 ~ 32V, 1400mA | ±7%  | 83%   |

□ = Blank/A; Blank: without auxiliary output, A: with auxiliary function  
○ = Blank or DA (without Auxiliary power)

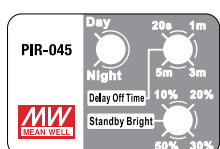
## ODLC-65 Series



| Model No.      | Output           | Tol. | Effi. |
|----------------|------------------|------|-------|
| ODLC-65□-700○  | 69 ~ 93V, 700mA  | ±7%  | 88%   |
| ODLC-65□-1050○ | 46 ~ 62V, 1050mA | ±7%  | 86%   |
| ODLC-65□-1400○ | 34 ~ 46V, 1400mA | ±7%  | 85%   |
| ODLC-65□-1750○ | 27 ~ 36V, 1750mA | ±7%  | 85%   |

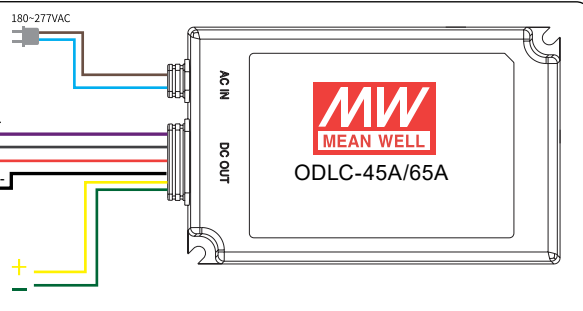
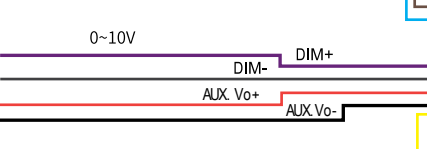
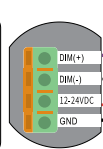
□ = Blank/A; Blank: without auxiliary output, A: with auxiliary function  
○ = Blank or DA (without Auxiliary power)

## Intelligent dimming control with an auxiliary power



Photoelectric Motion Sensor

(Or please refer to page 34 for Wireless Dimming control)



# PLD series 16~60W

## Features

- **Constant current mode**
- PLD-16: 115VAC or 230VAC input  
PLD-25: 90~295VAC input  
PLD-40/60: 230VAC input only
- Fully isolated plastic case with IP42 level
- Isolation class II, no F.G.
- Class 2 power unit / Pass LPS (PLD-16/25)
- Suitable for indoor LED lighting applications
- Protections: Short circuit / Over temperature
- 3 years warranty

|                                                                                                                                                                                                                                         |        | PLD-16                                                                                                                                                                                                                                   | PLD-25                                                                            | PLD-40                                                                             | PLD-60 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------|
| <div>INPUT</div> <div><div>A-Type</div><div>B-Type</div><div>PLD-25</div></div> <div><div>ACL</div><div>ACN</div><div>ACL</div><div>ACN</div><div>ACL</div><div>ACN</div></div> <div>OUTPUT</div> <div><div>V+</div><div>V-</div></div> |        |                                                                                                                                                         |  |  |        |
| AC input voltage range                                                                                                                                                                                                                  |        | 115VAC (90~135VAC) or 230VAC (180~295VAC)                                                                                                                                                                                                |                                                                                   | 90~295VAC                                                                          |        |
| AC inrush current (max.)                                                                                                                                                                                                                |        | Cold start, 20A at 230VAC                                                                                                                                                                                                                |                                                                                   | Cold start, 25A at 230VAC                                                          |        |
| Setup time                                                                                                                                                                                                                              |        | 500ms at full load and 230VAC                                                                                                                                                                                                            |                                                                                   |                                                                                    |        |
| Total harmonic distortion                                                                                                                                                                                                               |        | THD<20%                                                                                                                                                                                                                                  |                                                                                   |                                                                                    |        |
| Withstand voltage                                                                                                                                                                                                                       |        | I/P - O/P: 3.75kVAC                                                                                                                                                                                                                      |                                                                                   |                                                                                    |        |
| Short circuit protection                                                                                                                                                                                                                |        | Hiccup mode, auto-recovery                                                                                                                                                                                                               |                                                                                   |                                                                                    |        |
| Over temp. protection                                                                                                                                                                                                                   |        | Shut down o/p voltage, re-power on to recover                                                                                                                                                                                            |                                                                                   | Shut down o/p voltage, auto-recovery                                               |        |
| Working temperature                                                                                                                                                                                                                     |        | -30~+50°C                                                                                                                                                                                                                                |                                                                                   | -30~+60°C                                                                          |        |
| Safety standards                                                                                                                                                                                                                        |        | UL8750 (PLD-16/25 only), ENEC BS EN61347-1, BS EN61347-2-13, EAC TP TC 040, BIS IS15885 (refer to sepc for models), BS EN62384 (except for PLD-16 A-Type) GB19510.14, GB19510.1 (except for PLD-60)                                      |                                                                                   |                                                                                    |        |
| EMC standards                                                                                                                                                                                                                           |        | BS EN55015 (except for PLD-16 A-Type), BS EN61000-3-2 Class C, BS EN61000-3-3, BS EN61000-4,2,3,4,5,6,8,11, BS EN61547, FCC part 18 non-consumer equipment (PLD-16 A-Type, PLD-25), GB17743, EAC TP TC 020, GB17625.1(except for PLD-60) |                                                                                   |                                                                                    |        |
| Connection                                                                                                                                                                                                                              | Input  | PLD-16 A-Type: UL1430 18AWGx2C (7.5cm)<br>PLD-16 B-Type & PLD-25: NISPT-1 18AWGx2C (7.5cm)<br>PLD-40/60: H03VVH2-F 0.75mm² x2C (7.5cm)                                                                                                   |                                                                                   |                                                                                    |        |
|                                                                                                                                                                                                                                         | Output | UL1430 18AWGx2C (15cm)                                                                                                                                                                                                                   |                                                                                   |                                                                                    |        |
| Dimension (LxWxH)(mm)                                                                                                                                                                                                                   |        | 84x 57x 29.5                                                                                                                                                                                                                             |                                                                                   | 128x 60x 31.5                                                                      |        |

### PLD-16 Series

| Model No.     | Output         | Io Tol. | R&N  | Effi. |
|---------------|----------------|---------|------|-------|
| PLD-16-350 □  | 24~48V, 350mA  | ±5%     | 4.6V | 84.5% |
| PLD-16-700 □  | 16~24V, 700mA  | ±5%     | 2.7V | 84.5% |
| PLD-16-1050 □ | 12~16V, 1050mA | ±5%     | 2.2V | 84.0% |
| PLD-16-1400 □ | 8~12V, 1400mA  | ±5%     | 2.0V | 82.5% |

□ =A or B-Type ; A-Type: 90~135VAC, B-Type: 180~295VAC

### PLD-25 Series

| Model No.   | Output         | Io Tol. | R&N  | Effi. |
|-------------|----------------|---------|------|-------|
| PLD-25-350  | 36~58V, 350mA  | ±5%     | 4.6V | 85%   |
| PLD-25-700  | 24~36V, 700mA  | ±5%     | 2.7V | 86%   |
| PLD-25-1050 | 16~24V, 1050mA | ±5%     | 2.2V | 85%   |
| PLD-25-1400 | 12~18V, 1400mA | ±5%     | 2.0V | 84%   |

### PLD-40 Series

| Model No.    | Output         | Io Tol. | R&N  | Effi. |
|--------------|----------------|---------|------|-------|
| PLD-40-350B  | 70~108V, 350mA | ±5%     | 9.5V | 88%   |
| PLD-40-500B  | 45~80V, 500mA  | ±5%     | 5.0V | 88%   |
| PLD-40-700B  | 34~57V, 700mA  | ±5%     | 3.1V | 87%   |
| PLD-40-1050B | 22~38V, 1050mA | ±5%     | 2.6V | 87%   |
| PLD-40-1400B | 17~29V, 1400mA | ±5%     | 2.5V | 86%   |
| PLD-40-1750B | 13~23V, 1750mA | ±5%     | 2.4V | 86%   |

### PLD-60 Series

| Model No.    | Output         | Io Tol. | R&N   | Effi. |
|--------------|----------------|---------|-------|-------|
| PLD-60-500B  | 70~108V, 500mA | ±5%     | 10.2V | 88%   |
| PLD-60-700B  | 50~86V, 700mA  | ±5%     | 5.6V  | 87%   |
| PLD-60-1050B | 34~57V, 1050mA | ±5%     | 3.8V  | 87%   |
| PLD-60-1400B | 25~43V, 1400mA | ±5%     | 3.4V  | 86%   |
| PLD-60-1750B | 20~34V, 1750mA | ±5%     | 3.3V  | 86%   |
| PLD-60-2000B | 18~30V, 2000mA | ±5%     | 2.4V  | 86%   |
| PLD-60-2400B | 15~25V, 2400mA | ±5%     | 2.4V  | 85%   |

# PCD series 16~60W

## Features

- **Constant current mode**
- PCD-16/25: 115VAC or 230VAC input  
PCD-40/60: 230VAC input only
- **AC phase-cut dimming**, work with leading edge and trailing edge TRIAC dimmers
- Fully isolated plastic case with IP42 level
- Isolation class II, no F.G.
- Class 2 power unit / Pass LPS (PCD-16/25)
- Protections: Short circuit / Over temperature
- 3 years warranty

|                                                                                 |                                                                     | PCD-16/25                                                                                                                                                                                                               | PCD-40/60                                                                           |
|---------------------------------------------------------------------------------|---------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <div><div>INPUT<br/>(A type)</div><div><div>ACL</div><div>ACN</div></div></div> |                                                                     |                                                                                                                                        |  |
|                                                                                 |                                                                     |                                                                                                                                                                                                                         |                                                                                     |
| <div><div>INPUT<br/>(B type)</div><div><div>ACL</div><div>ACN</div></div></div> | <div><div>OUTPUT</div><div><div>Vo~</div><div>Vo+</div></div></div> |                                                                                                                                                                                                                         |                                                                                     |
| AC input voltage range                                                          |                                                                     | 115VAC (90~135VAC) or 230VAC (180~295VAC)                                                                                                                                                                               | 230VAC (180~295VAC)                                                                 |
| AC inrush current (max.)                                                        |                                                                     | Cold start, 10A at 230VAC                                                                                                                                                                                               | PCD-40: Cold start, 11A at 230VAC<br>PCD-60: Cold start, 13A at 230VAC              |
| Setup time                                                                      |                                                                     | 500ms at full load and 230VAC                                                                                                                                                                                           |                                                                                     |
| Total harmonic distortion                                                       |                                                                     | THD<20%                                                                                                                                                                                                                 |                                                                                     |
| Withstand voltage                                                               |                                                                     | I/P - O/P: 3.75kVAC                                                                                                                                                                                                     |                                                                                     |
| Working temperature                                                             |                                                                     | -30~+60°C (refer to output derating curve)                                                                                                                                                                              | PCD-40: -30~+50°C ; PCD-60: -30~+45°C                                               |
| Safety standards                                                                |                                                                     | UL8750 (PCD-16/25 only), ENEC BS EN61347-1, BS EN61347-2-13, BS EN62384 (except for PCD-16/25 A-Type), GB19510.14, GB19510-1, EAC TP TC 004, BIS ISI5885 (PCD-16/25-350B/700B)                                          |                                                                                     |
| EMC standards                                                                   |                                                                     | BS EN55015(except for PCD-16/25 A-Type), BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8, 11, BS EN61547; FCC part 18 non-consumer equipment (for PCD-16/25 A-Type), GB17743, GB17625.1, EAC TP TC 020 |                                                                                     |
| Connection                                                                      | Input                                                               | A-Type: UL1430 18AWGx2C (7.5cm);<br>B-Type: NISPT-1 18AWGx2C (7.5cm)                                                                                                                                                    | H03VVH2-F 0.75mm <sup>2</sup> x2C (7.5cm)                                           |
|                                                                                 | Output                                                              | UL1430 18AWGx2C (15cm)                                                                                                                                                                                                  |                                                                                     |
| Dimension (LxWxH)(mm)                                                           |                                                                     | 84x 57x 29.5                                                                                                                                                                                                            | 128x 60x 31.5                                                                       |

| PCD-16 Series |                |         |      |       |  |
|---------------|----------------|---------|------|-------|--|
| Model No.     | Output         | Io Tol. | R&N  | Effi. |  |
| PCD-16-350 □  | 24~48V, 350mA  | ±5%     | 4.6V | 82.0% |  |
| PCD-16-700 □  | 16~24V, 700mA  | ±5%     | 2.7V | 81.0% |  |
| PCD-16-1050 □ | 12~16V, 1050mA | ±5%     | 2.2V | 80.5% |  |
| PCD-16-1400 □ | 8~12V, 1400mA  | ±5%     | 2.0V | 80.0% |  |

□ = A or B-Type ; A-Type: 90~135VAC, B-Type: 180~295VAC

| PCD-25 Series |                |         |      |       |  |
|---------------|----------------|---------|------|-------|--|
| Model No.     | Output         | Io Tol. | R&N  | Effi. |  |
| PCD-25-350 □  | 40~58V, 350mA  | ±5%     | 4.6V | 82.0% |  |
| PCD-25-700 □  | 24~36V, 700mA  | ±5%     | 2.7V | 81.0% |  |
| PCD-25-1050 □ | 16~24V, 1050mA | ±5%     | 2.2V | 80.5% |  |
| PCD-25-1400 □ | 12~18V, 1400mA | ±5%     | 2.0V | 80.0% |  |

□ = A or B-Type ; A-Type: 90~135VAC, B-Type: 180~295VAC

| PCD-40 Series |                |         |      |       |  |
|---------------|----------------|---------|------|-------|--|
| Model No.     | Output         | Io Tol. | R&N  | Effi. |  |
| PCD-40-350B   | 70~108V, 350mA | ±5%     | 9.5V | 87%   |  |
| PCD-40-500B   | 45~80V, 500mA  | ±5%     | 5.0V | 87%   |  |
| PCD-40-700B   | 34~57V, 700mA  | ±5%     | 3.1V | 86%   |  |
| PCD-40-1050B  | 22~38V, 1050mA | ±5%     | 2.6V | 86%   |  |
| PCD-40-1400B  | 17~29V, 1400mA | ±5%     | 2.5V | 85%   |  |
| PCD-40-1750B  | 13~23V, 1750mA | ±5%     | 2.4V | 85%   |  |

| PCD-60 Series |                |         |       |       |  |
|---------------|----------------|---------|-------|-------|--|
| Model No.     | Output         | Io Tol. | R&N   | Effi. |  |
| PCD-60-500B   | 70~108V, 500mA | ±5%     | 10.2V | 87%   |  |
| PCD-60-700B   | 50~86V, 700mA  | ±5%     | 5.6V  | 86%   |  |
| PCD-60-1050B  | 34~57V, 1050mA | ±5%     | 3.8V  | 86%   |  |
| PCD-60-1400B  | 25~43V, 1400mA | ±5%     | 3.4V  | 85%   |  |
| PCD-60-1750B  | 20~34V, 1750mA | ±5%     | 3.3V  | 85%   |  |
| PCD-60-2000B  | 18~30V, 2000mA | ±5%     | 2.4V  | 85%   |  |
| PCD-60-2400B  | 15~25V, 2400mA | ±5%     | 2.4V  | 84%   |  |

## Dimmer Compatibility Chart

| Manufacturer   | Dimmer Model                |                     |
|----------------|-----------------------------|---------------------|
| LUTRON         | SKYLARK SF-12P-277          | (277VAC / 60Hz)     |
| LUTRON         | DVF-103P-277                | (277VAC / 60Hz)     |
| LUTRON         | SKYLARK SF-10P              | (120VAC / 60Hz)     |
| LUTRON         | SKYLARK S-600P              | (120VAC / 60Hz)     |
| LUTRON         | SKYLARK DVF-103P            | (120VAC / 60Hz)     |
| LEVITON        | ILLUMATECH TM Cat.No.IP106  | (120VAC / 60Hz)     |
| LEVITON        | SURESLIDE TM Cat.No.6633-P  | (120VAC / 60Hz)     |
| LEVITON        | SURESLIDE TM Cat. No.6615-P | (120VAC / 60Hz)     |
| JUNG           | Licht-Management 225 T DE   | (230VAC / 50Hz)     |
| JUNG           | Licht-Management 225 NV DE  | (230VAC / 50Hz)     |
| BERKER         | Tronic-Drehdimmer 286710    | (230-240VAC / 50Hz) |
| BE LICHTREGLER | T39.01                      | (230VAC / 50Hz)     |
| BE LICHTREGLER | T46                         | (230VAC / 50Hz)     |
| CLIPSAL        | 32E450UDM                   | (220-240VAC / 50Hz) |
| CLIPSAL        | NO 32E450TM                 | (220-240VAC / 50Hz) |

- ▶ Conduction angle: 30 degrees (min.) / 180 degrees (max.)
- ▶ For PCD-16/25/40/60 only

# PLN series 20~96W

## Features

- Constant current mode (PLN-20/30/45/60)
- Constant current + constant voltage (PLN-100)
- Universal AC input (90 to 295VAC) / Full range
- Fully isolated plastic case with IP64 level
- Isolation class II, no F.G. for PLN-20/30
- Class 2 power unit / Pass LPS
- User adjustable output voltage (except for PLN-20) and current protection level
- Suitable for LED lighting with independent applications
- Protections: Short circuit / Over current / Over voltage / Over temperature
- 2 years warranty

|               |                  | PLN-20        | PLN-30 | PLN-45/60 | PLN-100 |
|---------------|------------------|---------------|--------|-----------|---------|
| <b>INPUT</b>  |                  |               |        |           |         |
| PLN-20        | PLN-30           | PLN-45/60/100 |        |           |         |
| <b>OUTPUT</b> |                  |               |        |           |         |
| PLN-20        | PLN-30/45/60/100 |               |        |           |         |
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### PLN-20 Series

| Model No. | Output       | Tol. | R&N  | Effi. |
|-----------|--------------|------|------|-------|
| PLN-20-12 | 12V, 0~1.6A  | ±10% | 2.5V | 80.0% |
| PLN-20-18 | 18V, 0~1.1A  | ±10% | 3.0V | 81.0% |
| PLN-20-24 | 24V, 0~0.8A  | ±10% | 3.0V | 82.0% |
| PLN-20-36 | 36V, 0~0.55A | ±10% | 3.0V | 83.0% |
| PLN-20-48 | 48V, 0~0.42A | ±10% | 3.8V | 83.5% |

### PLN-30 Series

| Model No. | Output       | Tol. | R&N  | Effi. |
|-----------|--------------|------|------|-------|
| PLN-30-9  | 9V, 0~3.3A   | ±10% | 2.6V | 80.0% |
| PLN-30-12 | 12V, 0~2.5A  | ±10% | 2.0V | 82.5% |
| PLN-30-15 | 15V, 0~2.0A  | ±10% | 2.6V | 83.5% |
| PLN-30-20 | 20V, 0~1.5A  | ±10% | 2.6V | 84.0% |
| PLN-30-24 | 24V, 0~1.25A | ±10% | 2.6V | 84.0% |
| PLN-30-27 | 27V, 0~1.12A | ±10% | 2.3V | 84.5% |
| PLN-30-36 | 36V, 0~0.84A | ±10% | 4.5V | 85.0% |
| PLN-30-48 | 48V, 0~0.63A | ±10% | 3.7V | 85.5% |

### PLN-45 Series

| Model No. | Output      | Tol. | R&N  | Effi. |
|-----------|-------------|------|------|-------|
| PLN-45-12 | 12V, 0~3.8A | ±10% | 2.0V | 83.5% |
| PLN-45-15 | 15V, 0~3.0A | ±10% | 2.4V | 85.0% |
| PLN-45-20 | 20V, 0~2.3A | ±10% | 1.8V | 86.5% |

| Model No. | Output       | Tol. | R&N  | Effi. |
|-----------|--------------|------|------|-------|
| PLN-45-24 | 24V, 0~1.9A  | ±10% | 2.7V | 86.5% |
| PLN-45-27 | 27V, 0~1.7A  | ±10% | 2.7V | 86.5% |
| PLN-45-36 | 36V, 0~1.25A | ±10% | 3.6V | 87.5% |
| PLN-45-48 | 48V, 0~0.95A | ±10% | 4.6V | 87.5% |

### PLN-60 Series

| Model No. | Output      | Tol. | R&N  | Effi. |
|-----------|-------------|------|------|-------|
| PLN-60-12 | 12V, 0~5.0A | ±10% | 2.0V | 85.0% |
| PLN-60-15 | 15V, 0~4.0A | ±10% | 2.4V | 86.0% |
| PLN-60-20 | 20V, 0~3.0A | ±10% | 1.8V | 87.5% |
| PLN-60-24 | 24V, 0~2.5A | ±10% | 2.7V | 87.0% |
| PLN-60-27 | 27V, 0~2.3A | ±10% | 2.7V | 88.0% |
| PLN-60-36 | 36V, 0~1.7A | ±10% | 3.6V | 89.0% |
| PLN-60-48 | 48V, 0~1.3A | ±10% | 4.6V | 89.0% |

### PLN-100 Series

| Model No.  | Output       | Tol. | R&N   | Effi. |
|------------|--------------|------|-------|-------|
| PLN-100-12 | 12V, 0~5.0A  | ±3%  | 150mV | 83.0% |
| PLN-100-15 | 15V, 0~5.0A  | ±3%  | 150mV | 85.0% |
| PLN-100-20 | 20V, 0~4.8A  | ±3%  | 150mV | 88.5% |
| PLN-100-24 | 24V, 0~4.0A  | ±3%  | 150mV | 88.5% |
| PLN-100-27 | 27V, 0~3.55A | ±3%  | 150mV | 88.0% |
| PLN-100-36 | 36V, 0~2.65A | ±2%  | 150mV | 88.0% |
| PLN-100-48 | 48V, 0~2.0A  | ±2%  | 200mV | 88.5% |

# HLN series 40~80W

## Features

- Constant voltage + constant current modes
- Universal AC input (90 to 305VAC) / Full range
- High efficiency up to 91%
- Fully isolated plastic case with IP64 level
- Class 2 power unit / Pass LPS
- Suitable for dry, damp location
- Suitable for LED lighting with independent applications

- Protections:  
Short circuit / Over current / Over voltage / Over temperature
- Multiple models for choice:  
A-Type: IP64 rated. Output voltage and constant current level can be adjusted through internal potentiometer  
B-Type: IP64 rated and built-in 3 in 1 dimming function (1-10VDC, PWM signal, or resistance)
- 3 years warranty



|                           |        |                                                                                                                                                                                                                 |                           |                           |
|---------------------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|
| AC input voltage range    |        | 90~305VAC; 127~431VDC                                                                                                                                                                                           |                           |                           |
| AC inrush current (max.)  |        | Cold start, 50A at 230VAC                                                                                                                                                                                       | Cold start, 55A at 230VAC | Cold start, 70A at 230VAC |
| DC adjustment range       |        | ±10% rated output voltage (A-Type only)                                                                                                                                                                         |                           |                           |
| Current adjustment range  |        | 60%~100%                                                                                                                                                                                                        |                           |                           |
| Over current protection   |        | 95%~108% constant current limiting, auto-recovery                                                                                                                                                               |                           |                           |
| Over voltage protection   |        | 109%~150% rated output voltage                                                                                                                                                                                  |                           |                           |
| Setup, rise, hold up time |        | 500ms, 80ms, 16ms at full load and 230VAC                                                                                                                                                                       |                           |                           |
| Total harmonic distortion |        | THD<20%                                                                                                                                                                                                         |                           |                           |
| Withstand voltage         |        | I/P-O/P: 3.75kVAC, I/P-FG: 2kVAC, O/P-FG:1.5kVAC                                                                                                                                                                |                           |                           |
| Working temperature       |        | -40~+50°C (refer to output derating curve)                                                                                                                                                                      |                           |                           |
| Safety standards          |        | UL8750, CSA C22.2 No. 250.0-08 , BS EN61347-1, BS EN61347-2-13 independent, IP64, J61347-1, J61347-2-13, EAC TP TC 004,GB19510.1,GB19510.14 approved ; design refer to UL60950-1, BS EN60335-1(for HLN-40H/60H) |                           |                           |
| EMC standards             |        | BS EN55015, BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, EAC TP TC 020                                                                                                      |                           |                           |
| Connection                | Input  | UL rated, SVT 18AWGx3C (30cm)                                                                                                                                                                                   |                           |                           |
|                           | Output | A-Type: UL rated, SVT 18AWGx2C (30cm) ; B-Type: UL rated, SVT 18AWGx4C (30cm)                                                                                                                                   |                           |                           |
| Dimension (LxWxH) (mm)    |        | 161x 61.5x 35                                                                                                                                                                                                   |                           | 181x 61.5x 35             |

## HLN-40H Series

| Model No.     | Output       | Tol.  | R&N   | Effi. |
|---------------|--------------|-------|-------|-------|
| HLN-40H-12(A) | 12V, 0~3.33A | ±2.5% | 150mV | 86.5% |
| HLN-40H-15(A) | 15V, 0~2.67A | ±2.0% | 150mV | 86.5% |
| HLN-40H-20(A) | 20V, 0~2.00A | ±1.0% | 150mV | 87.5% |
| HLN-40H-24(A) | 24V, 0~1.67A | ±1.0% | 150mV | 88.0% |
| HLN-40H-30(A) | 30V, 0~1.33A | ±1.0% | 200mV | 88.5% |
| HLN-40H-36(A) | 36V, 0~1.12A | ±1.0% | 200mV | 88.5% |
| HLN-40H-42(A) | 42V, 0~0.96A | ±1.0% | 300mV | 88.5% |
| HLN-40H-48(A) | 48V, 0~0.84A | ±1.0% | 300mV | 89.0% |
| HLN-40H-54(A) | 54V, 0~0.75A | ±1.0% | 300mV | 89.0% |

○ = A or B

## HLN-60H Series

| Model No.     | Output      | Tol.  | R&N   | Effi. |
|---------------|-------------|-------|-------|-------|
| HLN-60H-15(A) | 15V, 0~4.0A | ±2.0% | 150mV | 87.0% |
| HLN-60H-20(A) | 20V, 0~3.0A | ±1.0% | 150mV | 88.5% |
| HLN-60H-24(A) | 24V, 0~2.5A | ±1.0% | 150mV | 89.0% |

| Model No.     | Output       | Tol.  | R&N   | Effi. |
|---------------|--------------|-------|-------|-------|
| HLN-60H-30(A) | 30V, 0~2.0A  | ±1.0% | 200mV | 89.5% |
| HLN-60H-36(A) | 36V, 0~1.70A | ±1.0% | 200mV | 90.0% |
| HLN-60H-42(A) | 42V, 0~1.45A | ±1.0% | 300mV | 90.0% |
| HLN-60H-48(A) | 48V, 0~1.30A | ±1.0% | 300mV | 90.5% |
| HLN-60H-54(A) | 54V, 0~1.15A | ±1.0% | 300mV | 90.5% |

○ = A or B

## HLN-80H Series

| Model No.     | Output       | Tol.  | R&N   | Effi. |
|---------------|--------------|-------|-------|-------|
| HLN-80H-12(A) | 12V, 0~5.0A  | ±2.5% | 150mV | 88.0% |
| HLN-80H-15(A) | 15V, 0~5.0A  | ±2.0% | 150mV | 89.0% |
| HLN-80H-20(A) | 20V, 0~4.0A  | ±1.0% | 150mV | 90.0% |
| HLN-80H-24(A) | 24V, 0~3.4A  | ±1.0% | 150mV | 90.5% |
| HLN-80H-30(A) | 30V, 0~2.7A  | ±1.0% | 200mV | 91.0% |
| HLN-80H-36(A) | 36V, 0~2.3A  | ±1.0% | 200mV | 91.0% |
| HLN-80H-42(A) | 42V, 0~1.95A | ±1.0% | 200mV | 91.0% |
| HLN-80H-48(A) | 48V, 0~1.7A  | ±1.0% | 200mV | 91.0% |
| HLN-80H-54(A) | 54V, 0~1.5A  | ±1.0% | 200mV | 91.0% |

○ = A or B

# OWA series 60~90W

## Features

- Constant voltage + constant current modes
- Universal AC input / Full range
- Built-in active PFC function (OWA-90)
- No load power consumption <0.15W
- Energy efficiency Level VI and COC V5 Tier 2
- Fully encapsulated with IP67 level for power body
- Isolation class II, no F.G.
- Class 2 power unit (OWA-60 & OWA-90-20~54)
- Protections: Short circuit / Over current / Over voltage / Over temp.
- IP67 Suitable for dry and damp location
- 5 years warranty

| INPUT     |        |
|-----------|--------|
| OWA-60/90 |        |
| U-Type    | E-Type |
|           |        |
| OUTPUT    |        |
| OWA-60    |        |
| U-Type    | E-Type |
|           |        |
| OWA-90    |        |
| U-Type    | E-Type |
|           |        |



|                           |        |                                                                                                            |                                                                                                                                                                                                                                                           |
|---------------------------|--------|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AC input voltage range    |        | 90~264VAC ; 127~370VDC                                                                                     |                                                                                                                                                                                                                                                           |
| AC inrush current (max.)  |        | Cold start, 65A at 230VAC                                                                                  | Cold start, 60A at 230VAC                                                                                                                                                                                                                                 |
| Over current protection   |        | 95%~108% constant current limiting, auto-recovery                                                          |                                                                                                                                                                                                                                                           |
| Over voltage protection   |        | 110%~140% rated output voltage                                                                             |                                                                                                                                                                                                                                                           |
| Over temp. protection     |        | Shut down output voltage, re-power on to recover                                                           |                                                                                                                                                                                                                                                           |
| Setup, rise, hold up time |        | 500ms, 80ms, 16ms at full load and 230VAC                                                                  |                                                                                                                                                                                                                                                           |
| Withstand voltage         |        | I/P-O/P: 3.75KVAC                                                                                          |                                                                                                                                                                                                                                                           |
| Working temperature       |        | -35~+70°C                                                                                                  | -40~+70°C (refer to output derating curve)                                                                                                                                                                                                                |
| Safety standards          | U-Type | UL8750 Listed approved                                                                                     |                                                                                                                                                                                                                                                           |
|                           | E-Type | DEKRA IEC/BS EN60335-1(except for 48~54V),<br>IEC/BS EN61558-1, BS EN61558-2-16,<br>EAC TP TC 040 approved | TUV BS EN60335-1(except for 42~54V),BS EN61558-1,<br>BS EN61558-2-16,<br>EAC TP TC 040 approved                                                                                                                                                           |
| EMC standards             |        | U-Type: FCC Part 15; E-Type: BS EN55014, BS EN55032 class B, BS EN61000-3-2,-3, EAC TP TC 020              |                                                                                                                                                                                                                                                           |
| Connection                | Input  | Plug                                                                                                       | U-Type: NEMA 1-15P plug; E-Type: CEE 7/7 EU plug                                                                                                                                                                                                          |
|                           |        | Cable                                                                                                      | U-Type: UL rated, SVT 18AWGx2C (150cm); E-Type: H05RN-F 1.0mm <sup>2</sup> x2C (150cm)                                                                                                                                                                    |
|                           | Output | Plug                                                                                                       | 2.1φ x 5.5φ x 11mm / C+<br><br>U-Type: Power DIN 4P (with lock) type, or 2.5φ x 5.5φ x 11mm/C+, tuning fork type (20~54V only)<br>E-Type : XLR 4P, male type                                                                                              |
|                           |        | Cable                                                                                                      | U-Type : UL1185 16AWG x 2C (30cm);<br>E-Type : H05RN-F 1.0mm <sup>2</sup> x 2C (30cm)<br><br>U-Type: UL2464 18AWGx4C (30cm)<br>for Power DIN 4P type;<br>UL246416AWGx2C (30cm)<br>for tuning fork type;<br>E-Type : H05RN-F 1.0mm <sup>2</sup> x2C (30cm) |
| Dimension (LxWxH)(mm)     |        | 130× 53× 35                                                                                                | 171× 63× 37.5                                                                                                                                                                                                                                             |

## OWA-60 Series

| Model No.  | Output       | Tol. | R&N   | Effi. |
|------------|--------------|------|-------|-------|
| OWA-60□-12 | 12V, 0~5A    | ±4%  | 150mV | 88%   |
| OWA-60□-15 | 15V, 0~4A    | ±4%  | 150mV | 89%   |
| OWA-60□-20 | 20V, 0~3A    | ±4%  | 150mV | 89%   |
| OWA-60□-24 | 24V, 0~2.5A  | ±3%  | 150mV | 90%   |
| OWA-60□-30 | 30V, 0~2A    | ±3%  | 200mV | 90%   |
| OWA-60□-36 | 36V, 0~1.67A | ±2%  | 200mV | 90%   |
| OWA-60□-42 | 42V, 0~1.5A  | ±1%  | 250mV | 90%   |
| OWA-60□-48 | 48V, 0~1.25A | ±1%  | 250mV | 91%   |
| OWA-60□-54 | 54V, 0~1.12A | ±1%  | 350mV | 91%   |

## OWA-90 Series

| Model No.    | Output       | Tol. | R&N   | Effi. |
|--------------|--------------|------|-------|-------|
| OWA-90□-12   | 12V, 0~7.5A  | ±4%  | 150mV | 89%   |
| OWA-90□-15   | 15V, 0~6A    | ±4%  | 150mV | 90%   |
| OWA-90□-20-△ | 20V, 0~4.5A  | ±4%  | 150mV | 90%   |
| OWA-90□-24-△ | 24V, 0~3.75A | ±3%  | 150mV | 90%   |
| OWA-90□-30-△ | 30V, 0~3A    | ±3%  | 200mV | 90%   |
| OWA-90□-36-△ | 36V, 0~2.5A  | ±2%  | 200mV | 91%   |
| OWA-90□-42-△ | 42V, 0~2.15A | ±1%  | 250mV | 91%   |
| OWA-90□-48-△ | 48V, 0~1.88A | ±1%  | 250mV | 91%   |
| OWA-90□-54-△ | 54V, 0~1.67A | ±1%  | 350mV | 91%   |

□ = U / E; U: American 2P, E: European 2P

□ = U / E; U: American 2P, E: European 2P  
△ = Blank/P1M; Blank: Power DIN 4P with lock type, P1M: 2.5φx5.5φx11mm/C+, tuning fork type

# OWA series 120~200W

## Features

- Constant voltage + constant current modes
- Universal AC input / Full range
- Built-in active PFC function
- No load power consumption <0.15W
- Energy efficiency Level VI and COC V5 Tier 2
- Fully encapsulated with IP67 level for power body
- Isolation class II, no F.G.
- Class 2 power unit
- Protections: Short circuit / Over current / Over voltage / Over temp.
- IP67 Suitable for dry and damp location
- 5 years warranty

| INPUT       |        |
|-------------|--------|
| OWA-120/200 |        |
| U-Type      | E-Type |
|             |        |
| OUTPUT      |        |
| OWA-120/200 |        |
| U-Type      | E-Type |
|             |        |



|                           |        |        |                                                                                                                               |  |                                                                    |  |
|---------------------------|--------|--------|-------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------|--|
| AC input voltage range    |        |        | 90~264VAC ; 127~370VDC (180~264VAC ; 254~370VDC for OWA-120E)                                                                 |  | 100 ~ 264VAC; 142 ~ 370VDC (180~264VAC ; 254~370VDC for OWA-200E)) |  |
| AC inrush current (max.)  |        |        | Cold start, 60A at 230VAC                                                                                                     |  | Cold start, 90A at 115VAC<br>Cold start, 180A at 230VAC            |  |
| Over current protection   |        |        | 95%~108% constant current limiting, auto-recovery                                                                             |  | 105%~150%                                                          |  |
| Over voltage protection   |        |        | 110%~140% rated output voltage                                                                                                |  |                                                                    |  |
| Over temp. protection     |        |        | Shut down output voltage, re-power on to recover                                                                              |  |                                                                    |  |
| Setup, rise, hold up time |        |        | 500ms, 80ms, 16ms at full load and 230VAC/115VAC                                                                              |  |                                                                    |  |
| Withstand voltage         |        |        | I/P-O/P: 3.75K V AC                                                                                                           |  | I/P-O/P: 4.2K V AC                                                 |  |
| Working temperature       |        |        | -40~+70°C (refer to output derating curve)                                                                                    |  |                                                                    |  |
| Safety standards          |        | U-Type | UL8750 Listed approved                                                                                                        |  | UL62368-1 Listed approved                                          |  |
|                           |        | E-Type | DEKRA IEC/BS EN60335-1(except for 48~54V),<br>IEC/BS EN61558-1, BS EN61558-2-16,<br>EAC TP TC 040 approved                    |  |                                                                    |  |
| EMC standards             |        |        | U-Type: FCC Part 15; E-Type: BS EN55014, BS EN55032 class B, BS EN61000-3-2,-3, EAC TP TC 020                                 |  |                                                                    |  |
| Connection                | Input  | Plug   | U-Type: NEMA 1-15P plug; E-Type: CEE 7/7 EU plug                                                                              |  |                                                                    |  |
|                           |        | Cable  | U-Type: UL rated, SVT 18AWGx2C (150cm); E-Type: H05RN-F 1.0mm <sup>2</sup> x2C (150cm)                                        |  |                                                                    |  |
|                           | Output | Plug   | U-Type: Power DIN 4P (with lock) type, or 2.5φ x 5.5φ x 11mm/C+, tuning fork type (20~54V only)<br>E-Type : XLR 4P, male type |  |                                                                    |  |
|                           |        | Cable  | U-Type: UL2464 18AWGx4C (30cm);<br>E-Type: H07RN-F 1.5mm <sup>2</sup> x2C (30cm)                                              |  | U-Type: UL2464 16AWGx4C(100cm)<br>E-Type:SJOW14AWGx2C:300v(30cm)   |  |
| Dimension (LxWxH)(mm)     |        |        | 191× 63× 37.5                                                                                                                 |  | 195x68x39.5                                                        |  |

## OWA-120 Series

| Model No.   | Output      | Tol. | R&N   | Effi. |
|-------------|-------------|------|-------|-------|
| OWA-120□-12 | 12V, 0~10A  | ±4%  | 150mV | 87.5% |
| OWA-120□-15 | 15V, 0~8A   | ±4%  | 150mV | 89%   |
| OWA-120□-20 | 20V, 0~6A   | ±4%  | 150mV | 90%   |
| OWA-120□-24 | 24V, 0~5A   | ±4%  | 150mV | 90.5% |
| OWA-120□-30 | 30V, 0~4A   | ±3%  | 200mV | 90%   |
| OWA-120□-36 | 36V, 0~3.4A | ±2%  | 200mV | 90%   |
| OWA-120□-42 | 42V, 0~2.9A | ±1%  | 250mV | 90.5% |
| OWA-120□-48 | 48V, 0~2.5A | ±1%  | 250mV | 90.5% |
| OWA-120□-54 | 54V, 0~2.3A | ±1%  | 350mV | 90.5% |

□ = U / E; U: American 2P, E: European 2P

## OWA-200 Series

| Model No.   | Output       | Tol. | R&N   | Effi.  |        |
|-------------|--------------|------|-------|--------|--------|
|             |              |      |       | 115VAC | 230VAC |
| OWA-200□-12 | 12V, 0~15A   | ±5%  | 150mV | 88.5%  | 91%    |
| OWA-200□-20 | 20V, 0~10A   | ±4%  | 150mV | 90%    | 92.5%  |
| OWA-200□-24 | 24V, 0~8.3A  | ±4%  | 150mV | 90.5%  | 93%    |
| OWA-200□-36 | 36V, 0~5.55A | ±3%  | 200mV | 91.5%  | 94%    |
| OWA-200□-42 | 42V, 0~4.75A | ±3%  | 250mV | 91.5%  | 94%    |
| OWA-200□-48 | 48V, 0~4.17A | ±3%  | 250mV | 91.5%  | 94%    |
| OWA-200□-54 | 54V, 0~3.71A | ±3%  | 350mV | 91.5%  | 94%    |

□ = U / E; U: American 2P, E: European 2P

# GSV series 30~60W

## Features

- Design with Active PFC Function
- Class II/2 power unit, no FG
- Meet BS EN61347 regulation
- Meet BS EN61000-3-2 harmonic current class c
- Constant voltage output
- No load power consumption < 0.5W
- Dimmable with a PWM Dimmer
- Suitable for indoor LED lighting applications
- Protection: Short circuit / Over load / Over voltage
- 3 years warranty

|                                                                                                                |        |                 | GSV30                                                                                                                                                                                                                                                | GSV60                                       |
|----------------------------------------------------------------------------------------------------------------|--------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| <div>OUTPUT</div> <div></div> |        |                 | <div><br/>EU type</div> <div><br/>Interchangeable(optional)</div> <div>NEW</div> |                                             |
| AC input voltage range                                                                                         |        |                 | 180~264VAC; 255~373VDC                                                                                                                                                                                                                               | 180~264VAC; 255~373VDC                      |
| AC inrush current (max.)                                                                                       |        |                 | Cold start, 20A at 230VAC                                                                                                                                                                                                                            |                                             |
| Setup time                                                                                                     |        |                 | <500ms at full load and 230VAC                                                                                                                                                                                                                       |                                             |
| Total harmonic distortion                                                                                      |        |                 | THD<20%/230V@full load                                                                                                                                                                                                                               |                                             |
| Short circuit protection                                                                                       |        |                 | Hiccup mode, auto-recovery                                                                                                                                                                                                                           |                                             |
| Withstand voltage                                                                                              |        |                 | I/P-O/P: 3.75kVAC                                                                                                                                                                                                                                    |                                             |
| Working temperature                                                                                            |        |                 | -20~+50°C ( refer to output derating curve)                                                                                                                                                                                                          | -20~+40°C ( refer to output derating curve) |
| Safety standards                                                                                               |        |                 | BS EN61347-1, BS EN61347-2-13 approved                                                                                                                                                                                                               |                                             |
| EMC standards                                                                                                  |        |                 | BS EN55015, BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547                                                                                                                                                          |                                             |
| Connection                                                                                                     | Input  | Fixed           | European 2P                                                                                                                                                                                                                                          |                                             |
|                                                                                                                |        | Interchangeable | Optional: U.K type / European type                                                                                                                                                                                                                   |                                             |
|                                                                                                                | Output | Plug            | 2.1ϕ x 5.5ϕ x11mm, C+ (P1J)                                                                                                                                                                                                                          |                                             |
|                                                                                                                |        | Cable           | UL2468 1500+150/-0mm                                                                                                                                                                                                                                 |                                             |
| Dimension (LxWxH)(mm)                                                                                          |        |                 | 75.5x32x47.5                                                                                                                                                                                                                                         |                                             |

## GSV30 Series



| Model No.    | Output        | Vo Tol. | R&N  | Effi. |
|--------------|---------------|---------|------|-------|
| GSV30□12-P1J | 12V, 0~2.5A   | ±1.5V   | 2.5V | 83.0% |
| GSV30□24-P1J | 24V, 0~1.25A  | ±2.0V   | 3.5V | 86.0% |
| GSV30□48-P1J | 48V, 0~0.625A | ±4.0V   | 4.5V | 89.0% |

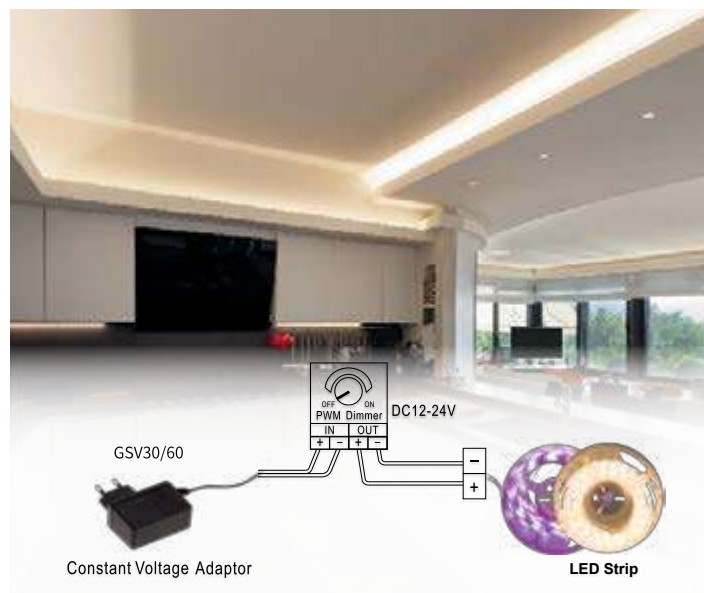
## GSV60 Series



| Model No.    | Output       | Vo Tol. | R&N  | Effi. |
|--------------|--------------|---------|------|-------|
| GSV60□12-P1J | 12V, 0~4.16A | ±1.5V   | 2.5V | 85.0% |
| GSV60□24-P1J | 24V, 0~2.5A  | ±2.25V  | 4V   | 87.0% |
| GSV60□48-P1J | 48V, 0~1.25A | ±4.5V   | 5.5V | 90.0% |

□ = E: European 2 pin;  
Optional I: interchangeable type available by request.  
(AC plug order separately)

## ► GSV30/60 Application Diagram



# Plastic Case

With PFC + Terminal block

- 31 SLD Series (50~80W)
- 32 LDC Series (35~80W)
- 33 LCM Series (25~60W)
- 34 LCM-U Series (40~60W)
- 35 LCM-KN Series (25~60W)
- 36 IDLV Series (25~65W)
- 37 IDLC Series (25~65W)
- 38 PLM Series (12~25W)
- 39 PLC Series (30~100W)

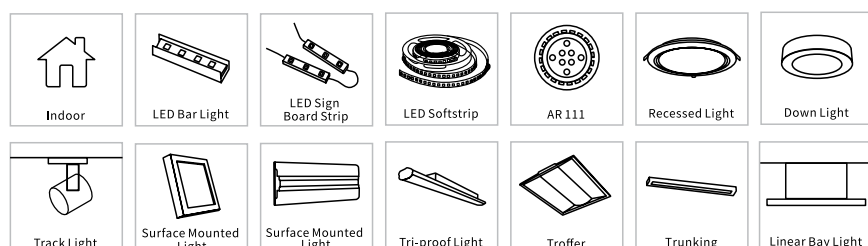


**BLUEVIEW**  
CERTIFIED PARTNER

MEAN WELL has a wide range terminal block type indoor LED driver for most Indoor LED lighting luminaires. Designed as an independent control gear, LCM, IDLC and PLM series accept full range input voltage and feature 0-10V or DALI dimming function with global safety approvals. Besides, IDLC and LCM series can provide auxiliary power for the IoT intelligent dimming application.

Other highlights for this category are the SLD and LDC series for linear fixtures. For linear fixtures, slim and linear LED drivers are required. Therefore SLD and LDC series emphasize the compact design with merely 16.8~21mm in height and 30mm in width.

## Application



# SLD series 50~80W

## Features

- Constant voltage + Constant current mode output
- Universal AC input 110~305VAC input
- Plastic housing with Class II design
- SELV and Isolated Design
- Class 2 power unit (Except for SLD-80-12)
- Slim and Linear housing Design
- No load power consumption < 0.5W
- Protections: Short circuit / Over current / Over voltage / Over temp.
- Meet with BS EN61347 regulation
- Meet BS EN61000-3-2 Harmonic current
- 3 years warranty

|                           | SLD-50                                                                                                                                                                                                     | SLD-80                                                                             |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
|                           |                                                                                                                           |  |
| AC input voltage range    | 110~305VAC; 154~431VDC                                                                                                                                                                                     |                                                                                    |
| AC inrush current (max.)  | Cold start, 50A at 230VAC                                                                                                                                                                                  |                                                                                    |
| Setup time                | 500ms at 230VAC                                                                                                                                                                                            |                                                                                    |
| Total harmonic distortion | THD < 10%                                                                                                                                                                                                  |                                                                                    |
| Short circuit protection  | Hiccup mode, recovers automatically after fault condition is removed                                                                                                                                       |                                                                                    |
| Over temp. protection     | Shut down output voltage, re-power on to recovery                                                                                                                                                          |                                                                                    |
| Withstand voltage         | I/P-O/P: 3.75KVAC                                                                                                                                                                                          |                                                                                    |
| Working temperature       | Tcase = -20~+90°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)                                                                                                                                   |                                                                                    |
| Safety standards          | UL8750, CSA C22.2 No. 250.13-12, ENEC BS EN61347-1, BS EN61347-2-13 independent, BS EN62384, EAC TP TC 004, GB19510.1, GB19510.14, BIS ISI5885 approved                                                    |                                                                                    |
| EMC standards             | BS EN55015, BS EN61000-3-2 Class C (@load ≥ 60%); BS EN61000-3-3; GB17743 and GB17625.1, BS EN61000-4-2, 3, 4, 5, 6, 8, 11; BS EN61547, light industry level (surge immunity Line-Line 1KV), EAC TP TC 020 |                                                                                    |
| Dimension (LxWxH)(mm)     | 280x 30x 16.8                                                                                                                                                                                              | 320x 30x 16.8                                                                      |

### SLD-50 Series



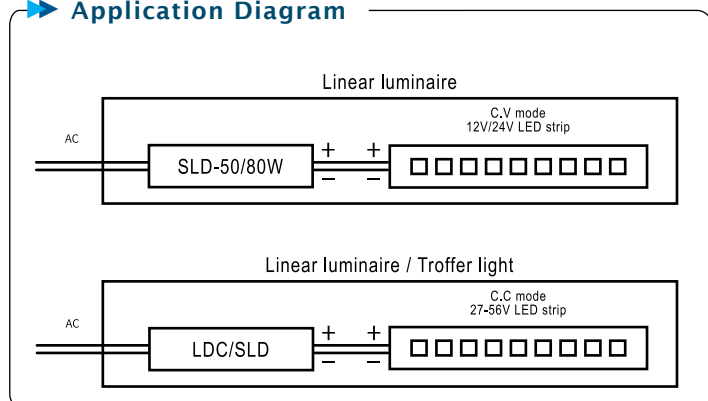
| Model No. | Output           | Tol. | R&N   | Effi. |
|-----------|------------------|------|-------|-------|
| SLD-50-12 | 7.2~12V, 4.2A    | ±4%  | 150mV | 88%   |
| SLD-50-24 | 14.4~24V, 2.1A   | ±3%  | 240mV | 90%   |
| SLD-50-56 | 30~56V, 0.9~1.4A | ±1%  | 350mV | 90%   |

### SLD-80 Series



| Model No. | Output           | Tol. | R&N   | Effi. |
|-----------|------------------|------|-------|-------|
| SLD-80-12 | 7.2~12V, 6.6A    | ±4%  | 150mV | 88%   |
| SLD-80-24 | 14.4~24V, 3.3A   | ±3%  | 240mV | 90%   |
| SLD-80-56 | 30~56V, 1.4~2.1A | ±1%  | 350mV | 90%   |

## Application Diagram



## SLD & LDC Linear series Selection guide

| output Model | 12V | 24V | 56V | 0-10V | DALI | Push Dim | warranty |
|--------------|-----|-----|-----|-------|------|----------|----------|
| LDC-35       |     |     | ✓   | ✓     | ✓    | ✓        | 5        |
| LDC-55       |     |     | ✓   | ✓     | ✓    | ✓        | 5        |
| LDC-80       |     |     | ✓   | ✓     | ✓    | ✓        | 5        |
| SLD-50       | ✓   | ✓   | ✓   |       |      |          | 3        |
| SLD-80       | ✓   | ✓   | ✓   |       |      |          | 3        |

\* 56V output is C.P mode output

# LDC series 35~80W

## Features

- Constant power mode (Full power at 70~100% current)
- Linear metal housing
- SELV and Isolated Design
- Flicker-Free
- No load power consumption < 0.5W
- Push terminal style I/O
- Protections: Short circuit / Over temperature / Over voltage
- 5 years warranty

- Multiple types for choice:
  - Blank-Type: Without dimming function
  - B-Type: Built-in 3 in 1 dimming function (0~10VDC, PWM signal or resistance)
  - DA-Type: Built-in DALI interface, push dimming function
  - DA2-Type: DALI-2 (only for LDC-55)
- Output current level can be adjusted by resistance
- Built-in temperature compensation function by external NTC

|                          | LDC-35(DA)                                                                                                                       | LDC-55(DA/DA2)                                                                     | LDC-80(DA)                                                                          |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>INPUT</b>             |                                                  |  |  |
| <b>OUTPUT</b>            |                                                 |  |  |
| AC input voltage range   | 180~295VAC                                                                                                                       |                                                                                    |                                                                                     |
| AC inrush current (max.) | Cold start, 30A at 230VAC                                                                                                        | Cold start, 65A at 230VAC                                                          | Cold start, 55A at 230VAC                                                           |
| Setup time               | 500ms at 230VAC                                                                                                                  |                                                                                    |                                                                                     |
| Short circuit protection | Constant current limiting or hiccup mode, auto-recovery                                                                          |                                                                                    |                                                                                     |
| Over temp. protection    | Shut down o/p voltage with auto-recovery                                                                                         |                                                                                    |                                                                                     |
| Withstand voltage        | I/P-O/P: 3.75KVAC, I/P-FG: 2KVAC, O/P-FG: 1.5KVAC                                                                                |                                                                                    |                                                                                     |
| Working temperature      | Tcase = -25~+80°C                                                                                                                |                                                                                    |                                                                                     |
| Safety standards         | UL8750, ENEC BS EN/AS/NZS61347-1, BS EN/AS/NZS61347-2-13, BS EN62384, GB19510.14, GB19510.1, EAC TP TC 004, BIS IS15885          |                                                                                    |                                                                                     |
| DALI standards           | Design refer to IEC62386-101, 102, 207 (DA-Type only)                                                                            |                                                                                    |                                                                                     |
| EMC standards            | BS EN55015, BS EN61000-3-2 Class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, GB/T17743, GB17625.1, EAC TP TC 020 |                                                                                    |                                                                                     |
| Dimension (LxWxH)(mm)    | 280x 30x 21                                                                                                                      | 320x 30x 21                                                                        | 360x 30x 21                                                                         |

### LDC-35(DA)

| Model No. | Output                | Io Tol. | Effi. |
|-----------|-----------------------|---------|-------|
| LDC-35□   | 27~56V,<br>300~1000mA | 5%      | 88%   |

□ = Blank, B or DA

### LDC-55(DA/DA2)

| Model No. | Output                | Io Tol. | Effi. |
|-----------|-----------------------|---------|-------|
| LDC-55□   | 27~56V,<br>500~1600mA | 5%      | 90%   |

□ = Blank, B, DA or DA2

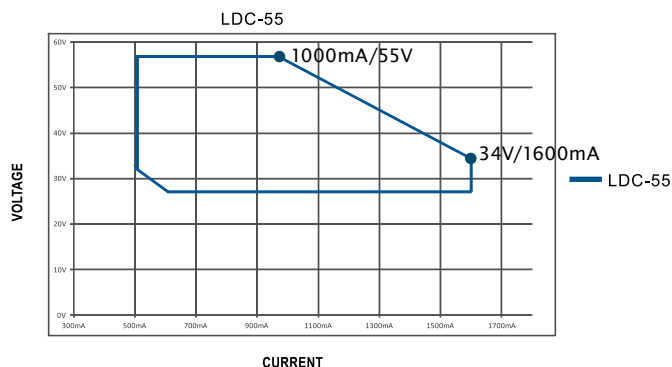
### LDC-80(DA)

| Model No. | Output                | Io Tol. | Effi. |
|-----------|-----------------------|---------|-------|
| LDC-80□   | 27~56V,<br>700~2100mA | 5%      | 90%   |

□ = Blank, B or DA

Note: DALI-2 is available, please consult MEAN WELL for details.

## CP Curve



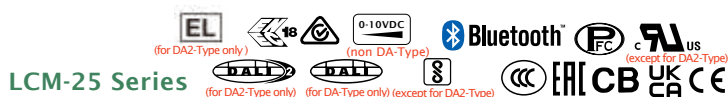
# LCM series 25~60W

## Features

- Constant current mode
- LCM-25: 180~277VAC input only  
LCM-40/60: 180~295VAC input only
- Multiple-stage output current level selectable by DIP switch
- No load power consumption <0.5W (LCM-25/25DA/40DA/60DA)
- Class II power unit, no F.G.
- Built-in 3 in 1 dimming function, 0~10VDC, PWM signal, or resistance (non DA-Type)
- Wireless driver with integrated EnOcean for LCM-40EO/60EO (by request)
- Built-in DALI interface and push dimming function (DA/DA2 type)
- 12V/50mA auxiliary output for LCM-40/60 (LCM-40DA/60DA by request)
- Temperature compensation function by external NTC (40W/60W only)
- Power supplies synchronization function up to 10 units
- Built-in Bluetooth mesh wireless dimming for IoT types
- Protections: Short circuit / Over voltage (40W/60W only) / Over temp.
- 3 years warranty

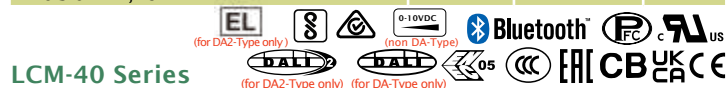
|             | INPUT       |     | OUTPUT  |  | LCM-25/40/60(DA/DA2/IOT) | LCM-40EO/60EO |
|-------------|-------------|-----|---------|--|--------------------------|---------------|
|             | 25W/40W/60W | 25W | 40W/60W |  |                          |               |
| Non-DA Type |             |     |         |  |                          |               |
| DA-Type     |             |     |         |  |                          | By request    |

|                           |                                                                                                                                                                                                                                                                            |                  |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| AC input voltage range    | 180~277VAC; 254~380VDC(LCM-25), 180~295VAC; 254~417VDC(LCM-40/60)                                                                                                                                                                                                          |                  |
| AC inrush current (Typ.)  | Cold start, 20A at 230VAC                                                                                                                                                                                                                                                  |                  |
| Short circuit protection  | Constant current limiting, recovers automatically after fault condition is removed                                                                                                                                                                                         |                  |
| Over voltage protection   | LCM-40/40DA: 110~130VDC, LCM-60/60DA: 105~125VDC                                                                                                                                                                                                                           |                  |
| Setup time                | 500ms / 230VAC                                                                                                                                                                                                                                                             |                  |
| Total harmonic distortion | THD<20%                                                                                                                                                                                                                                                                    |                  |
| Wireless protocol         | EnOcean standard 868MHz for European (EO-Type)                                                                                                                                                                                                                             |                  |
| Withstand voltage         | I/P-O/P: 3.75KVAC                                                                                                                                                                                                                                                          |                  |
| Working temperature       | Tcase= -30~+85°C                                                                                                                                                                                                                                                           | Tcase= -30~+90°C |
| Safety standards          | UL8750(except for DA2-Type), CSA C22.2 No.250.13-12, ENEC BS EN61347-1, BS EN61347-2-13, BS EN62384 independent,GB19510.14,GB19510.1,BIS IS15885(except for DA2-Type), EAC TP TC 004 approved; According to BS EN61347-2-13appendix J suitable for emergency installations |                  |
| DALI standards            | EC62386-101, 102, 207,251(DA2 Type only)                                                                                                                                                                                                                                   |                  |
| EMC standards             | BS EN55015, BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, GB17625.1, GB17743, EAC TP TC 020                                                                                                                                             |                  |
| Dimension (LxWxH)(mm)     | 105x 68x 23 (LCM-25), 123.5x 81.5x 23(LCM-40/60)                                                                                                                                                                                                                           |                  |



### LCM-25 Series

| Output                         | Io Tol. | Io Ripple | Effi. |
|--------------------------------|---------|-----------|-------|
| 350mA, 6~54V                   | ±5%     | 5% (max.) | 86%   |
| 500mA, 6~50V                   |         |           |       |
| 600mA, 6~42V                   |         |           |       |
| 700mA, 6~36V (Factory setting) |         |           |       |
| 900mA, 6~28V                   |         |           |       |
| 1050mA, 6~24V                  |         |           |       |

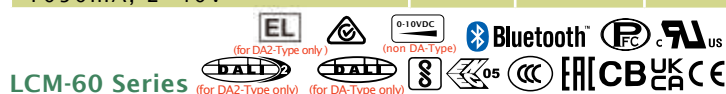


### LCM-40 Series

| Output        | Io Tol. | Io Ripple | Effi. |
|---------------|---------|-----------|-------|
| 350mA, 2~100V | ±5%     | 5% (max.) | 91%   |
| 500mA, 2~80V  |         |           |       |
| 600mA, 2~67V  |         |           |       |

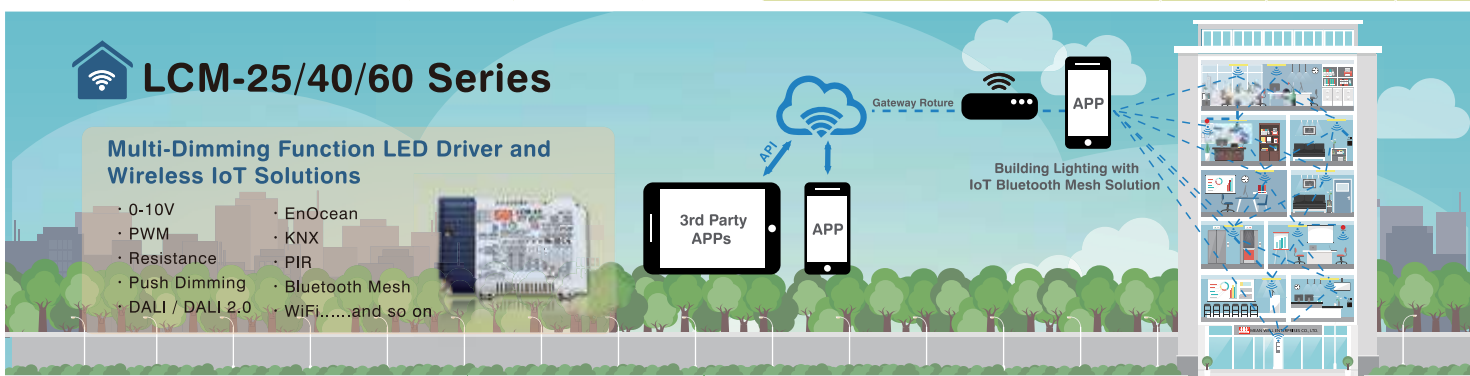
### LCM-40 Series

| Output                         | Io Tol. | Io Ripple | Effi. |
|--------------------------------|---------|-----------|-------|
| 700mA, 2~57V (Factory setting) | ±5%     | 5% (max.) | 91%   |
| 900mA, 2~45V                   |         |           |       |
| 1050mA, 2~40V                  |         |           |       |



### LCM-60 Series

| Output                         | Io Tol. | Io Ripple | Effi. |
|--------------------------------|---------|-----------|-------|
| 500mA, 2~90V                   | ±5%     | 5% (max.) | 92%   |
| 600mA, 2~90V                   |         |           |       |
| 700mA, 2~86V (Factory setting) |         |           |       |
| 900mA, 2~67V                   |         |           |       |
| 1050mA, 2~57V                  |         |           |       |
| 1400mA, 2~42V                  |         |           |       |



# LCM-U series 40~60W

## Features

- Constant current mode
- 90~132VAC input only
- Multiple-stage output current level selectable by DIP switch
- Class II power unit, no F.G.
- Built-in 3 in 1 dimming function, 0~10VDC, PWM signal, or resistance (non DA-Type)
- Wireless driver with integrated EnOcean for LCM-40EO/60EO (by request)

- Built-in DALI interface and push dimming function (DA-Type)
- 12V/50mA auxiliary output for LCM-40U/60U (LCM-40UDA/60UDA by request)
- Temperature compensation function by external NTC
- Power supplies synchronization function up to 10 units
- Suitable for indoor LED lighting applications
- Protections: Short circuit / Over voltage / Over temp.
- 3 years warranty

|                             | INPUT                                                                              | OUTPUT | LCM-40U(DA)/60U(DA) | LCM-40UEO/60UEO |
|-----------------------------|------------------------------------------------------------------------------------|--------|---------------------|-----------------|
| Non-DA Type                 |                                                                                    |        |                     |                 |
| DA-Type                     |                                                                                    |        |                     | <br>By request  |
| AC input voltage range      | 90~132VAC ; 127~186VDC                                                             |        |                     |                 |
| AC inrush current (Typ.)    | Cold start, 15A at 230VAC                                                          |        |                     |                 |
| Short circuit protection    | Constant current limiting, recovers automatically after fault condition is removed |        |                     |                 |
| Over voltage protection     | LCM-40U(DA): 110~130VDC, LCM-60U(DA): 105~125VDC                                   |        |                     |                 |
| Over temperature protection | Shut down o/p voltage, auto-recovery or re-power on to recover                     |        |                     |                 |
| Setup time                  | 1000ms / 115VAC                                                                    |        |                     |                 |
| Total harmonic distortion   | THD<20%                                                                            |        |                     |                 |
| Wireless protocol           | EnOcean standard 902MHz for USA/Canada (EO-Type)                                   |        |                     |                 |
| Withstand voltage           | I/P-O/P: 3.75kVAC                                                                  |        |                     |                 |
| Working temperature         | Tcase= -30~+90°C                                                                   |        |                     |                 |
| Safety standards            | UL8750 approved                                                                    |        |                     |                 |
| DALI standards              | Comply with IEC62386-101, 102, 207 (DA-Type only)                                  |        |                     |                 |
| EMC standards               | FCC part 15                                                                        |        |                     |                 |
| Dimension (LxWxH)(mm)       | 123.5x 81.5x 23                                                                    |        |                     |                 |

## LCM-40U Series



| Output                         | Io Tol. | Io Ripple | Effi. | DIP Switch |      |      |      |      |      |
|--------------------------------|---------|-----------|-------|------------|------|------|------|------|------|
|                                |         |           |       | 1          | 2    | 3    | 4    | 5    | 6    |
| 350mA, 2~100V                  | ±5%     | 5% (max.) | 87.5% | ----       | ---- | ---- | ---- | ---- | ---- |
| 500mA, 2~70V                   |         |           |       | ON         | ---- | ---- | ---- | ---- | ---- |
| 600mA, 2~59V                   |         |           |       | ON         | ON   | ---- | ---- | ---- | ---- |
| 700mA, 2~50V (Factory setting) |         |           |       | ON         | ON   | ON   | ---- | ---- | ON   |
| 900mA, 2~39V                   |         |           |       | ON         | ON   | ON   | ON   | ---- | ON   |
| 1050mA, 2~34V                  |         |           |       | ON         | ON   | ON   | ON   | ON   | ON   |

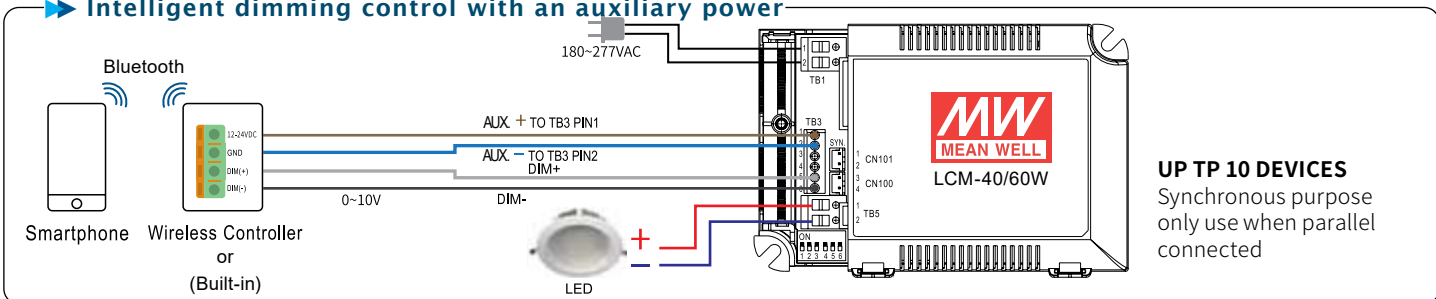
## LCM-60U Series



| Output                         | Io Tol. | Io Ripple | Effi. | DIP Switch |      |      |      |      |      |
|--------------------------------|---------|-----------|-------|------------|------|------|------|------|------|
|                                |         |           |       | 1          | 2    | 3    | 4    | 5    | 6    |
| 500mA, 2~90V                   | ±5%     | 5% (max.) | 89%   | ----       | ---- | ---- | ---- | ---- | ---- |
| 600mA, 2~84V                   |         |           |       | ON         | ---- | ---- | ---- | ---- | ---- |
| 700mA, 2~72V (Factory setting) |         |           |       | ON         | ON   | ---- | ---- | ---- | ---- |
| 900mA, 2~56V                   |         |           |       | ON         | ON   | ON   | ---- | ---- | ON   |
| 1050mA, 2~48V                  |         |           |       | ON         | ON   | ON   | ON   | ---- | ON   |
| 1400mA, 2~36V                  |         |           |       | ON         | ON   | ON   | ON   | ON   | ON   |

► LCM-40U/60U are primary models with 0~10VDC, PWM or resistance signal dimming function.

► Intelligent dimming control with an auxiliary power



# LCM-KN series 25~60W

## Features

- Constant current mode output
- KNX protocol
- Multiple-stage output current level selectable by DIP switch
- support emergency lighting(EL)
- Integrated constant light output
- Integrated KNX push button interface
- synchronization up to 10units

- Multiple models for choice:  
Blank-Type: KNX and push dimming, with standby power consumption<0.5W  
AUX-Type: KNX and push dimming, with standby power consumption<1.2W and Auxiliary DC output
- Protections: Short circuit / Over voltage / Over temp.
- 3 years warranty

|                             | LCM-25KN                                                                                                                                                                                      | LCM-40KN                                                                          | LCM-60KN                                                                          |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <b>INPUT</b>                |                                                                                                              |  |  |
| <b>OUTPUT</b>               |                                                                                                              |  |  |
| AC input voltage range      | 180 ~ 277VAC; 220 ~ 417VDC                                                                                                                                                                    |                                                                                   | 180 ~ 295VAC; 220 ~ 417VDC                                                        |
| AC inrush current (Typ.)    | COLD START, 20A at 230VAC; Per NEMA 410                                                                                                                                                       |                                                                                   |                                                                                   |
| Short circuit protection    | Constant current limiting, recovers automatically after fault condition is removed                                                                                                            |                                                                                   |                                                                                   |
| Over voltage protection     | ---                                                                                                                                                                                           | 110 ~ 130V                                                                        | 105 ~ 125V                                                                        |
| Over temperature protection | Shutdown o/p voltage, re-power on to recover                                                                                                                                                  |                                                                                   |                                                                                   |
| Setup time                  | 500ms / 230VAC                                                                                                                                                                                |                                                                                   |                                                                                   |
| Total harmonic distortion   | THD< 20%                                                                                                                                                                                      |                                                                                   |                                                                                   |
| Withstand voltage           | I/P-O/P:3.75KVAC                                                                                                                                                                              |                                                                                   |                                                                                   |
| Working temperature         | Tcase= -30~+85°C(Please refer to "OUTPUT LOAD vs TEMPERATURE" section)                                                                                                                        |                                                                                   | Tcase=-30~+90°C(Please refer to " OUTPUT LOAD vs TEMPERATURE" section)            |
| Safety standards            | CSA C22.2 No.250.13-12(LCM-25KN only); ENEC BS EN61347-1, BS EN61347-2-13, BS EN62384 independent, GB19510.14,GB19510.1, EAC TP TC 004 approved                                               |                                                                                   |                                                                                   |
| KNX standards               | Certified protocol                                                                                                                                                                            |                                                                                   |                                                                                   |
| EMC standards               | BS EN55015, BS EN61000-3-2 Class C(@load≥40%) ; BS EN61000-3-3; GB17625.1,GB17743, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, light industry level(surge immunity Line-Line 2KV), EAC TP TC 020 |                                                                                   |                                                                                   |
| Dimension (LxWxH)(mm)       | 105x 68x 23                                                                                                                                                                                   |                                                                                   | 123.5x 81.5x 23                                                                   |

## LCM-25KN Series



| Output                         | Io Tol. | Io Ripple | Effi. | DIP Switch |      |      |      |      |      |
|--------------------------------|---------|-----------|-------|------------|------|------|------|------|------|
|                                |         |           |       | 1          | 2    | 3    | 4    | 5    | 6    |
| 350mA, 6~54V                   | ±5%     | 5% (max.) | 86%   | ----       | ---- | ---- | ---- | ---- | ---- |
| 500mA, 6~50V                   |         |           |       | ON         | ---- | ---- | ---- | ---- | ---- |
| 600mA, 6~42V                   |         |           |       | ON         | ON   | ---- | ---- | ---- | ---- |
| 700mA, 6~36V (Factory setting) |         |           |       | ON         | ON   | ON   | ---- | ---- | ON   |
| 900mA, 6~28V                   |         |           |       | ON         | ON   | ON   | ON   | ---- | ON   |
| 1050mA, 6~24V                  |         |           |       | ON         | ON   | ON   | ON   | ON   | ON   |

## LCM-40KN Series



| Output                         | Io Tol. | Io Ripple | Effi. | DIP Switch |      |      |      |      |      |
|--------------------------------|---------|-----------|-------|------------|------|------|------|------|------|
|                                |         |           |       | 1          | 2    | 3    | 4    | 5    | 6    |
| 350mA, 2~100V                  | ±5%     | 5% (max.) | 90%   | ----       | ---- | ---- | ---- | ---- | ---- |
| 500mA, 2~80V                   |         |           |       | ON         | ---- | ---- | ---- | ---- | ---- |
| 600mA, 2~67V                   |         |           |       | ON         | ON   | ---- | ---- | ---- | ---- |
| 700mA, 2~57V (Factory setting) |         |           |       | ON         | ON   | ON   | ---- | ---- | ON   |
| 900mA, 2~45V                   |         |           |       | ON         | ON   | ON   | ON   | ---- | ON   |
| 1050mA, 2~40V                  |         |           |       | ON         | ON   | ON   | ON   | ON   | ON   |

## LCM-60KN Series

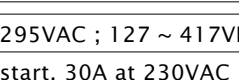


| Output                         | Io Tol. | Io Ripple | Effi. | DIP Switch |      |      |      |      |      |
|--------------------------------|---------|-----------|-------|------------|------|------|------|------|------|
|                                |         |           |       | 1          | 2    | 3    | 4    | 5    | 6    |
| 500mA, 2~90V                   | ±5%     | 5% (max.) | 91%   | ----       | ---- | ---- | ---- | ---- | ---- |
| 600mA, 2~90V                   |         |           |       | ON         | ---- | ---- | ---- | ---- | ---- |
| 700mA, 2~86V (Factory setting) |         |           |       | ON         | ON   | ---- | ---- | ---- | ---- |
| 900mA, 2~67V                   |         |           |       | ON         | ON   | ON   | ---- | ---- | ON   |
| 1050mA, 2~57V                  |         |           |       | ON         | ON   | ON   | ON   | ---- | ON   |
| 1400mA, 2~42V                  |         |           |       | ON         | ON   | ON   | ON   | ON   | ON   |

# IDLV series 25~65W

## Features

- Constant voltage PWM style output mode
- IDLV-25/45: 90~295VAC input  
IDLV-65: 180~295VAC input only
- High efficiency up to 90%
- No load power consumption <0.5W (Blank-Type)
- Fully isolated plastic case with IP20 level
- Isolation class II, no F.G.
- Built-in 2 in 1 dimming function (0~10VDC or PWM signal)
- Built-in 12V/50mA auxiliary output (A-Type)
- Suitable for indoor LED strip lighting
- Protection: Short circuit / Over current
- 3 years warranty

|                            | IDLV-25(A)                                                                                                                                                 | IDLV-45(A)                                                                        | IDLV-65(A)                                                                         |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| <b>INPUT</b>               |                                                                           |  |  |
| <b>OUTPUT (Blank-Type)</b> |                                                                           |  |  |
| <b>OUTPUT (A-Type)</b>     |                                                                           |  |  |
| AC input voltage range     | 90 ~ 295VAC ; 127 ~ 417VDC                                                                                                                                 |                                                                                   | 180 ~ 295VAC; 254 ~ 417VDC                                                         |
| AC inrush current (max.)   | Cold start, 30A at 230VAC                                                                                                                                  |                                                                                   |                                                                                    |
| Setup time                 | 500ms / 230AVC                                                                                                                                             |                                                                                   |                                                                                    |
| PWM dimming signal         | 10V PWM signal, frequency range 300Hz~3kHz                                                                                                                 |                                                                                   |                                                                                    |
| Total harmonic distortion  | THD<20%                                                                                                                                                    |                                                                                   |                                                                                    |
| Short circuit protection   | Shut down o/p voltage, repower on to recover                                                                                                               |                                                                                   |                                                                                    |
| Withstand voltage          | I/P-O/P: 3.75KVAC                                                                                                                                          |                                                                                   |                                                                                    |
| Working temperature        | Tcase= -20~+90°C                                                                                                                                           |                                                                                   | Tcase= -20~+85°C (refer to "OUTPUT LOAD vs TEMPERATURE")                           |
| Safety standards           | UL8750, ENEC BS EN/AS/NZS61347-1, BS EN/AS/NZS61347-2-13, BS EN62384, GB19510.14, GB19510.1, EAC TP TC 004, BIS ISI 5885 (for 12V, 24V, 48V only) approved |                                                                                   |                                                                                    |
| EMC standards              | BS EN55015, BS EN61000-3-2 Class C, BS EN61000-3-3, BS EN61000-4-2, 3, 4, 5, 6, 8, 11, BS EN61547, GB17743, GB17625.1, EAC TP TC 020                       |                                                                                   |                                                                                    |
| Connection (Input/Output)  | 4+4P push-in terminal block for Blank-Type, 4+6P for A-Type                                                                                                |                                                                                   |                                                                                    |
| Dimension (LxWxH) mm       | 110 x 75 x 22                                                                                                                                              | 120 x 75 x 25                                                                     | 130 x 75 x 25                                                                      |

### IDLV-25/25A Series

| Model No.   | Output       | Tol. | Effi. |
|-------------|--------------|------|-------|
| IDLV-25□-12 | 12V, 0~1.8A  | ±10% | 80%   |
| IDLV-25□-24 | 24V, 0~1.05A | ±10% | 81%   |
| IDLV-25□-36 | 36V, 0~0.7A  | ±10% | 82%   |
| IDLV-25□-48 | 48V, 0~0.52A | ±10% | 83%   |
| IDLV-25□-60 | 60V, 0~0.42A | ±10% | 84%   |

□ = Blank/A; Blank: without auxiliary output, A: with auxiliary function

### IDLV-45/45A Series

| Model No.   | Output       | Tol. | Effi. |
|-------------|--------------|------|-------|
| IDLV-45□-12 | 12V, 0~3A    | ±10% | 84%   |
| IDLV-45□-24 | 24V, 0~1.88A | ±10% | 86%   |
| IDLV-45□-36 | 36V, 0~1.25A | ±10% | 88%   |
| IDLV-45□-48 | 48V, 0~0.94A | ±10% | 88%   |
| IDLV-45□-60 | 60V, 0~0.75A | ±10% | 90%   |

□ = Blank/A; Blank: without auxiliary output, A: with auxiliary function

### IDLV-65/65A Series

| Model No.   | Output       | Tol. | Effi. |
|-------------|--------------|------|-------|
| IDLV-65□-12 | 12V, 0~4.2A  | ±10% | 85%   |
| IDLV-65□-24 | 24V, 0~2.4A  | ±10% | 87%   |
| IDLV-65□-36 | 36V, 0~1.8A  | ±10% | 88%   |
| IDLV-65□-48 | 48V, 0~1.35A | ±10% | 89%   |
| IDLV-65□-60 | 60V, 0~1.08A | ±10% | 90%   |

□ = Blank/A; Blank: without auxiliary output, A: with auxiliary function

### IDL / IDP / ODL Series Difference

| Series       | Type                        | AC Input Range | IP   | Output Mode                      |
|--------------|-----------------------------|----------------|------|----------------------------------|
| IDLC<br>IDLV | Plastic case with T.B.      | 90~295VAC      | IP20 | IDLC/IDPC/<br>ODLC:<br>C.C. mode |
| IDPC<br>IDPV | PCB Type                    |                |      |                                  |
| ODLC<br>ODLV | Plastic case with lead wire | 180~295VAC     | IP67 | IDLV/IDPV/<br>ODLV:<br>C.V. mode |

# IDLC series 25~65W

## Features

- Constant current mode
- Flicker free design
- IDLC-25/45: 90~295VAC input  
IDLC-65: 180~295VAC input only
- No load power consumption <0.5W (Blank/DA-Type)
- Fully isolated plastic case with IP20 level
- Isolation class II, no F.G.
- Built-in DALI interface (IDLC-45/65-DA)
- Built-in 2 in 1 dimming function (0~10VDC or PWM signal)
- Built-in 12V/50mA auxiliary output (A-Type)
- Suitable for indoor LED lighting applications
- Protection: Short circuit
- 3 years warranty

|                                            | IDLC-25(A)                                                                                                                                                                                         | IDLC-45(A)<br>IDLC-45-DA                                                          | IDLC-65(A)<br>IDLC-65-DA                                                          |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <b>INPUT</b>                               |                                                                                                                   |  |  |
| <b>OUTPUT</b><br>(Blank-Type)<br>(DA-Type) |                                                                                                                   |  |  |
| <b>OUTPUT</b><br>(A-Type)                  |                                                                                                                   |  |  |
| AC input voltage range                     | 90 ~ 295VAC                                                                                                                                                                                        |                                                                                   | 180 ~ 295VAC ; 254~417VDC                                                         |
| AC inrush current (max.)                   | Cold start, 30A at 230VAC                                                                                                                                                                          |                                                                                   |                                                                                   |
| Setup time                                 | 500ms / 230VAC                                                                                                                                                                                     |                                                                                   |                                                                                   |
| PWM dimming signal                         | 10V PWM signal, frequency range 300Hz~3kHz                                                                                                                                                         |                                                                                   |                                                                                   |
| Total harmonic distortion                  | THD<20%                                                                                                                                                                                            |                                                                                   |                                                                                   |
| Short circuit protection                   | Hiccup mode, auto-recovery                                                                                                                                                                         |                                                                                   |                                                                                   |
| Withstand voltage                          | I/P-O/P: 3.75KVAC                                                                                                                                                                                  |                                                                                   |                                                                                   |
| Working temperature                        | Tcase= -20~+90°C      Tcase= -20~+85°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                                                     |                                                                                   |                                                                                   |
| Safety standards                           | UL8750, ENEC BS EN/AS/NZS61347-1(except for DA-Type), BS EN/AS/NZS61347-2-13 (except for DA-Type), BS EN62384, GB19510.14, GB19510.1, EAC TP TC 004; BIS 15885 (refer to spec for models) approved |                                                                                   |                                                                                   |
| DALI standards                             | IEC 62386-101, 102 (DA-Type only)                                                                                                                                                                  |                                                                                   |                                                                                   |
| EMC standards                              | BS EN55015, BS EN61000-3-2 Class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, GB17743, GB17625.1, EAC TP TC 020                                                                     |                                                                                   |                                                                                   |
| Connection (Input/Output)                  | 4+4P push-in terminal block for Blank/DA-Type, 4+6P for A-Type                                                                                                                                     |                                                                                   |                                                                                   |
| Dimension (LxWxH) mm                       | 110 x 75 x 22                                                                                                                                                                                      | 120 x 75 x 25                                                                     | 130 x 75 x 25                                                                     |

## IDLC-25(A) Series

| Model No.     | Output           | Tol. | Effi. |
|---------------|------------------|------|-------|
| IDLC-25□-350  | 49 ~ 70V, 350mA  | ±7%  | 82%   |
| IDLC-25□-500  | 35 ~ 50V, 500mA  | ±7%  | 81.5% |
| IDLC-25□-700  | 25 ~ 36V, 700mA  | ±7%  | 82%   |
| IDLC-25□-1050 | 17 ~ 24V, 1050mA | ±7%  | 81.5% |

□ = Blank/A; Blank: without auxiliary output, A: with auxiliary function

## IDLC-45(A) Series IDLC-45-DA Series

| Model No.      | Output           | Tol. | Effi. |
|----------------|------------------|------|-------|
| IDLC-45□-350○  | 57 ~ 95V, 350mA  | ±5%  | 86%   |
| IDLC-45□-500○  | 54 ~ 90V, 500mA  | ±5%  | 85%   |
| IDLC-45□-700○  | 38 ~ 64V, 700mA  | ±5%  | 85%   |
| IDLC-45□-1050○ | 26 ~ 43V, 1050mA | ±5%  | 84%   |
| IDLC-45□-1400○ | 19 ~ 32V, 1400mA | ±5%  | 83%   |

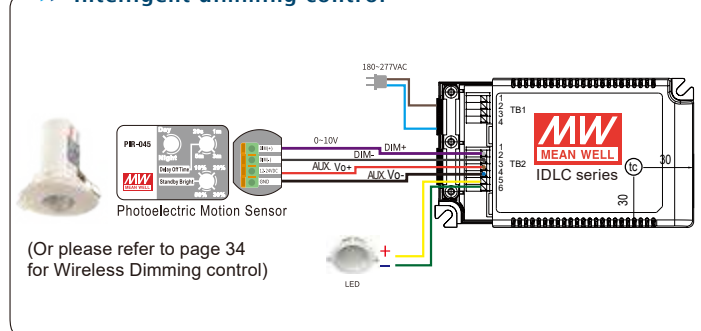
□ = Blank/A; Blank: without auxiliary output, A: with auxiliary function  
○ = Blank/DA; Blank: 2 in 1 dimming, DA: DALI

## IDLC-65(A) Series IDLC-65-DA Series

| Model No.      | Output           | Tol. | Effi. |
|----------------|------------------|------|-------|
| IDLC-65□-700○  | 69 ~ 93V, 700mA  | ±5%  | 89%   |
| IDLC-65□-1050○ | 46 ~ 62V, 1050mA | ±5%  | 87%   |
| IDLC-65□-1400○ | 34 ~ 46V, 1400mA | ±5%  | 86%   |
| IDLC-65□-1750○ | 27 ~ 36V, 1750mA | ±5%  | 86%   |

□ = Blank/A; Blank: without auxiliary output, A: with auxiliary function  
○ = Blank/DA; Blank: 2 in 1 dimming, DA: DALI

### Intelligent dimming control



# PLM series 12~25W

## Features

- Constant current mode
- 110~295VAC input
- No load power consumption <0.5W
- Fully isolated plastic case with push terminal style I/O
- IP30 design
- Isolation class II, no F.G.
- Class 2 power unit (except for PLM-25-350)
- Low cost, high reliability
- Suitable for indoor LED lighting applications
- Protections: Short circuit
- 2 years warranty

|                             | PLM-12                                                                                                                         | PLM-25 | PLM-25E                |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------|--------|------------------------|
|                             |                                               |        |                        |
| INPUT                       |                                                |        |                        |
| OUTPUT                      |                                               |        |                        |
| AC input voltage range      | 110~295VAC; 156~417VDC                                                                                                         |        | 180~295VAC; 254~417VDC |
| AC inrush current (max.)    | Cold start, 15A at 230VAC                                                                                                      |        |                        |
| Setup time                  | 500ms at full load and 230VAC                                                                                                  |        |                        |
| Total harmonic distortion   | THD<20%                                                                                                                        |        |                        |
| Short circuit protection    | Hiccup mode, auto-recovery                                                                                                     |        |                        |
| Withstand voltage           | I/P-O/P: 3.75kVAC                                                                                                              |        |                        |
| Working temperature         | -30~+50°C                                                                                                                      |        | -30~+45°C              |
| Safety standards            | UL8750, ENEC BS EN61347-1, BS EN61347-2-13, BS EN62384, GB19510.14, GB19510.1, EAC TP TC 004 approved                          |        |                        |
| EMC standards               | BS EN55015, BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, GB17743, GB17625.1, EAC TP TC 020 |        |                        |
| Connection (Input / Output) | 2+2P push terminal block                                                                                                       |        |                        |
| Dimension (LxWxH)(mm)       | 145x 38x 22                                                                                                                    |        |                        |

## PLM-12 Series



| Model No.   | Output        | Io Tol. | R&N  | Effi. |
|-------------|---------------|---------|------|-------|
| PLM-12-350  | 22~36V, 350mA | ±5%     | 3.6V | 85%   |
| PLM-12-500  | 15~24V, 500mA | ±5%     | 2.4V | 84%   |
| PLM-12-700  | 11~18V, 700mA | ±5%     | 2.4V | 83%   |
| PLM-12-1050 | 7~12V, 1050mA | ±5%     | 1.8V | 81%   |

## PLM-25 Series



| Model No.  | Output        | Io Tol. | R&N  | Effi. |
|------------|---------------|---------|------|-------|
| PLM-25-350 | 42~72V, 350mA | ±5%     | 7.2V | 87%   |
| PLM-25-500 | 30~50V, 500mA | ±5%     | 5.0V | 86%   |

## PLM-25 Series

| Model No.   | Output         | Io Tol. | R&N  | Effi. |
|-------------|----------------|---------|------|-------|
| PLM-25-700  | 21~36V, 700mA  | ±5%     | 3.6V | 86%   |
| PLM-25-1050 | 14~24V, 1050mA | ±5%     | 2.4V | 85%   |

## PLM-25E Series



| Model No.    | Output         | Io Tol. | R&N  | Effi. |
|--------------|----------------|---------|------|-------|
| PLM-25E-350  | 42~72V, 350mA  | ±5%     | 9V   | 86%   |
| PLM-25E-500  | 30~50V, 500mA  | ±5%     | 7.5V | 85%   |
| PLM-25E-700  | 21~36V, 700mA  | ±5%     | 5.4V | 85%   |
| PLM-25E-1050 | 14~24V, 1050mA | ±5%     | 3.6V | 82%   |

# PLC series 30~100W

## Features

- Constant current mode  
(Constant voltage + constant current modes for PLC-100)
- Universal AC input / Full range
- Fully isolated plastic case with screw terminal style I/O
- Adjustable output voltage and current level
- Class 2 power unit / Pass LPS
- Isolation class II, no F.G. for PLC-30
- Suitable for LED lighting and LED sign applications
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Cooling by free air convection
- 2 years warranty



|                             |                                                                                                               |                                                   |                                                   |
|-----------------------------|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------|---------------------------------------------------|
| AC input voltage range      | 90~264VAC ; 127~370VDC                                                                                        |                                                   |                                                   |
| AC inrush current (max.)    | Cold start, 35A at 230VAC                                                                                     |                                                   | Cold start, 40A at 230VAC                         |
| DC adjustment range         | 95%~110% rated output voltage                                                                                 | 90%~110% rated output voltage                     | 85%~100% rated output voltage                     |
| Current adjustment range    | 75%~103%                                                                                                      |                                                   | 75%~100%                                          |
| Over current protection     | 100%~110% constant current limiting, auto-recovery                                                            | 95%~110% constant current limiting, auto-recovery | 95%~102% constant current limiting, auto-recovery |
| Over voltage protection     | 110%~155% rated output voltage                                                                                | 115%~140% rated output voltage                    | 107%~135% rated output voltage                    |
| Setup time                  | 500ms at full load and 230VAC                                                                                 |                                                   |                                                   |
| Withstand voltage           | I/P-O/P: 3.75kVAC                                                                                             | I/P-O/P: 3.75kVAC, I/P-FG: 2kVAC, O/P-FG:1.5kVAC  |                                                   |
| Working temperature         | -30~+50°C (refer to output derating curve)                                                                    |                                                   |                                                   |
| Safety standards            | UL1310, TUV BS EN61347-1, BS EN61347-2-13, EAC TP TC 004 approved; TUV BS EN62368-1 approved for PLC-100 only |                                                   |                                                   |
| EMC standards               | BS EN55015, BS EN61000-3-2 class C, BS EN61000-3-3, EAC TP TC 020, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547    |                                                   |                                                   |
| Connection (Input / Output) | 2+2P screw terminal block                                                                                     | 3+2P screw terminal block                         |                                                   |
| Dimension (LxWxH)(mm)       | 160x 46x 30                                                                                                   | 181.5x 62x 35                                     | 200.5x 69.5x 35                                   |
| Packing                     | 0.2kg ; 70pcs / 15kg                                                                                          | 0.41kg ; 30pcs / 13.3kg                           | 0.52kg ; 25pcs / 14kg                             |

## PLC-30 Series



| Model No. | Output       | Tol. | R&N  | Effi. |
|-----------|--------------|------|------|-------|
| PLC-30-9  | 9V, 0~3.3A   | ±10% | 2.6V | 80.0% |
| PLC-30-12 | 12V, 0~2.5A  | ±10% | 2.0V | 82.5% |
| PLC-30-15 | 15V, 0~2.0A  | ±10% | 2.6V | 83.5% |
| PLC-30-20 | 20V, 0~1.5A  | ±10% | 2.6V | 84.0% |
| PLC-30-24 | 24V, 0~1.25A | ±10% | 2.4V | 84.0% |
| PLC-30-27 | 27V, 0~1.12A | ±10% | 2.3V | 84.5% |
| PLC-30-36 | 36V, 0~0.84A | ±10% | 3.6V | 85.0% |
| PLC-30-48 | 48V, 0~0.63A | ±10% | 3.7V | 85.5% |

## PLC-60 Series



| Model No. | Output      | Tol. | R&N  | Effi. |
|-----------|-------------|------|------|-------|
| PLC-60-12 | 12V, 0~5.0A | ±10% | 2.0V | 85.0% |
| PLC-60-15 | 15V, 0~4.0A | ±10% | 2.4V | 86.0% |
| PLC-60-20 | 20V, 0~3.0A | ±10% | 1.8V | 87.5% |
| PLC-60-24 | 24V, 0~2.5A | ±10% | 2.4V | 87.0% |
| PLC-60-27 | 27V, 0~2.3A | ±10% | 2.7V | 88.0% |
| PLC-60-36 | 36V, 0~1.7A | ±10% | 3.6V | 89.0% |
| PLC-60-48 | 48V, 0~1.3A | ±10% | 4.6V | 89.0% |

## PLC-45 Series



| Model No. | Output       | Tol. | R&N  | Effi. |
|-----------|--------------|------|------|-------|
| PLC-45-12 | 12V, 0~3.8A  | ±10% | 2.0V | 83.5% |
| PLC-45-15 | 15V, 0~3.0A  | ±10% | 2.4V | 85.0% |
| PLC-45-20 | 20V, 0~2.3A  | ±10% | 1.8V | 86.5% |
| PLC-45-24 | 24V, 0~1.9A  | ±10% | 2.7V | 86.5% |
| PLC-45-27 | 27V, 0~1.7A  | ±10% | 2.7V | 86.5% |
| PLC-45-36 | 36V, 0~1.25A | ±10% | 3.6V | 87.5% |
| PLC-45-48 | 48V, 0~0.95A | ±10% | 4.6V | 87.5% |

## PLC-100 Series



| Model No.  | Output       | Tol. | R&N   | Effi. |
|------------|--------------|------|-------|-------|
| PLC-100-12 | 12V, 0~5.0A  | ±3%  | 150mV | 83.0% |
| PLC-100-15 | 15V, 0~5.0A  | ±3%  | 150mV | 85.0% |
| PLC-100-20 | 20V, 0~4.8A  | ±3%  | 150mV | 88.5% |
| PLC-100-24 | 24V, 0~4.0A  | ±3%  | 150mV | 88.5% |
| PLC-100-27 | 27V, 0~3.55A | ±3%  | 150mV | 88.0% |
| PLC-100-36 | 36V, 0~2.65A | ±2%  | 150mV | 88.0% |
| PLC-100-48 | 48V, 0~2.0A  | ±2%  | 200mV | 88.5% |

# Metal Case

with PFC+Cable

- 41 XLG Series (25~240W)
- 44 ELG Series (75~300W)
- 47 ELG-C Series (75~300W)
- 51 HLG Series (40~600W)
- 56 HLG-C Series (60~480W)
- 59 HVG Series (65~480W)
- 62 HVGC Series (65~1000W)
- 65 FDL Series(65W)



A complete outdoor LED driver solutions for outdoor luminaires are well-displayed in this category. The best cost-performance ratio and compact size design are XLG series and the ELG(C) series. Designed with DALI /Timer/Programmable dimming functions. A high-efficiency design of HLG(C) series. with 7 years warranty and HVG(C) series with the high-voltage input 180-528V AC, It is suitable for general 230V/347V mains supply or 1 phase 380V AC voltage from 3 phase input. All models are listed for choices. Most of the models offer 0-10V dimming function, easily integrated into smart city lighting control.

MEAN WELL has launched brand new XLG series which design with compact size and constant power mode, output wattage covers a wide range of 25/50/75/100/150/200/240W, wide choices for any indoor or outdoor luminaire applications.

## Application



## Selection guide

| Series | Features                                                                         | Remark                                                           |
|--------|----------------------------------------------------------------------------------|------------------------------------------------------------------|
| XLG    | Constant Power Mode<br>Compact size<br>Surge protection with 10kv/6kv (Optional) | Design with Input Over Voltage Protection and India(EESL)version |
| ELG(C) | DALI/Timer/Programmable dimming                                                  | ELGT-150 with class II                                           |
| HLG(C) | High reliability/ 7 years warranty                                               | UP to 600W                                                       |
| HVG(C) | High Voltage Input 180~528 VAC                                                   | UP to 1000W                                                      |
| FDL    | Entry level with 3 Years warranty                                                | UP to 65W                                                        |

# XLG series 25~50W

## Features

- Constant power mode output
- Wide input range 100~305VAC (Class I)
- Metal housing design with functional ground
- Built-in active PFC function, Class 2 power unit
- Surge protection with 6KV/4KV
- India (EESL) version with Input Over Voltage Protection can survive input voltage stress of 440Vac for 48 hours
- 5 years warranty
- Multiple models for choice:  
A-Type: IP67 rated. Io adjustable through built-in potentiometer  
AB-Type: IP67 rated. Io adjustable through built-in potentiometer & 3 in 1 dimming function.
- Protections: Over power/Short circuit / Over temperature / Input over voltage(only for India version )
- IP67 rating for indoor or outdoor installations

### XLG-25

### XLG-50

|                                          |                                                                                   |                            |
|------------------------------------------|-----------------------------------------------------------------------------------|----------------------------|
| <b>INPUT</b>                             |  | ACL<br>ACN<br>FG           |
| <b>OUTPUT</b><br>(Non-Dimming<br>Models) |  | Vo-<br>Vo+                 |
| <b>OUTPUT</b><br>(Dimming<br>Models)     |  | DIM-<br>DIM+<br>Vo+<br>Vo- |





**A**



**AB**



|                                       |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                   |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| AC input voltage range                | 100~305VAC; 127~431VDC                                                                                                                                                                                                                                                                            |                                                                                                                                                   |
| AC inrush current (max.)              | Cold start, 50A at 230 VAC                                                                                                                                                                                                                                                                        |                                                                                                                                                   |
| Over power protection                 | 110-150% Over Power Protection, recovers automatically after fault condition is removed                                                                                                                                                                                                           |                                                                                                                                                   |
| Input Over Voltage(for India version) | 320 ~ 370VAC (Shut down output voltage when the input voltage exceeds protection voltage,recovers automatically after fault condition is removed)automatically after fault condition is removed)<br>Can survive input voltage stress of 440Vac for 48 hours@tc75°C max                            |                                                                                                                                                   |
| Over temp. protection                 | Hiccup mode, recovers automatically after fault condition is removed                                                                                                                                                                                                                              |                                                                                                                                                   |
| Setup, rise time                      | 500ms, 100ms/115VAC, 230VAC                                                                                                                                                                                                                                                                       |                                                                                                                                                   |
| Withstand voltage                     | I/P-O/P:3.75KVAC I/P-FG:2.0KVAC O/P-FG:1.5KVAC                                                                                                                                                                                                                                                    |                                                                                                                                                   |
| Working temperature                   | Tcase= -40~+85°C                                                                                                                                                                                                                                                                                  | Tcase=-40 ~ +90°C                                                                                                                                 |
| Safety standards                      | UL8750(type"HL"), CSA C22.2 No. 250.13-12; ENEC AS/NZS IEC BS EN61347-1, AS/NZS BS EN61347-2-13 independent, BS EN62384;IP67; GB19510.1, GB19510.14, EAC TP TC 004, J61347-1(H29), J61347-2-13(H29), KC61347-1, KC61347-2-13, IS15885(Part2/Sec13)( for XLG-25I/50I type only), NOM-058-SCFI-2017 |                                                                                                                                                   |
| EMC standards                         | BS EN55015,BS EN61000-3-2 Class C (@load≥50%) ; BS EN61000-3-3; GB17743, GB17625.1, BS EN61000-4-2,3,4,5,6,8,11; BS EN61547, (surge immunity Line-Earth 6KV, Line-Line 4KV)                                                                                                                       |                                                                                                                                                   |
| Connection                            | Input                                                                                                                                                                                                                                                                                             | SJOW 17AWGx3C & H05RN-F 3x1.0mm <sup>2</sup> (30cm)                                                                                               |
|                                       | Output                                                                                                                                                                                                                                                                                            | A-Type: SJOW 17AWGx2C & H05RN-F 2x1.0mm <sup>2</sup> (30cm)<br>AB-Type: SJOW 17AWGx2C & H05RN-F 2x1.0mm <sup>2</sup> (30cm)+UL2517 20AWGx2C(35cm) |
| Dimension (LxWxH) (mm)                | 105x 63x 30                                                                                                                                                                                                                                                                                       |                                                                                                                                                   |

**XLG-25 Series**

Model No. Output I<sub>o</sub> Ripple Effi.

XLG-25□-○ 22~54V, 0.25 ~ 1.05A 5%(max.) 88%

□ = Blank, I; Blank: For standard version, I: For India version  
○ = A, AB

Note: Products sourced from the Americas regions may not have the PSE/CCC/BIS/KC logo. Please contact your MEAN WELL sales for more information

**XLG-50 Series**

Model No. Output I<sub>o</sub> Ripple Effi.

XLG-50□-○ 22~54V, 0.53 ~ 2.1A 5%(max.) 90%

□ = Blank, I; Blank: For standard version, I: For India version  
○ = A, AB

Note: Products sourced from the Americas regions may not have the PSE/CCC/BIS/KC logo. Please contact your MEAN WELL sales for more information

## XLG family selection guide

| output Model | 12V    | 24V   | L type      | M type      | H type       |
|--------------|--------|-------|-------------|-------------|--------------|
| XLG-25       |        |       |             |             | 250~1050 mA  |
| XLG-50       |        |       |             |             | 530~2100 mA  |
| XLG-75       | 5A     | 3.1A  | 350~1050 mA |             | 650~2100 mA  |
| XLG-100      | 8A     | 4A    | 350~1050 mA |             | 875~2780 mA  |
| XLG-150      | 12.5 A | 6.25A | 350~1050 mA | 700~2100 mA | 1400~4100 mA |
| XLG-200      | 16A    | 8.3A  | 350~1050 mA |             | 1750~5500 mA |
| XLG-240      |        |       | 350~1050 mA | 700~2100 mA | 2200~6600 mA |

\* 12V/24V with C.V+C.C mode  
• XLG-20 is under development

# XLG series 75~150W

## Features

- Full power output at 70~100% Constant power mode operation
- Wide input range 100~305V AC (Class I)
- Built-in active PFC function, Class 2 power unit
- Metal case with IP67, suitable for outdoor application
- Surge protection with 6K V/4K V (10K V/6K V optional)
- India (EESL) version with Input Over Voltage Protection can survive input voltage stress of 440Vac for 48 hours
- 5 years warranty
- Multiple models for choice:
  - Blank-Type: Io and Vo fixed. (For harsh environment)
  - A-Type: IP67 rated. Io adjustable via built-in potentiometer
  - AB-Type: IP67 rated. Io adjustable through built-in potentiometer & 3 in 1 dimming function
- Protections: Over current (for 12, 24V) / Over power (for L, M, H-Type) / Over temperature / Short circuit / Input over voltage (for India version)

|                                        |                                                                                   | XLG-75                                                                                                                                                                                                                                                                                                              | XLG-100                                                                                                                                                                                           | XLG-150                                                                          |
|----------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| INPUT                                  |  |                                                                                                                                                                                                                                   |                                                                                                                                                                                                   |                                                                                  |
| OUTPUT<br>(Non-Dimming Models)         |  |                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                   |                                                                                  |
| OUTPUT<br>(Dimming Models)             |  |                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                   |                                                                                  |
| AC input voltage range                 |                                                                                   | 100~305VAC ; 142~431VDC                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                   |                                                                                  |
| AC inrush current (max.)               |                                                                                   | Cold start, 50A at 230VAC                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                   |                                                                                  |
| Over current protection (for 12,24V)   |                                                                                   | 95%~ 108% Constant current limiting, recovers automatically after fault condition is removed                                                                                                                                                                                                                        |                                                                                                                                                                                                   |                                                                                  |
| Over power protection (for L,M,H-Type) |                                                                                   | 110% ~ 150% Hiccup mode, recovers automatically after fault condition is removed                                                                                                                                                                                                                                    | 105% ~ 150% Hiccup mode, recovers automatically after fault condition is removed                                                                                                                  | 105% ~ 130% Hiccup mode, recovers automatically after fault condition is removed |
| Over temp. protection                  |                                                                                   | Shut down output voltage, re-power on to recover                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                   |                                                                                  |
| Input over voltage (for India version) |                                                                                   | 320~370VAC (Shut down output voltage , recovers automatically after fault condition is removed)                                                                                                                                                                                                                     | 320~390VAC (Shut down output voltage , recovers automatically after fault condition is removed)                                                                                                   |                                                                                  |
| Set up time                            |                                                                                   | 500ms/230VAC, 1200ms/115VAC                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                   |                                                                                  |
| Withstand voltage                      |                                                                                   | I/P-O/P:4.2KVAC I/P-FG:2.1KVAC O/P-FG:1.5KVAC                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                   |                                                                                  |
| Working temperature                    |                                                                                   | Tcase= -40~+90°C                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                   |                                                                                  |
| Safety standards                       |                                                                                   | UL8750(type"HL"), <b>UL879(For 12V, 24V)</b> , CSA C22.2 No. 250.13-12; ENEC BS EN61347-1, BS EN61347-2-13 independent, BS EN62384; GB19510.1,GB19510.14; IP67, EAC TP TC 004, J61347-1(H29), J61347-2-13(H29), KC61347-1, KC61347-2-13, ISI 5885(Part2/Sec13)( for XLG-75I/100I/150I type only), NOM-058-SCFI-2017 |                                                                                                                                                                                                   |                                                                                  |
| EMC standards                          |                                                                                   | BS EN55015,BS EN61000-3-2 Class C (@load≥50%) ; BS EN61000-3-3;BS EN61000-4-2,3,4,5,6,8,11; BS EN61547, (surge immunity Line-Earth 6KV, Line-Line 4KV)(10K/6K option, except for XLG-75)                                                                                                                            |                                                                                                                                                                                                   |                                                                                  |
| Connection                             | Input                                                                             | SJOW 17AWGx3C & H05RN-F 1.0mm <sup>2</sup> (30cm)                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                   |                                                                                  |
|                                        | Output                                                                            | Blank/A-Type: SJOW 17AWGx2C & H05RN-F 2x1.0mm <sup>2</sup> (30cm)<br>AB-Type: SJOW 17AWGx2C & H05RN-F 2x1.0mm <sup>2</sup> (30cm)+UL2517 20AWGx2C(35cm)                                                                                                                                                             | Blank/A-Type: SJOW 17AWG/14AWG(for XLG-100-12 and XLG-150-12/24V) x2C & H05RN-F 2x1.0mm <sup>2</sup> (30cm)<br>AB-Type: SJOW 17AWGx2C & H05RN-F 2x1.0mm <sup>2</sup> (30cm)+UL2517 20AWGx2C(35cm) |                                                                                  |
| Dimension (LxWxH) (mm)                 |                                                                                   | 140x 63x 32                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                   | 180x 63x 35.5                                                                    |

**XLG-75 Series**

| Model No.   | Output              | I <sub>o</sub> Ripple | Effi. |
|-------------|---------------------|-----------------------|-------|
| XLG-75□-12○ | 8.4~12V, 5A         | ---                   | 89%   |
| XLG-75□-24○ | 16.8~24V, 3.1A      | ---                   | 90%   |
| XLG-75□-L ○ | 53~107V, 350~1050mA | 3%                    | 91%   |
| XLG-75□-H ○ | 27~56V, 650~2100mA  | 3%                    | 90%   |

**XLG-100 Series**

| Model No.      | Output              | I <sub>o</sub> Ripple | Effi. |
|----------------|---------------------|-----------------------|-------|
| XLG-100 □-12 ○ | 8.4~12V, 4 ~ 8A     | ---                   | 92%   |
| XLG-100 □-24 ○ | 16.8~24V, 2 ~ 4A    | ---                   | 92%   |
| XLG-100 □-L ○  | 71~142V, 350~1050mA | 3%                    | 92.5% |
| XLG-100 □-H ○  | 27~56V, 875~2780mA  | 3%                    | 91%   |

**XLG-150 Series**

| Model No.     | Output               | I <sub>o</sub> Ripple | Effi. |
|---------------|----------------------|-----------------------|-------|
| XLG-150 □-12○ | 8.4~12V, 6.5~ 12.5A  | ---                   | 91.5% |
| XLG-150 □-24○ | 16.8~24V, 3.2~ 6.25A | ---                   | 93%   |
| XLG-150 □-L ○ | 120~214V, 350~1050mA | 3%                    | 93%   |
| XLG-150 □-M ○ | 60~107V, 700~2100mA  | 3%                    | 92.5% |
| XLG-150 □-H ○ | 27~56V, 1400~4170mA  | 4%                    | 92%   |

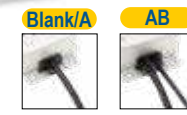
□ = Blank, I: Blank; For standard version, I: For India version  
○ = A, AB, Blank

Note: Products sourced from the Americas regions may not have the PSE/CCC/BIS/KC logo. Please contact your MEAN WELL sales for more information.

# XLG series 200~240W

## Features

- Full power output at 70~100% Constant power mode operation
- Wide input range 100~305V AC (Class I)
- Built-in active PFC function
- Metal case with IP67, suitable for outdoor application
- Surge protection with 6K V/4K V (10K V/6K V optional)
- India (EESL) version with Input Over Voltage Protection can survive input voltage stress of 440Vac for 48 hours
- 5 years warranty
- Multiple models for choice:
  - Blank-Type:  $I_o$  and  $V_o$  fixed. (For harsh environment)
  - A-Type: IP67 rated.  $I_o$  adjustable via built-in potentiometer
  - AB-Type: IP67 rated.  $I_o$  adjustable through built-in potentiometer & 3 in 1 dimming function
- Protections: Over current (for 12, 24V) / Over power (for L, M, H-Type) / Over temperature / Short circuit / Input over voltage (for India version)

|                                                                                                   |                                                                                                                            | XLG-200                                                                                                                                                                                                                                                                       |                                                                                   | XLG-240                                                                                                                                                                                                                                                                                                                       |                                                                                     |                            |
|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------|
| <b>INPUT</b><br> |                                                                                                                            |                                                                                                                                                                                              |  |                                                                                                                                                                                                                                             |  |                            |
|                                                                                                   | <b>OUTPUT</b><br>(Non-Dimming Models)<br> |                                                                                                                                                                                                                                                                               |                                                                                   |                                                                                                                                                                                                                                                                                                                               |                                                                                     | Vo-<br>Vo+                 |
|                                                                                                   | <b>OUTPUT</b><br>(Dimming Models)<br>     |                                                                                                                                                                                                                                                                               |                                                                                   |                                                                                                                                                                                                                                                                                                                               |                                                                                     | DIM-<br>DIM+<br>Vo+<br>Vo- |
| AC input voltage range                                                                            |                                                                                                                            | 100~305VAC ; 142~431VDC                                                                                                                                                                                                                                                       |                                                                                   |                                                                                                                                                                                                                                                                                                                               |                                                                                     |                            |
| AC inrush current (max.)                                                                          |                                                                                                                            | Cold start, 65A at 230VAC                                                                                                                                                                                                                                                     |                                                                                   | Cold start, 75A at 230VAC                                                                                                                                                                                                                                                                                                     |                                                                                     |                            |
| Over current protection (for 12,24V)                                                              |                                                                                                                            | 95%~ 108% Constant current limiting, recovers automatically after fault condition is removed                                                                                                                                                                                  |                                                                                   |                                                                                                                                                                                                                                                                                                                               |                                                                                     |                            |
| Over power protection (for L,M,H-Type)                                                            |                                                                                                                            | 105% ~ 130% Hiccup mode, recovers automatically after fault condition is removed                                                                                                                                                                                              |                                                                                   |                                                                                                                                                                                                                                                                                                                               |                                                                                     |                            |
| Over temp. protection                                                                             |                                                                                                                            | Shut down O/P voltage, recovers automatically after temperature goes down                                                                                                                                                                                                     |                                                                                   |                                                                                                                                                                                                                                                                                                                               |                                                                                     |                            |
| Input over voltage (for India version)                                                            |                                                                                                                            | 320 ~ 390VAC (Shut down output voltage when the input voltage exceeds protection voltage)                                                                                                                                                                                     |                                                                                   | 320 ~ 370VAC (Shut down output voltage when the input voltage exceeds protection voltage)                                                                                                                                                                                                                                     |                                                                                     |                            |
| Set up time                                                                                       |                                                                                                                            | 500ms/230VAC, 1200ms/115VAC                                                                                                                                                                                                                                                   |                                                                                   |                                                                                                                                                                                                                                                                                                                               |                                                                                     |                            |
| Withstand voltage                                                                                 |                                                                                                                            | I/P-O/P:4.2KVAC I/P-FG:2.1KVAC O/P-FG:1.5KVAC                                                                                                                                                                                                                                 |                                                                                   | I/P-O/P:3.75KVAC I/P-FG:2.0KVAC O/P-FG:1.5KVAC                                                                                                                                                                                                                                                                                |                                                                                     |                            |
| Working temperature                                                                               |                                                                                                                            | Tcase= -40~+90°C                                                                                                                                                                                                                                                              |                                                                                   |                                                                                                                                                                                                                                                                                                                               |                                                                                     |                            |
| Safety standards                                                                                  |                                                                                                                            | UL8750(type"HL"), CSA C22.2 No. 250.13-12; ENEC BS EN61347-1, BS EN61347-2-13 independent, BS EN62384;GB19510.1,GB19510.14; IP67 approved,EAC TP TC 004; J61347-1(H29), J61347-2-13(H29), KC61347-1, KC61347-2-13, IS15885(Part2/Sec13)( for XLG-200 only), NOM-058-SCFI-2017 |                                                                                   |                                                                                                                                                                                                                                                                                                                               |                                                                                     |                            |
| EMC standards                                                                                     |                                                                                                                            | BS EN55015,BS EN61000-3-2 Class C (@load≥50%) ;BS EN61000-3-3;BS EN61000-4-2,3,4,5,6,8,11; BS EN61547(surge immunity Line-Earth 6KV, Line-Line 4KV)(10K/6KV option);                                                                                                          |                                                                                   |                                                                                                                                                                                                                                                                                                                               |                                                                                     |                            |
| Connection                                                                                        | Input                                                                                                                      | SJOW 17AWGx3C & H05RN-F 3x1.0mm <sup>2</sup> (30cm)                                                                                                                                                                                                                           |                                                                                   |                                                                                                                                                                                                                                                                                                                               |                                                                                     |                            |
|                                                                                                   | Output                                                                                                                     | Blank/A-Type: SJOW 17AWGx2C/14AWGx2C(12V) & H05RN-F 2x1.0mm <sup>2</sup> (30cm)<br>AB-Type: SJOW 17AWGx2C & H05RN-F 2x1.0mm <sup>2</sup> (30cm) + UL2517 20AWGx2C(35cm)                                                                                                       |                                                                                   | Blank/A-Type: SJOW 17AWGx2C & H05RN-F 2x1.0mm <sup>2</sup> for H&M type (30cm);SJOW 14AWGx2C for 12/24V type(30cm);SOOW 17AWGx2C&H07RN-F 2x1.0mm for L type(30cm)<br>AB-Type: SJOW 17AWGx2C & H05RN-F 2x1.0mm <sup>2</sup> for H&M type / SOOW 17AWGx2C&H07RN-F 2x1.0mm <sup>2</sup> for L type(30cm) + UL2517 20AWGx2C(35cm) |                                                                                     |                            |
| Dimension (LxWxH) (mm)                                                                            |                                                                                                                            | 199x 63x 35.5mm                                                                                                                                                                                                                                                               |                                                                                   | 219x 63x 35.5mm                                                                                                                                                                                                                                                                                                               |                                                                                     |                            |








**XLG-200 Series**

| Model No.     | Output                | $I_o$ Ripple | Effi. |
|---------------|-----------------------|--------------|-------|
| XLG-200 □-12○ | 8.4~12V, 8 ~ 16A      | ---          | 92%   |
| XLG-200 □-24○ | 16.8~24V, 4.15 ~ 8.3A | ---          | 94%   |
| XLG-200 □-L○  | 142~285V, 350~1050mA  | 3%           | 94%   |
| XLG-200 □-H○  | 27~56V, 1750~5550mA   | 3%           | 93%   |








**XLG-240 Series**

| Model No.    | Output               | $I_o$ Ripple | Effi. |
|--------------|----------------------|--------------|-------|
| XLG-240 □-L○ | 178~342V, 350~1050mA | 5%           | 93%   |
| XLG-240 □-M○ | 90~171V, 700~2100mA  | 5%           | 92.5% |
| XLG-240 □-H○ | 27~56V, 2400~6660mA  | 5%           | 91%   |

□ = Blank, I; Blank: For standard version, I: For India only  
 ○ = A, AB, Blank

Note: Products sourced from the Americas regions may not have the PSE/CCC/BIS/KC logo. Please contact your MEAN WELL sales for more information

# ELG series 75~100W

## Features

- Constant voltage+constant current modes
- Universal AC input (100 to 305VAC) / Full range
- High efficiency up to 91%
- No load / Standby power consumption <0.5W
- Meet 6KV surge immunity level (IEC61000-4-5)
- Class 2 power unit (ELG-75/100 only)
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires
- Suitable for dry / damp / wet locations with IP67
- Suitable for outdoor LED lighting applications
- Protections:  
Short circuit / Over current / Over voltage / Over temp.

- Multiple models for choice:

**Blank-Type:** IP67 rated. Cable for I/O connection (For harsh environment)

**A-Type:** IP65 rated. Io and Vo adjustable through built-in potentiometer

**B-Type:** IP67 rated. 3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)

**AB-Type:** IP65 rated. Io adjustable through built-in potentiometer & 3 in 1 dimming function.

**D2-Type:** IP67 rated. Smart timer dimming function\*, contact MEAN WELL for details

**DA-Type:** IP67 rated. DALI control technology

- 5 years warranty

|                                       | ELG-75                           | ELG-100               |
|---------------------------------------|----------------------------------|-----------------------|
| <b>INPUT</b>                          | ACN<br>ACL                       |                       |
| <b>INPUT</b><br>(3Y Models)           | ACL<br>ACN<br>FG                 |                       |
| <b>OUTPUT</b><br>(Non-Dimming Models) | Vo-<br>Vo+                       |                       |
| <b>OUTPUT</b><br>(Dimming Models)     | DIM-/DA<br>DIM+/DA<br>Vo+<br>Vo- | Blank/A<br>B/AB/D2/DA |

|                           |                                                                                                                                                                                 |                                                          |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| AC input voltage range    | 100~305VAC ; 142~431VDC                                                                                                                                                         |                                                          |
| AC inrush current (max.)  | Cold start, 50A at 230VAC                                                                                                                                                       | Cold start, 60A at 230VAC                                |
| DC adjustment range       | ±10% rated output voltage (A-Type only)                                                                                                                                         |                                                          |
| Current adjustment range  | 50%~100% via potentiometer (A-Type only)                                                                                                                                        |                                                          |
| Over current protection   | 95%~108% constant current limiting, auto-recovery                                                                                                                               |                                                          |
| Over voltage protection   | 110%~140% rated output voltage                                                                                                                                                  |                                                          |
| Over temp. protection     | Shut down o/p voltage, re-power on to recover                                                                                                                                   |                                                          |
| Setup, rise, hold up time | 500ms, 100ms, 10ms at full load and 230VAC                                                                                                                                      |                                                          |
| Withstand voltage         | I/P-O/P: 3.75kVAC I/P-FG: 2kVAC O/P-FG: 1.5kVAC                                                                                                                                 |                                                          |
| Working temperature       | Tcase= -40~+85°C                                                                                                                                                                | Tcase= -40~+90°C (refer to "OUTPUT LOAD vs TEMPERATURE") |
| Safety standards          | UL8750, IEC/BS EN/AS/NZ61347-1,-2-13, BS EN62384, GB19510.1, GB19510.14, EAC TP TC 004, BIS IS15885(refer to spec for models), KC61347-1, KC61347-2-13, IEC 62386(DA type only) |                                                          |
| EMC standards             | BS EN55015, BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, GB17743, GB17625.1, EAC TP TC 020, KC KN15, KN61547                                |                                                          |
| Connection                | Please refer to page 50                                                                                                                                                         |                                                          |
| Dimension (LxWxH) (mm)    | 180x 63x 35.5                                                                                                                                                                   | 199x 63x 35.5                                            |

| ELG-75 Series         |              |       |       |       |
|-----------------------|--------------|-------|-------|-------|
| Model No.             | Output       | Tol.  | R&N   | Effi. |
| ELG-75-12 $\Delta$ -□ | 12V, 0~5A    | ±3.0% | 150mV | 85%   |
| ELG-75-24 $\Delta$ -□ | 24V, 0~3.15A | ±3.0% | 200mV | 88%   |
| ELG-75-36 $\Delta$ -□ | 36V, 0~2.1A  | ±2.5% | 250mV | 89%   |
| ELG-75-42 $\Delta$ -□ | 42V, 0~1.8A  | ±2.5% | 250mV | 90%   |
| ELG-75-48 $\Delta$ -□ | 48V, 0~1.6A  | ±2.0% | 250mV | 90%   |

○ = Blank, A, B, AB, D2 or DA ; □ = Blank, 3Y

□ = Blank, 2-wire input for standard mode ; □ = 3Y, 3-wire input for standard mode.

| ELG-100 Series         |              |       |       |       |
|------------------------|--------------|-------|-------|-------|
| Model No.              | Output       | Tol.  | R&N   | Effi. |
| ELG-100-24 $\Delta$ -□ | 24V, 0~4A    | ±3%   | 200mV | 88%   |
| ELG-100-36 $\Delta$ -□ | 36V, 0~2.66A | ±2.5% | 250mV | 89%   |
| ELG-100-42 $\Delta$ -□ | 42V, 0~2.28A | ±2.5% | 250mV | 90%   |
| ELG-100-48 $\Delta$ -□ | 48V, 0~2A    | ±2%   | 300mV | 90%   |
| ELG-100-54 $\Delta$ -□ | 54V, 0~1.78A | ±2%   | 350mV | 91%   |

○ = Blank, A, B, AB, D2 or DA ; □ = Blank, 3Y

\*MEAN WELL Smart timer dimming primarily provides the adaptive proportion dimming profile for the output constant current level.



# ELG series 240~300W

## Features

- Constant voltage+constant current modes
- Wide input range 100~305VAC
- High efficiency up to 94%
- No load / Standby power consumption <0.5W(for ELG-240 only)
- Meet 6KV surge immunity level (IEC61000-4-5)
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires
- Suitable for dry / damp / wet locations
- Suitable for outdoor LED lighting applications
- Protections:
  - Short circuit / Over current / Over voltage / Over temp.
- Multiple models for choice:(ELG-240)
  - Blank-Type:** IP67 rated. Io and Vo fixed(For harsh environment)
  - A-Type:** IP65 rated. Io and Vo adjustable through built-in potentiometer
  - B-Type:** IP67 rated. 3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)
  - AB-Type:** IP65 rated. Io and Vo adjustable through built-in potentiometer & 3 in 1 dimming function.
  - D2-Type:** IP67 rated. Smart timer dimming function\*, contact MEAN WELL for details
  - DA-Type:** IP67 rated. DALI control technology
- 5 years warranty

|                                                                                                                                                                                    | ELG-240                                                                                                                                                                                                                                                                               | ELG-300                                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| <b>INPUT</b> ACN<br>ACL<br><b>INPUT</b> (3Y Models) ACL<br>ACN<br>FG<br><b>OUTPUT</b> (Non-Dimming Models) Vo-<br>Vo+<br><b>OUTPUT</b> (Dimming Models) DIM-<br>DIM+<br>Vo+<br>Vo- |                                                                                                                                                                                                                                                                                       |                                                   |
| AC input voltage range                                                                                                                                                             | 100~305VAC ; 142~431VDC                                                                                                                                                                                                                                                               |                                                   |
| AC inrush current (max.)                                                                                                                                                           | Cold start, 60A at 230VAC                                                                                                                                                                                                                                                             | Cold start, 45A at 230VAC                         |
| DC adjustment range                                                                                                                                                                | ±8% rated output voltage (A/AB-Type only)                                                                                                                                                                                                                                             |                                                   |
| Current adjustment range                                                                                                                                                           | 50%~100% via potentiometer (A/AB-Type only)                                                                                                                                                                                                                                           |                                                   |
| Over current protection                                                                                                                                                            | 95%~108% constant current limiting, auto-recovery                                                                                                                                                                                                                                     |                                                   |
| Over voltage protection                                                                                                                                                            | 110%~140% rated output voltage                                                                                                                                                                                                                                                        |                                                   |
| Setup, rise, hold up time                                                                                                                                                          | 500ms, 100ms, at 230VAC                                                                                                                                                                                                                                                               |                                                   |
| Withstand voltage                                                                                                                                                                  | I/P-O/P: 3.75kVAC I/P-FG: 2.0kVAC O/P-FG: 1.5kVAC                                                                                                                                                                                                                                     |                                                   |
| Working temperature                                                                                                                                                                | -40~+90°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                                                                                                                                                                     | -40~+85°C (refer to "OUTPUT LOAD vs TEMPERATURE") |
| Safety standards                                                                                                                                                                   | UL8750(type"HL"), CSA C22.2 No. 250.13-12, BS EN61347-1,-2-13, IEC/AS/NZS 61347-1, IEC/AS/NZS 61347-2-13 independent, BS EN62384, EAC TP TC 004, BIS IS15885(refer to spec for models) GB19510.14, GB19510.1, IP65 or IP67 approved, KC61347-1, KC61347-2-13, IEC 62386(DA type only) |                                                   |
| EMC standards                                                                                                                                                                      | BS EN55015, BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, GB17743, GB17625.1, EAC TP TC 020, KC KN15, KN61547                                                                                                                                      |                                                   |
| Connection                                                                                                                                                                         | Please refer to page 50                                                                                                                                                                                                                                                               |                                                   |
| Dimension (LxWxH) (mm)                                                                                                                                                             | 244x 71x 37.5                                                                                                                                                                                                                                                                         | 246x 77x 39.5                                     |

| Model No.       | Output       | Tol. | R&N   | Effi. |
|-----------------|--------------|------|-------|-------|
| ELG-240-24(A)-□ | 24V, 0~10A   | ±2%  | 200mV | 92.0% |
| ELG-240-36(A)-□ | 36V, 0~6.66A | ±2%  | 250mV | 92.0% |
| ELG-240-42(A)-□ | 42V, 0~5.71A | ±2%  | 250mV | 92.5% |
| ELG-240-48(A)-□ | 48V, 0~5.0A  | ±2%  | 250mV | 93.0% |
| ELG-240-54(A)-□ | 54V, 0~4.45A | ±2%  | 350mV | 93.0% |

| Model No.   | Output          | Tol. | R&N   | Effi. |
|-------------|-----------------|------|-------|-------|
| ELG-300-12A | 12V, 11~22A     | ±3%  | 150mV | 91.0% |
| ELG-300-24A | 24V, 6.25~12.5A | ±2%  | 240mV | 94.0% |

○ = Blank, A, B, AB, D2 or DA ; □ = Blank, 3Y

□ = Blank, 2-wire input for standard mode ; □ = 3Y, 3-wire input for standard mode.

Note 1:ELG-240 for 24/24B/36/36A/42/42A/54/54A only, ELG-300(Part2/Sec13)

\*MEAN WELL Smart timer dimming primarily provides the adaptive proportion dimming profile for the output constant current level.

# ELG-C series 75~100W

## Features

- **Constant current mode**
- Universal AC input (100 to 305VAC) / Full range
- High efficiency up to 92%
- **No load / Standby power consumption <0.5W**
- **Meet 6KV surge immunity level (IEC61000-4-5)**
- **Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires**
- Suitable for dry / damp / wet locations
- Suitable for outdoor LED lighting applications
- Protections:  
Short circuit / Over voltage / Over temperature

- Multiple models for choice:  
**Blank-Type:** IP67 rated. Cable for I/O connection (For harsh environment)  
**A-Type:** IP65 rated. Io and Vo adjustable through built-in potentiometer  
**B-Type:** IP67 rated. 3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)  
**AB-Type:** IP65 rated. Io adjustable through built-in potentiometer & 3 in 1 dimming function.  
**D2-Type:** IP67 rated. **Smart timer dimming function\***, contact MEAN WELL for details  
**DA-Type:** IP67 rated. **DALI control technology**
- **5 years warranty**

|                                       | ELG-75-C                   | ELG-100-C             |
|---------------------------------------|----------------------------|-----------------------|
| <b>INPUT</b>                          | ACN<br>ACL                 |                       |
| <b>INPUT</b><br>(3Y Models)           | ACL<br>ACN<br>FG           |                       |
| <b>OUTPUT</b><br>(Non-Dimming Models) | Vo-<br>Vo+                 |                       |
| <b>OUTPUT</b><br>(Dimming Models)     | DIM-<br>DIM+<br>Vo+<br>Vo- | Blank/A<br>B/AB/D2/DA |

|                             |                                                                                                                                                                                   |                                                         |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| AC input voltage range      | 100~305VAC; 142~431VDC                                                                                                                                                            |                                                         |
| AC inrush current (max.)    | Cold start, 50A at 230VAC                                                                                                                                                         | Cold start, 40A at 230VAC                               |
| Current adjustment range    | 50%~100% via potentiometer (A-Type only)                                                                                                                                          |                                                         |
| Over voltage protection     | 105%~145% rated output voltage                                                                                                                                                    |                                                         |
| Over temperature protection | Shut down o/p voltage, re-power on to recover                                                                                                                                     |                                                         |
| Setup time                  | 500ms at 230VAC                                                                                                                                                                   |                                                         |
| Withstand voltage           | I/P-O/P: 3.75kVAC I/P-FG: 2kVAC O/P-FG: 1.5kVAC                                                                                                                                   |                                                         |
| Working temperature         | Tcase=-40~+90°C                                                                                                                                                                   | Tcase=-40~+85°C (refer to "OUTPUT LOAD vs TEMPERATURE") |
| Safety standards            | UL8750, ENEC/AS/NZS/BS EN61347-1,-2-13, BS EN62384, GB19510.1, GB19510.14, EAC TP TC 004, BIS IS15885(refer to spec for models), KC61347-1, KC61347-2-13, IEC 62386(DA type only) |                                                         |
| EMC standards               | BS EN55015, BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11,BS EN61547, GB17743, GB17625.1, EAC TP TC 020,KC KN15, KN61547                                    |                                                         |
| Connection                  | Please refer to page 50                                                                                                                                                           |                                                         |
| Dimension (LxWxH) (mm)      | 180x 63x 35.5                                                                                                                                                                     | 199x 63x 35.5                                           |

|                 |  |
|-----------------|--|
| ELG-75-C Series |  |
|-----------------|--|

| Model No.         | Output          | Tol. | Io Ripple | Effi. |
|-------------------|-----------------|------|-----------|-------|
| ELG-75-C350(A)-□  | 107~214V, 350mA | ±5%  | 5%        | 91%   |
| ELG-75-C500(A)-□  | 75~150V, 500mA  | ±5%  | 5%        | 91%   |
| ELG-75-C700(A)-□  | 53~107V, 700mA  | ±5%  | 5%        | 91%   |
| ELG-75-C1050(A)-□ | 35~71V, 1050mA  | ±5%  | 5%        | 90%   |
| ELG-75-C1400(A)-□ | 27~54V, 1400mA  | ±5%  | 5%        | 90%   |

○ = Blank, A, B, AB, D2 or DA ; □ = Blank, 3Y

□ = Blank, 2-wire input for standard mode ; □ = 3Y, 3-wire input for standard mode.

|                  |  |
|------------------|--|
| ELG-100-C Series |  |
|------------------|--|

| Model No.          | Output          | Tol. | Io Ripple | Effi. |
|--------------------|-----------------|------|-----------|-------|
| ELG-100-C350(A)-□  | 143~286V, 350mA | ±5%  | 5%        | 92%   |
| ELG-100-C500(A)-□  | 100~200V, 500mA | ±5%  | 5%        | 91%   |
| ELG-100-C700(A)-□  | 71~143V, 700mA  | ±5%  | 5%        | 91%   |
| ELG-100-C1050(A)-□ | 48~95V, 1050mA  | ±5%  | 5%        | 90%   |
| ELG-100-C1400(A)-□ | 35~72V, 1400mA  | ±5%  | 5%        | 90%   |

○ = Blank, A, B, AB, D2 or DA ; □ = Blank, 3Y

\*MEAN WELL Smart timer dimming primarily provides the adaptive proportion dimming profile for the output constant current level.

# ELG-C series 150~200W

## Features

- Constant current mode
- Compliant with class II design (ELGT-150-C only)
- Universal AC input (up to 305VAC) / Full range
- High efficiency up to 93%
- No load / Standby power consumption <0.5W
- Meet 6KV surge immunity level (IEC61000-4-5)
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires
- Suitable for dry / damp / wet locations with IP67
- Suitable for outdoor LED lighting applications
- Protections: Short circuit / Over voltage / Over temperature
- 5 years warranty

- Multiple models for choice:

**Blank-Type:** IP67 rated. Cable for I/O connection (For harsh environment)

**A-Type:** IP65 rated. Io and Vo adjustable through built-in potentiometer

**B-Type:** IP67 rated. 3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)

**AB-Type:** IP65 rated. Io adjustable through built-in potentiometer & 3 in 1 dimming function.

**D2-Type:** IP67 rated. Smart timer dimming function\*, contact MEAN WELL for details

**DA-Type:** IP67 rated. DALI control technology

**BE-Type:** IP67 rated. 3 in 1 dimming function and 12V/300mA auxiliary output (ELG-150-C only)

|                                                                                                                                                                                                                                                                                                              | ELG-150-C/ELGT-150-C                                                                                                                                                                                  | ELG-200-C     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| <div> <div>INPUT</div> <div>ACN<br/>ACL</div> </div> <div> <div>INPUT<br/>(3Y Models)</div> <div>ACL<br/>ACN<br/>FG</div> </div> <div> <div>OUTPUT<br/>(Non-Dimming Models)</div> <div>Vo-<br/>Vo+</div> </div> <div> <div>OUTPUT<br/>(Dimming Models)</div> <div>DIM-<br/>DIM+<br/>Vo+<br/>Vo-</div> </div> |                                                                                                                                                                                                       |               |
| AC input voltage range                                                                                                                                                                                                                                                                                       | 100~305VAC; 142~431VDC                                                                                                                                                                                |               |
| AC inrush current (max.)                                                                                                                                                                                                                                                                                     | Cold start, 65A at 230VAC                                                                                                                                                                             |               |
| Current adjustment range                                                                                                                                                                                                                                                                                     | 50%~100% via potentiometer (A-Type only)                                                                                                                                                              |               |
| Over voltage protection                                                                                                                                                                                                                                                                                      | 105%~145% rated output voltage                                                                                                                                                                        |               |
| Over temperature protection                                                                                                                                                                                                                                                                                  | Shut down o/p voltage, re-power on to recover                                                                                                                                                         |               |
| Setup time                                                                                                                                                                                                                                                                                                   | 500ms at 230VAC                                                                                                                                                                                       |               |
| Withstand voltage                                                                                                                                                                                                                                                                                            | I/P-O/P: 3.75kVAC I/P-FG: 2kVAC O/P-FG: 1.5kVAC for ELG-150/200-C; I/P-CASE: 3.75kVAC for ELGT-150-C                                                                                                  |               |
| Working temperature(Tcase)                                                                                                                                                                                                                                                                                   | -40~+90°C (refer to "OUTPUT LOAD vs TEMPERATURE") -40~+85°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                                   |               |
| Safety standards                                                                                                                                                                                                                                                                                             | UL8750, ENEC BS EN61347-1, BS EN61347-2-13, BS EN62384, GB19510.14, GB19510.1, EAC TP TC 004 approved, BIS ISI5885(ELG-150-C700A/1050A, 700DA only), KC61347-1, KC61347-2-13, IEC 62386(DA type only) |               |
| EMC standards                                                                                                                                                                                                                                                                                                | BS EN55015, BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, GB17743, GB17625.1, EAC TP TC 020, KC KN15, KN61547                                                      |               |
| Connection                                                                                                                                                                                                                                                                                                   | Please refer to page 50                                                                                                                                                                               |               |
| Dimension (LxWxH) (mm)                                                                                                                                                                                                                                                                                       | 219x 63x 35.5                                                                                                                                                                                         | 244x 71x 37.5 |

|                         |  |  |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-------------------------|--|--|--|--|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                         |  |  |  |  |  |  |  |  |    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|                         |  |  |  |  | (S & BE-Type) (DA-Type)                                                             |                                                                                     |                                                                                     |                                                                                     |    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>ELG-150-C Series</b> |  |  |  |  |  |  |  |  | 05 |  |  |  |  |  |

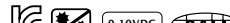
| Model No.          | Output          | Tol. | Io Ripple | Effi. |
|--------------------|-----------------|------|-----------|-------|
| ELG-150-C500(A)-□  | 150~300V, 500mA | ±5%  | 5%        | 92%   |
| ELG-150-C700(A)-□  | 107~214V, 700mA | ±5%  | 5%        | 92%   |
| ELG-150-C1050(A)-□ | 72~143V, 1050mA | ±5%  | 5%        | 92%   |
| ELG-150-C1400(A)-□ | 54~107V, 1400mA | ±5%  | 5%        | 91%   |
| ELG-150-C1750(A)-□ | 43~86V, 1750mA  | ±5%  | 5%        | 91%   |
| ELG-150-C2100(A)-□ | 36~72V, 2100mA  | ±5%  | 5%        | 91%   |

○ = Blank, A, B, AB, D2, DA or BE ; □ = Blank, 3Y

□ = Blank, 2-wire input for standard mode ;

□ = 3Y, 3-wire input for standard mode.

\*MEAN WELL Smart timer dimming primarily provides the adaptive proportion dimming profile for the output constant current level.








## ELGT-150-C Series

| Model No.         | Output          | Tol. | Io Ripple | Effi. |
|-------------------|-----------------|------|-----------|-------|
| ELGT-150-C700(A)  | 107~214V, 700mA | ±5%  | 5%        | 92%   |
| ELGT-150-C1050(A) | 72~143V, 1050mA | ±5%  | 5%        | 92%   |
| ELGT-150-C1400(A) | 54~107V, 1400mA | ±5%  | 5%        | 91%   |

|                   |  |                                                                                       |  |                                                                                       |  |                                                                                       |  |                                                                                       |  |
|-------------------|--|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|
| ELGT-200-C Series |  | 0.1~0.15W, 1000mA                                                                     |  | 0.1~0.15W, 1000mA                                                                     |  | 0.1~0.15W, 1000mA                                                                     |  | 0.1~0.15W, 1000mA                                                                     |  |
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○ = Blank, A, B, AB, D2 or DA ; □ = Blank, 3Y

# ELG-C & ELGC series 240~300W

## Features

- Constant power mode (for ELGC-300)
- Constant current mode output (for ELG-240-C)
- Universal AC input (100 to 305VAC) / Full range
- High efficiency up to 94.5%
- Standby power consumption<0.5W(for ELG-240-C)
- Meet 6KV surge immunity level (IEC61000-4-5)
- Type HL LED driver for use in Class I, Division 2 hazardous location luminaires
- Suitable for dry / damp / wet locations
- Suitable for outdoor LED lighting applications
- Protections: Short circuit / Over voltage / Over temperature
- 5 years warranty

- Multiple models for choice:

**Blank-Type:** IP67 rated. Cable for I/O connection(For harsh environment)

**A-Type:** IP65 rated. Io and Vo adjustable through built-in potentiometer

**B-Type:** IP67 rated. 3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)

**AB-Type:** IP65 rated. Io adjustable through built-in potentiometer  
& 3 in 1 dimming function.

**D2-Type:** IP67 rated. **Smart timer dimming function\***, contact MEAN WELL for details

**ADA-Type:** IP67 rated. DALI-2 control technology



|                             |                                                                                                                                                                                                                                           |                                                        |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| AC input voltage range      | 100~305VAC; 142~431VDC                                                                                                                                                                                                                    |                                                        |
| AC inrush current (max.)    | Cold start 75A at 230VAC                                                                                                                                                                                                                  | Cold start 45A at 230VAC                               |
| Current adjustment range    | 50%~100% via potentiometer(A/AB-Type only)                                                                                                                                                                                                | 32.5%~100% via potentiometer(A/AB-Type only)           |
| Over voltage protection     | 105%~145% rated output voltage                                                                                                                                                                                                            |                                                        |
| Over temperature protection | Shut down o/p voltage, re-power on to recover                                                                                                                                                                                             | Tcase>85°C±5°C, derate power automatically by 6%/°Cmax |
| Setup time                  | 800ms/115VAC, 500ms/230VAC                                                                                                                                                                                                                | 500ms at 230VAC and 115VAC                             |
| Withstand voltage           | I/P-O/P:3.75kVAC I/P-FG: 2kVAC O/P-FG: 1.5kVAC                                                                                                                                                                                            |                                                        |
| Working temperature         | Tcase=-40~+85°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                                                                                                                   |                                                        |
| Safety standards            | UL8750(type"HL"), CSA C22.2 No. 250.13-12, ENEC BS EN61347-1, BS EN61347-2-13 independent; AS/NZS 61347-1,AS/NZS 61347-2-13 independent,BS EN62384, EAC TP TC 004,KC61347-1, KC61347-2-13, GB19510.14,GB19510.1, IEC 62386(ADA type only) |                                                        |
| EMC standards               | BS EN55015, BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2,3,4,6,8,11, BS EN61547; GB17743, GB17625.1, EAC TP TC 020,KC KN15, KN61547                                                                                             |                                                        |
| Connection                  | Please refer to page 50                                                                                                                                                                                                                   |                                                        |
| Dimension (LxWxH) (mm)      | 244x 71x 37.5                                                                                                                                                                                                                             | 246x 77x 39.5                                          |

**ELG-240-C Series**

(for 700A, 1050A only)

UL US ENEC CB UK CE

| Model No.          | Output           | Tol.  | Io Ripple | Effi. |
|--------------------|------------------|-------|-----------|-------|
| ELG-240-C700(A)-□  | 172~343V, 700mA  | ±5.0% | 5%        | 93%   |
| ELG-240-C1050(A)-□ | 114~228V, 1050mA | ±5.0% | 5%        | 93%   |
| ELG-240-C1400(A)-□ | 86~171V, 1400mA  | ±5.0% | 5%        | 93%   |
| ELG-240-C1750(A)-□ | 69~137V, 1750mA  | ±5.0% | 5%        | 93%   |
| ELG-240-C2100(A)-□ | 57~115V, 2100mA  | ±5.0% | 5%        | 93%   |

○ = Blank, A, B, AB, D2 or DA ; □ = Blank, 3Y

**ELGC-300 Series**

UL US ENEC CB UK CE

| Model No.    | Vout     | Iout(mA)   |            | Tol. | Io Ripple | Effi. |
|--------------|----------|------------|------------|------|-----------|-------|
|              |          | 100~180VAC | 200~305VAC |      |           |       |
| ELGC-300-L-□ | 116~232V | 650~1700   | 650~2000   | ±5%  | 5%        | 94.5% |
| ELGC-300-M-□ | 58~116V  | 1300~3400  | 1300~4000  | ±5%  | 5%        | 93.5% |
| ELGC-300-H-□ | 29~58V   | 2600~6800  | 2600~8000  | ±5%  | 5%        | 92.5% |

□ = Blank, A, AB, D2 or ADA

\*MEAN WELL Smart timer dimming primarily provides the adaptive proportion dimming profile for the output constant current level.

# Globally Certified Cable Adoption for ELG

## ELG-75/100 Series

|            |        |                                                                                                                                                                                                                                                                    |
|------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connection | Input  | SJOW 17AWGx2C & H05RN-F 1.0mm <sup>2</sup> (30cm)                                                                                                                                                                                                                  |
|            | Output | <ul style="list-style-type: none"> <li>Blank/A-Type:<br/>SJOW 17AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm)</li> <li>B/AB/D2/DA-Type:<br/>SJOW 17AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm) + SJOW 17AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm)</li> </ul> |

## ELG-150 Series

|            |        |                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connection | Input  | SJOW 17AWGx2C & H05RN-F 1.0mm <sup>2</sup> (30cm)                                                                                                                                                                                                                                                                                                                                                   |
|            | Output | <ul style="list-style-type: none"> <li>Blank/A-Type:<br/>SJOW 17AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm)</li> <li>B/AB/D2/DA-Type:<br/>SJOW 17AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm) + SJOW 17AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm)</li> <li>BE-Type:<br/>SJOW 17AWGx4C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm)+ SJOW 17AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm)</li> </ul> |

## ELG-200/240 Series

|            |        |                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connection | Input  | SJOW 17AWGx2C & H05RN-F 1.0mm <sup>2</sup> (30cm)                                                                                                                                                                                                                                                                                                                                                                 |
|            | Output | <ul style="list-style-type: none"> <li>Blank/A-Type:<br/>SJTW 14AWGx2C (30cm) for 12V<br/>SJOW 17AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm) for others</li> <li>B/AB/D2/DA-Type:<br/>SJTW 14AWGx2C (30cm) + SJOW 17AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm) for 12V<br/>SJOW 17AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm) + SJOW 17AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm) for others</li> </ul> |

## ELG-75/100-C Series

|            |        |                                                                                                                                                                                                                                                                    |
|------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connection | Input  | SJOW 17AWGx2C & H05RN-F 1.0mm <sup>2</sup> (30cm)                                                                                                                                                                                                                  |
|            | Output | <ul style="list-style-type: none"> <li>Blank/A-Type:<br/>SJOW 17AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm)</li> <li>B/AB/D2/DA-Type:<br/>SJOW 17AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm) + SJOW 17AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm)</li> </ul> |

## ELG-150-C Series

|            |        |                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connection | Input  | SJOW 17AWGx2C & H05RN-F 1.0mm <sup>2</sup> (30cm)                                                                                                                                                                                                                                                                                                                                                   |
|            | Output | <ul style="list-style-type: none"> <li>Blank/A-Type:<br/>SJOW 17AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm)</li> <li>B/AB/D2/DA-Type:<br/>SJOW 17AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm) + SJOW 17AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm)</li> <li>BE-Type:<br/>SJOW 17AWGx4C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm)+ SJOW 17AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm)</li> </ul> |

## ELG-200/240-C Series

|            |        |                                                                                                                                                                                                                                                                    |
|------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connection | Input  | SJOW 17AWGx2C & H05RN-F 1.0mm <sup>2</sup> (30cm)                                                                                                                                                                                                                  |
|            | Output | <ul style="list-style-type: none"> <li>Blank/A-Type:<br/>SJOW 17AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm)</li> <li>B/AB/D2/DA-Type:<br/>SJOW 17AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm) + SJOW 17AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm)</li> </ul> |

## ELGC-300 / ELG-300 Series

|            |        |                                                                                                                                                                                                                                                                                                                                                                                |
|------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connection | Input  | SJOW 17AWGx3C & H05RN-F 1.0mm <sup>2</sup> (30cm)                                                                                                                                                                                                                                                                                                                              |
|            | Output | <ul style="list-style-type: none"> <li>Blank/A-Type:<br/>SJOW 17AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm) / ELG-300: SJOW 14AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm)</li> <li>AB/D2/DA-Type:<br/>SJOW 17AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm) + SJOW 17AWGx2C &amp; H05RN-F 1.0mm<sup>2</sup> (30cm)</li> <li>Dimming cable: UL2517 20AWGx2C(30cm)</li> </ul> |

# HLG series 40~60W

## Features

- Constant voltage + constant current modes
- Universal AC input (90 to 305VAC) / Full range
- High efficiency up to 90.5%
- Meet 4kV surge immunity level (IEC61000-4-5)
- Class 2 power unit
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires
- Suitable for dry, damp, and wet location with IP67
- Suitable for outdoor LED lighting applications
- Protections:  
Short circuit / Over current / Over voltage / Over temp.

- Multiple models for choice:

**Blank-Type:** IP67 rated. Cable for I/O connection (For harsh environment)

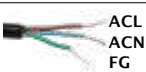
**A-Type:** IP65 rated. Io and Vo adjustable through built-in potentiometer

**B-Type:** IP67 rated. 3 in 1 dimming function (1~10Vdc, 10V PWM signal and resistance)

**AB-Type:** IP65 rated. Io adjustable through built-in potentiometer & 3 in 1 dimming function.

**D-Type(option):** IP67 rated. Timer dimming function, contact MEAN WELL for details.

- 7 years warranty

| HLG-40H                        |                                                                                                                                                                                                                                                                                                            | HLG-60H                                                                                                                                                                                                                                                                                                                                       |                           |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| INPUT                          |                                                                                                                                                                                                                           |     |                           |
| OUTPUT<br>(Non-Dimming Models) |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                               |                           |
| OUTPUT<br>(Dimming Models)     |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                               |                           |
| AC input voltage range         | 90~305VAC ; 127~431VDC                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                               |                           |
| AC inrush current (max.)       | Cold start, 50A at 230VAC                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                               | Cold start, 55A at 230VAC |
| DC adjustment range            | ±10% rated output voltage (A-Type only)                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                               |                           |
| Current adjustment range       | 60%~100% via potentiometer (A-Type only)                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                               |                           |
| Over current protection        | 95%~108% constant current limiting, auto-recovery                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                               |                           |
| Over voltage protection        | 109%~145% rated output voltage                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                               |                           |
| Setup, rise, hold up time      | 500ms, 80ms, 16ms at full load and 230VAC                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                               |                           |
| Withstand voltage              | I/P-O/P: 3.75kVAC, I/P-FG: 2kVAC, O/P-FG:1.5kVAC                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                               |                           |
| Working temperature            | -40~+80°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                               |                           |
| Safety standards               | UL8750(type"HL"), CSA C22.2 No. 250.0-08 , independent , BS EN/AS/NZS 61347-1,BS EN/AS/ NZS 61347-2-13 GB19510.1,GB19510.14,EAC TP TC 004,KC61347-1,KC61347-2-13 IP65 or IP67 approved ; (except for AB-type), J61347-1 J61347-2-13(except for B, AB and D-type), design refer to BS EN60335-1(by request) |                                                                                                                                                                                                                                                                                                                                               |                           |
| EMC standards                  | BS EN55015, BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, GB17743, GB17625.1, EAC TP TC 020                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                               |                           |
| Connection                     | Please refer to page 66                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                               |                           |
| Dimension (LxWxH) (mm)         | 171x 61.5x 36.8                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                               |                           |

## HLG-40H Series

| Model No.     | Output       | Tol.  | R&N   | Effi. |
|---------------|--------------|-------|-------|-------|
| HLG-40H-12(A) | 12V, 0~3.33A | ±2.5% | 150mV | 86.5% |
| HLG-40H-15(A) | 15V, 0~2.67A | ±2.0% | 150mV | 86.5% |
| HLG-40H-20(A) | 20V, 0~2.00A | ±1.0% | 150mV | 88.0% |
| HLG-40H-24(A) | 24V, 0~1.67A | ±1.0% | 200mV | 88.0% |
| HLG-40H-30(A) | 30V, 0~1.34A | ±1.0% | 200mV | 88.5% |
| HLG-40H-36(A) | 36V, 0~1.12A | ±1.0% | 200mV | 88.5% |
| HLG-40H-42(A) | 42V, 0~0.96A | ±1.0% | 200mV | 88.5% |
| HLG-40H-48(A) | 48V, 0~0.84A | ±1.0% | 300mV | 89.5% |
| HLG-40H-54(A) | 54V, 0~0.75A | ±1.0% | 300mV | 89.5% |

○ = A, B, AB, D or Blank

## HLG-60H Series

| Model No.     | Output      | Tol.  | R&N   | Effi. |
|---------------|-------------|-------|-------|-------|
| HLG-60H-15(A) | 15V, 0~4.0A | ±2.0% | 150mV | 87.5% |
| HLG-60H-20(A) | 20V, 0~3.0A | ±1.0% | 150mV | 89.0% |

| Model No.     | Output       | Tol.  | R&N   | Effi. |
|---------------|--------------|-------|-------|-------|
| HLG-60H-24(A) | 24V, 0~2.5A  | ±1.0% | 150mV | 89.5% |
| HLG-60H-30(A) | 30V, 0~2.0A  | ±1.0% | 200mV | 90.0% |
| HLG-60H-36(A) | 36V, 0~1.70A | ±1.0% | 200mV | 90.0% |
| HLG-60H-42(A) | 42V, 0~1.45A | ±1.0% | 300mV | 90.0% |
| HLG-60H-48(A) | 48V, 0~1.30A | ±1.0% | 300mV | 90.5% |
| HLG-60H-54(A) | 54V, 0~1.15A | ±1.0% | 300mV | 90.5% |

○ = A, B, AB, D or Blank

## ▶ Junction Box for HLG Series



- Optional junction box available for HLG-80H~480H series (A/B/Blank-Type only). Please contact MEAN WELL for details.

- "UL8750 listed" safety & IP66 approved for HLG-80H-□BL (modified from B-Type only)

# HLG series 80~120W

## Features

- Constant voltage + constant current modes
- Universal AC input (90 to 305VAC) / Full range
- High efficiency up to 93.5%
- Meet 4kV surge immunity level (IEC61000-4-5)
- Class 2 power unit / Pass LPS (except for HLG-120H)
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires
- Suitable for dry, damp, and wet location with IP67
- Suitable for outdoor LED lighting applications
- Protections:  
Short circuit / Over current / Over voltage / Over temp
- 7 years warranty

- Multiple models for choice:

**Blank-Type:** IP67 rated. Cable for I/O connection (For harsh environment)

**A-Type:** IP65 rated. Io and Vo adjustable through built-in potentiometer

**B-Type:** IP67 rated. 3 in 1 dimming function (1~10Vdc, 10V PWM signal and resistance)

**AB-Type:** IP65 rated. Io adjustable and Vo (except for HLG-80H) through built-in potentiometer & 3 in 1 dimming function.

**BL-Type(option):** Junction box option for HLG-80H B-Type only, "UL8750 listed" safety & IP66 approved, contact MEAN WELL for details

**D-Type(option):** IP67 rated. Timer dimming function, contact MEAN WELL for details

| INPUT                          | ACL<br>ACN<br>FG           | HLG-80H                                                                                                                                                                                                                                                                                                          | HLG-100H/HLG-120H                         |
|--------------------------------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| OUTPUT<br>(Non-Dimming Models) | Vo-<br>Vo+                 |                                                                                                                                                                                                                                |                                           |
| OUTPUT<br>(Dimming Models)     | DIM+<br>DIM-<br>Vo-<br>Vo+ |                                                                                                                                                                                                                                                                                                                  |                                           |
| AC input voltage range         |                            | 90~305VAC ; 127~431VDC                                                                                                                                                                                                                                                                                           |                                           |
| AC inrush current (max.)       |                            | Cold start, 70A at 230VAC                                                                                                                                                                                                                                                                                        | Cold start, 60A at 230VAC                 |
| DC adjustment range            |                            | ±10% rated output voltage (A-Type only)                                                                                                                                                                                                                                                                          |                                           |
| Current adjustment range       |                            | HLG-80H/100H: 60%~100% ; HLG-120H: 50%~100% via potentiometer (A-Type only)                                                                                                                                                                                                                                      |                                           |
| Over current protection        |                            | 95%~108% constant current limiting, auto-recovery                                                                                                                                                                                                                                                                |                                           |
| Over voltage protection        |                            | 110%~140% rated output voltage                                                                                                                                                                                                                                                                                   |                                           |
| Setup, rise, hold up time      |                            | 500ms, 80ms, 16ms at full load and 230VAC                                                                                                                                                                                                                                                                        | 500ms, 50ms, 16ms at full load and 230VAC |
| Withstand voltage              |                            | I/P-O/P: 3.75kVAC, I/P-FG: 2kVAC, O/P-FG: 1.5kVAC                                                                                                                                                                                                                                                                |                                           |
| Working temperature            |                            | -40~+80°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                                                                                                                                                                                                |                                           |
| Safety standards               |                            | UL8750(type"HL"), CSA C22.2 No. 250.0-08, UL8750 LISTED for HLG-80H-□ BL; independent, BS EN/AS/NZS 61347-1, BS EN/AS/NZS 61347-2-13 J61347-1, J61347-2-13 (except for B, AB and D-type), GB19510.1, GB19510.14, EAC TP TC 004, BIS IS15885 (for 36A, 54A only), IP65 or IP67, (except for AB, BL-type) approved |                                           |
| EMC standards                  |                            | BS EN55015, BS EN55032 class B (except for HLG-80H), BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2, 3, 4, 5, 6, 8, 11, BS EN61547, GB17743, GB17625.1, EAC TP TC 020                                                                                                                                    |                                           |
| Connection                     |                            | Please refer to page 66                                                                                                                                                                                                                                                                                          |                                           |
| Dimension (LxWxH) (mm)         |                            | 195.6x 61.5x 38.8                                                                                                                                                                                                                                                                                                | 220x 68x 38.8                             |

| Model No.     | Output       | Tol.  | R&N   | Effi. |
|---------------|--------------|-------|-------|-------|
| HLG-80H-12(A) | 12V, 0~5.0A  | ±2.5% | 150mV | 88.0% |
| HLG-80H-15(A) | 15V, 0~5.0A  | ±2.0% | 150mV | 89.0% |
| HLG-80H-20(A) | 20V, 0~4.0A  | ±1.0% | 150mV | 90.0% |
| HLG-80H-24(A) | 24V, 0~3.4A  | ±1.0% | 150mV | 90.5% |
| HLG-80H-30(A) | 30V, 0~2.7A  | ±1.0% | 200mV | 91.0% |
| HLG-80H-36(A) | 36V, 0~2.3A  | ±1.0% | 200mV | 91.0% |
| HLG-80H-42(A) | 42V, 0~1.95A | ±1.0% | 200mV | 91.0% |
| HLG-80H-48(A) | 48V, 0~1.7A  | ±1.0% | 200mV | 91.0% |
| HLG-80H-54(A) | 54V, 0~1.5A  | ±1.0% | 200mV | 91.0% |

○ = A, B, AB, BL, D or Blank

| Model No.      | Output      | Tol. | R&N   | Effi. |
|----------------|-------------|------|-------|-------|
| HLG-100H-20(A) | 20V, 0~4.8A | ±1%  | 150mV | 93%   |
| HLG-100H-24(A) | 24V, 0~4.0A | ±1%  | 150mV | 93%   |
| HLG-100H-30(A) | 30V, 0~3.2A | ±1%  | 200mV | 93%   |

| Model No.      | Output       | Tol. | R&N   | Effi. |
|----------------|--------------|------|-------|-------|
| HLG-100H-36(A) | 36V, 0~2.65A | ±1%  | 200mV | 93%   |
| HLG-100H-42(A) | 42V, 0~2.28A | ±1%  | 200mV | 93%   |
| HLG-100H-48(A) | 48V, 0~2.0A  | ±1%  | 200mV | 93%   |
| HLG-100H-54(A) | 54V, 0~1.77A | ±1%  | 200mV | 93%   |

○ = A, B, AB, D or Blank

| Model No.      | Output      | Tol.  | R&N   | Effi. |
|----------------|-------------|-------|-------|-------|
| HLG-120H-12(A) | 12V, 0~10A  | ±2.5% | 150mV | 92.0% |
| HLG-120H-15(A) | 15V, 0~8.0A | ±2.0% | 150mV | 92.0% |
| HLG-120H-20(A) | 20V, 0~6.0A | ±1.0% | 150mV | 93.0% |
| HLG-120H-24(A) | 24V, 0~5.0A | ±1.0% | 150mV | 93.0% |
| HLG-120H-30(A) | 30V, 0~4.0A | ±1.0% | 200mV | 93.0% |
| HLG-120H-36(A) | 36V, 0~3.4A | ±1.0% | 200mV | 93.0% |
| HLG-120H-42(A) | 42V, 0~2.9A | ±1.0% | 200mV | 93.0% |
| HLG-120H-48(A) | 48V, 0~2.5A | ±1.0% | 200mV | 93.5% |
| HLG-120H-54(A) | 54V, 0~2.3A | ±1.0% | 200mV | 93.5% |

○ = A, B, AB, D or Blank

# HLG series 150~240W

## Features

- **Constant voltage+constant current modes**
- Universal AC input (90 to 305VAC) / Full range
- High efficiency up to 94%
- Meet 4kV surge immunity level (IEC61000-4-5)
- **Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires**
- Suitable for dry, damp, and wet location **with IP67**
- Suitable for outdoor LED lighting applications
- Protections:  
Short circuit / Over current / Over voltage / Over temp.
- **7 years warranty**

- Multiple models for choice:  
**Blank-Type:** IP67 rated. Cable for I/O connection (**For harsh environment**)  
**A-Type:** IP65 rated. Io and Vo adjustable through built-in potentiometer  
**B-Type:** IP67 rated. 3 in 1 dimming function (1~10Vdc, 10V PWM signal and resistance)  
**AB-Type:** IP65 rated. Io adjustable and Vo through built-in potentiometer & 3 in 1 dimming function.  
**C-Type:** Terminal block for I/O connection (HLG-240H)  
**D-Type(option):** IP67 rated. Timer dimming function, contact MEAN WELL for details
- Optional RCM models available (HLG-150H/185H/240H-A/B/Blank-Type)

|                                       | HLG-150H/185H                                                                                                                                                                                                                                                                                      | HLG-240H                                                   |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| <b>INPUT</b>                          | ACL<br>ACN<br>FG                                                                                                                                                                                                                                                                                   |                                                            |
| <b>OUTPUT</b><br>(Non-Dimming Models) | Vo-<br>Vo+                                                                                                                                                                                                                                                                                         |                                                            |
| <b>OUTPUT</b><br>(Dimming Models)     | DIM+<br>DIM-<br>Vo-<br>Vo+                                                                                                                                                                                                                                                                         |                                                            |
|                                       |                                                                                                                                                                                                                                                                                                    |                                                            |
| AC input voltage range                | 90~305VAC; 127~431VDC                                                                                                                                                                                                                                                                              |                                                            |
| AC inrush current (max.)              | Cold start, 65A at 230VAC                                                                                                                                                                                                                                                                          | Cold start, 75A at 230VAC                                  |
| DC adjustment range                   | ±10% rated output voltage (A-Type only)                                                                                                                                                                                                                                                            | ±6% rated output voltage (A-Type & C-Type)                 |
| Current adjustment range              | HLG-150H: 60%~100% ; HLG-185H/240H: 50%~100% via potentiometer (A-Type & HLG-240H C-Type)                                                                                                                                                                                                          |                                                            |
| Over current protection               | 95%~108% constant current limiting, auto-recovery                                                                                                                                                                                                                                                  |                                                            |
| Over voltage protection               | 110%~140% rated output voltage                                                                                                                                                                                                                                                                     |                                                            |
| Setup, rise, hold up time             | 500ms, 50ms, 16ms                                                                                                                                                                                                                                                                                  | 500ms, 80ms, 15ms at full load and 230VAC                  |
| Withstand voltage                     | I/P-O/P: 3.75kVAC, I/P-FG: 2kVAC, O/P-FG: 1.5kVAC                                                                                                                                                                                                                                                  |                                                            |
| Working temperature                   | -40~+90°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                                                                                                                                                                                  |                                                            |
| Safety standards                      | UL8750, BS EN/AS/NZS61347-1,-2-13(except for HLG-240H C-Type), PSE J61347-1, J61347-2-13, GB19510.14, GB19510.1, EAC TP TC 004 approved; UL1012, UL62368-1, TUV BS EN62368-1 approved for HLG-240H only; BIS ISI 5885(refer to spec for models), KC61347-1, KC61347-2-13(except for AB, C, D-type) |                                                            |
| EMC standards                         | BS EN55015, BS EN55032 class B, BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, GB17743, GB17625.1, EAC TP TC 020,KC KN15,KN61547(except for AB,Dx,D2-type)                                                                                                       |                                                            |
| Connection                            | Please refer to page 66                                                                                                                                                                                                                                                                            |                                                            |
| Dimension (LxWxH)(mm)                 | 228x 68x 38.8                                                                                                                                                                                                                                                                                      | A/B/D/Blank-Type: 244.2x 68x 38.8<br>C-Type: 251x 68x 38.8 |

## HLG-150H Series

| Model No.      | Output       | Tol.  | R&N   | Effi. |
|----------------|--------------|-------|-------|-------|
| HLG-150H-12(A) | 12V, 0~12.5A | ±2.5% | 150mV | 91.5% |
| HLG-150H-15(A) | 15V, 0~10.0A | ±2.0% | 150mV | 92.0% |
| HLG-150H-20(A) | 20V, 0~7.50A | ±1.0% | 150mV | 93.0% |
| HLG-150H-24(A) | 24V, 0~6.30A | ±1.0% | 150mV | 93.0% |
| HLG-150H-30(A) | 30V, 0~5.00A | ±1.0% | 200mV | 93.5% |
| HLG-150H-36(A) | 36V, 0~4.20A | ±1.0% | 200mV | 93.5% |
| HLG-150H-42(A) | 42V, 0~3.60A | ±1.0% | 200mV | 94.0% |
| HLG-150H-48(A) | 48V, 0~3.20A | ±1.0% | 200mV | 94.0% |
| HLG-150H-54(A) | 54V, 0~2.80A | ±1.0% | 200mV | 94.0% |

○ = A, B, AB, D or Blank

## HLG-185H Series

| Model No.      | Output       | Tol.  | R&N   | Effi. |
|----------------|--------------|-------|-------|-------|
| HLG-185H-12(A) | 12V, 0~13.0A | ±2.5% | 150mV | 91.5% |
| HLG-185H-15(A) | 15V, 0~11.5A | ±2.0% | 150mV | 92.0% |
| HLG-185H-20(A) | 20V, 0~9.30A | ±1.0% | 150mV | 93.0% |
| HLG-185H-24(A) | 24V, 0~7.80A | ±1.0% | 150mV | 93.5% |

| Model No.      | Output       | Tol.  | R&N   | Effi. |
|----------------|--------------|-------|-------|-------|
| HLG-185H-30(A) | 30V, 0~6.20A | ±1.0% | 200mV | 93.5% |
| HLG-185H-36(A) | 36V, 0~5.20A | ±1.0% | 200mV | 93.5% |
| HLG-185H-42(A) | 42V, 0~4.40A | ±1.0% | 200mV | 94.0% |
| HLG-185H-48(A) | 48V, 0~3.90A | ±1.0% | 200mV | 94.0% |
| HLG-185H-54(A) | 54V, 0~3.45A | ±1.0% | 200mV | 94.0% |

○ = A, B, AB, D or Blank

## HLG-240H Series

| Model No.      | Output       | Tol.  | R&N   | Effi. |
|----------------|--------------|-------|-------|-------|
| HLG-240H-12(A) | 12V, 0~16.0A | ±2.5% | 150mV | 90.0% |
| HLG-240H-15(A) | 15V, 0~15.0A | ±2.0% | 150mV | 90.0% |
| HLG-240H-20(A) | 20V, 0~12.0A | ±1.0% | 150mV | 91.5% |
| HLG-240H-24(A) | 24V, 0~10.0A | ±1.0% | 150mV | 92.5% |
| HLG-240H-30(A) | 30V, 0~8.00A | ±1.0% | 200mV | 92.5% |
| HLG-240H-36(A) | 36V, 0~6.70A | ±1.0% | 250mV | 92.5% |
| HLG-240H-42(A) | 42V, 0~5.72A | ±1.0% | 250mV | 92.5% |
| HLG-240H-48(A) | 48V, 0~5.00A | ±1.0% | 250mV | 93.0% |
| HLG-240H-54(A) | 54V, 0~4.45A | ±1.0% | 350mV | 93.5% |

○ = A, B, AB, C, D or Blank

# HLG series 320~480W

## Features

- Constant voltage+constant current modes
- Universal AC input (90 to 305VAC) / Full range
- Meet 4kV surge immunity level (IEC61000-4-5)
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires
- Suitable for outdoor LED lighting applications
- Protections:
  - Short circuit / Over current / Over voltage / Over temp.
- 7 years warranty

- Multiple models for choice:

**Blank-Type:** IP67 rated. Cable for I/O connection(For harsh environment)

**A-Type:** IP65 rated. Io and Vo adjustable through built-in potentiometer

**B-Type:** IP67 rated. 3 in 1 dimming function (1~10Vdc (for HLG-320H), 0~10V (for HLG-480H) , 10V PWM signal and resistance)

**AB-Type:** IP65 rated. Io adjustable and Vo (for HLG-480H only) through built-in potentiometer & 3 in 1 dimming function.

**C-Type:** Terminal block for I/O connection (HLG-320H only)

**D-Type(option):** IP67 rated. Timer dimming function, contact MEAN WELL for details (HLG-320H only)

**D2-Type(option):** IP67 rated. Smart timer dimming function\* (HLG-480H only)



|                           |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AC input voltage range    | 90~305VAC; 127~431VDC                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                |
| AC inrush current (max.)  | Cold start, 70A at 230VAC                                                                                                                                                                                                                                                                         | Cold start, 35A at 230VAC                                                                                                                                                                                                                                                                      |
| DC adjustment range       | -15%~+13.3% rated output voltage (A-Type & C-Type)                                                                                                                                                                                                                                                | -15%~+5% rated output voltage (A-Type only)                                                                                                                                                                                                                                                    |
| Current adjustment range  | 50%~100% via potentiometer (A-Type & HLG-320H C-Type only)                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                |
| Over current protection   | 95%~108% constant current limiting, auto- recovery                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                |
| Over voltage protection   | 110%~140% rated output voltage                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                |
| Setup, rise, hold up time | 500ms, 80ms, 15ms at full load and 230VAC                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                |
| Withstand voltage         | I/P-O/P: 3.75kVAC, I/P-FG: 2kVAC, O/P-FG: 1.5kVAC                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                |
| Working temperature       | -40~+90°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                |
| Safety standards          | UL8750(type"HL"), CSA C22.2 No. 250.0-08; BS EN/AS/NZS 61347-1, BS EN/AS/NZS 61347-2-13, independent; GB19510.1, GB19510.14; IP65 or IP67 (except for HLG-320H C-type); J61347-1, J61347-2-13 (except for HLG-320H C-type), EAC TP TC 004; KC61347-1, KC61347-2-13(except for AB,C-type) approved | UL8750(type"HL"), CSA C22.2 No. 250.13-12; ENEC BS EN61347-1, BS EN61347-2-13 independent, BS EN62384; GB19510.14, GB19510.1; IP65 or IP67, EAC TP TC 004, AS/NZS IEC 61347.2.13:2013, AS/NZS 61347.1:2016; KC61347-1, J61347-1, J61347-2-13, KC61347-2-13(except for AB,Dx, D2-type) approved |
| EMC standards             | BS EN55015, BS EN55032 for HLG-320H only, BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11,BS EN61547, GB17743, GB17625.1, EAC TP TC 020,KC KN15,KN61547(except for AB,Dx,D2-type)                                                                                             |                                                                                                                                                                                                                                                                                                |
| Connection                | Please refer to page 66                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                |
| Dimension (LxWxH)(mm)     | 252x 90x 43.8                                                                                                                                                                                                                                                                                     | 262x 125x 43.8                                                                                                                                                                                                                                                                                 |



### HLG-320H Series

| Model No.      | Output        | Tol.  | R&N   | Effi. |
|----------------|---------------|-------|-------|-------|
| HLG-320H-12(A) | 12V, 0~22.0A  | ±3.0% | 150mV | 91.0% |
| HLG-320H-15(A) | 15V, 0~19.0A  | ±2.0% | 150mV | 92.5% |
| HLG-320H-20(A) | 20V, 0~15.0A  | ±1.5% | 150mV | 93.5% |
| HLG-320H-24(A) | 24V, 0~13.34A | ±1.0% | 150mV | 94.0% |
| HLG-320H-30(A) | 30V, 0~10.7A  | ±1.0% | 200mV | 94.0% |
| HLG-320H-36(A) | 36V, 0~8.90A  | ±1.0% | 250mV | 94.5% |
| HLG-320H-42(A) | 42V, 0~7.65A  | ±1.0% | 250mV | 95.0% |
| HLG-320H-48(A) | 48V, 0~6.70A  | ±1.0% | 250mV | 95.0% |
| HLG-320H-54(A) | 54V, 0~5.95A  | ±1.0% | 350mV | 95.0% |



### HLG-480H Series

| Model No.      | Output       | Tol.  | R&N   | Effi. |
|----------------|--------------|-------|-------|-------|
| HLG-480H-24(A) | 24V, 0~20A   | ±1.0% | 200mV | 94.0% |
| HLG-480H-30(A) | 30V, 0~16A   | ±1.0% | 200mV | 94.5% |
| HLG-480H-36(A) | 36V, 0~13.3A | ±1.0% | 250mV | 95.0% |
| HLG-480H-42(A) | 42V, 0~11.4A | ±1.0% | 250mV | 95.0% |
| HLG-480H-48(A) | 48V, 0~10A   | ±1.0% | 250mV | 94.5% |
| HLG-480H-54(A) | 54V, 0~8.9A  | ±1.0% | 350mV | 95.0% |

○ = A, B, AB, C, D or Blank

○ = A, B, AB, D2 or Blank

\*MEAN WELL Smart timer dimming primarily provides the adaptive proportion dimming profile for the output constant current level.

# HLG series 600W

## Features

- Constant voltage+constant current modes
- Universal AC input (90 to 305VAC) / Full range
- High efficiency up to 96%
- Meet 4kV surge immunity level (IEC61000-4-5)
- No load power consumption <0.5W at remote off (HLG-600H)
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires
- LED indicator for power on (A-Type only)
- Suitable for outdoor LED lighting applications
- Protections:  
Short circuit / Over current / Over voltage / Over temperature

- Multiple models for choice:

**Blank-Type:** IP67 rated. Io and Vo fixed(For harsh environment)

**A-Type:** IP65 rated. Io and Vo adjustable through built-in potentiometer

**B-Type:** IP67 rated. 3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)

**AB-Type:** IP65 rated. Io and Vo adjustable through built-in potentiometer & 3 in 1 dimming function.

7 years warranty



|                           |                                                                                                                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AC input voltage range    | 90~305VAC; 127~431VDC                                                                                                                                                                                                                                               |
| AC inrush current (max.)  | Cold start, 70A at 230VAC                                                                                                                                                                                                                                           |
| DC adjustment range       | -15%~+5% rated output voltage (A-Type only)                                                                                                                                                                                                                         |
| Current adjustment range  | 50%~100% via potentiometer (A-Type & HLG-320H C-Type only)                                                                                                                                                                                                          |
| Over current protection   | 95%~108% constant current limiting, auto- recovery                                                                                                                                                                                                                  |
| Over voltage protection   | 110%~140% rated output voltage                                                                                                                                                                                                                                      |
| Setup, rise, hold up time | 500ms, 80ms, 15ms at full load and 230VAC                                                                                                                                                                                                                           |
| Withstand voltage         | I/P-O/P: 3.75kVAC, I/P-FG: 2kVAC, O/P-FG: 1.5kVAC                                                                                                                                                                                                                   |
| Working temperature       | -40~+90°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                                                                                                                                                   |
| Safety standards          | UL60950-1, UL8750(type"HL"), CSA C22.2 No. 250.13-12, ENEC BS EN61347-1, BS EN61347-2-13 independent, BS EN62384,IP65 or IP67, J61347-1, J61347-2-13, CCC GB4943.1, EAC TP TC 004, AS/NZS 60950.1(by CB),KC61347-1, KC61347-2-13(for 24A,36A,48A,54A only) approved |
| EMC standards             | BS EN55015, BS EN61000-3-2 Class C (@ load≥50%) ; BS EN61000-3-3, EAC TP TC 020;KC KN15, KN61547(for 24A,36A,48A,54A only);BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, BS EN55024, light industry level (surge immunity Line-Earth 4KV, Line-Line 2KV)                 |
| Connection                | Please refer to page 66                                                                                                                                                                                                                                             |
| Dimension (LxWxH)(mm)     | 280x 144x 48.5                                                                                                                                                                                                                                                      |

## HLG-600H Series

| Model No.      | Output     | Tol.  | R&N   | Effi. |
|----------------|------------|-------|-------|-------|
| HLG-600H-12(A) | 12V, 0~40A | ±3.0% | 150mV | 92.0% |
| HLG-600H-15(A) | 15V, 0~36A | ±2.0% | 150mV | 93.5% |
| HLG-600H-20(A) | 20V, 0~28A | ±1.5% | 150mV | 94.5% |
| HLG-600H-24(A) | 24V, 0~25A | ±1.0% | 150mV | 95.0% |
| HLG-600H-30(A) | 30V, 0~20A | ±1.0% | 200mV | 95.0% |

| Model No.      | Output       | Tol.  | R&N   | Effi. |
|----------------|--------------|-------|-------|-------|
| HLG-600H-36(A) | 36V, 0~16.7A | ±1.0% | 250mV | 95.5% |
| HLG-600H-42(A) | 42V, 0~14.3A | ±1.0% | 250mV | 96.0% |
| HLG-600H-48(A) | 48V, 0~12.5A | ±1.0% | 250mV | 96.0% |
| HLG-600H-54(A) | 54V, 0~11.2A | ±1.0% | 350mV | 96.0% |

○ = A, B, AB



# HLG-C series 60~120W

## Features

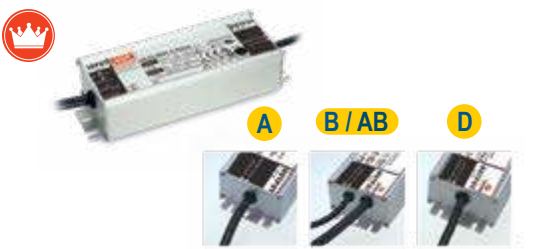
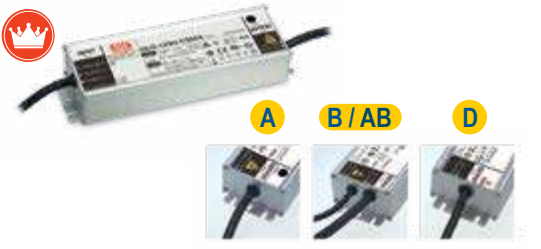
- **Constant current mode**
- Universal AC input (90 to 305VAC)/ Full range
- High efficiency up to 94%
- Suitable for dry, damp, and wet location
- Suitable for outdoor LED lighting applications
- Protections: Short circuit / Over voltage / Over temperature
- **7 years warranty**

• Multiple models for choice:

**A-Type:** IP65 rated. Io adjustable through built-in potentiometer  
**B-Type:** IP67 rated. 3 in 1 dimming function (1~10Vdc, 10V PWM signal and resistance)

**AB-Type:** IP65 rated. Io adjustable through built-in potentiometer & 3 in 1 dimming function.

**D-Type (option):** IP67 rated. Timer dimming function, contact MEAN WELL for details

|                                    | HLG-60H-C                                                                                                                                                            | HLG-80H-C         | HLG-120H-C                                        |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------------------------------------|
| <b>INPUT</b>                       |                                                                                     |                   |                                                   |
| <b>OUTPUT (Non-Dimming Models)</b> |                                                                                     |                   |                                                   |
| <b>OUTPUT (Dimming Models)</b>     |                                                                                     |                   |                                                   |
|                                    |   |                   |                                                   |
| AC input voltage range             | 90~305VAC; 127VDC~431VDC                                                                                                                                             |                   |                                                   |
| AC inrush current (max.)           | Cold start, 60A at 230VAC                                                                                                                                            |                   | Cold start, 50A at 230VAC                         |
| Current adjustment range           | 60%~100% via potentiometer (A-Type only)                                                                                                                             |                   | 50%~100% via potentiometer (A-Type only)          |
| Short circuit protection           | Hiccup mode, auto-recovery                                                                                                                                           |                   | Constant current limiting, auto-recovery          |
| Over voltage protection            | 110%~140%, shut down o/p voltage, re-power on to recover                                                                                                             |                   |                                                   |
| Over temp. protection              | Shut down o/p voltage, re-power on to recover                                                                                                                        |                   | Shut down o/p voltage, auto-recovery              |
| Setup time                         | 500ms at full load and 230VAC                                                                                                                                        |                   |                                                   |
| Withstand voltage                  | I/P-O/P:3.75kVAC, I/P-FG:2kVAC, O/P-FG:1.5kVAC                                                                                                                       |                   |                                                   |
| Working temperature                | -40~+80°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                                                    |                   | -40~+90°C (refer to "OUTPUT LOAD vs TEMPERATURE") |
| Safety standards                   | UL8750, GB19510.14, GB1950.1, EAC TP TC 004, BS EN/AS/NZS61347-1,-2-13, PSE J61347-1(for HLG-120H-C A-Type only), J61347-2-13(for HLG-120H-C A-Type only) approved   |                   |                                                   |
| EMC standards                      | BS EN55015, BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, GB17743, GB17625.1, EAC TP TC 020                                       |                   |                                                   |
| Connection                         | Please refer to page 66                                                                                                                                              |                   |                                                   |
| Dimension (LxWxH)(mm)              | 171x 61.5x 36.8                                                                                                                                                      | 195.6x 61.5x 38.8 | 220x 68x 38.8                                     |

### HLG-60H-C Series (70W)

| Model No.       | Output          | Io Tol. | Io Ripple | Effi. |
|-----------------|-----------------|---------|-----------|-------|
| HLG-60H-C350(A) | 100~200V, 350mA | ±5%     | 5% max.   | 91%   |
| HLG-60H-C700(A) | 50~100V, 700mA  | ±5%     | 5% max.   | 90.5% |

○ = A, B, AB or D

### HLG-80H-C Series (90W)

| Model No.       | Output          | Io Tol. | Io Ripple | Effi. |
|-----------------|-----------------|---------|-----------|-------|
| HLG-80H-C350(A) | 167~257V, 350mA | ±5%     | 8% max.   | 91.5% |
| HLG-80H-C700(A) | 84~129V, 700mA  | ±5%     | 8% max.   | 91.5% |

○ = A, B, AB or D

### HLG-120H-C Series (150W)

| Model No.         | Output          | Io Tol. | Io Ripple | Effi. |
|-------------------|-----------------|---------|-----------|-------|
| HLG-120H-C350(A)  | 215~430V, 350mA | ±5%     | 8% max.   | 94%   |
| HLG-120H-C500(A)  | 150~300V, 500mA | ±5%     | 8% max.   | 94%   |
| HLG-120H-C700(A)  | 107~215V, 700mA | ±5%     | 8% max.   | 94%   |
| HLG-120H-C1050(A) | 74~148V, 1050mA | ±5%     | 8% max.   | 94%   |
| HLG-120H-C1400(A) | 54~108V, 1400mA | ±5%     | 8% max.   | 93.5% |

○ = A, B, AB or D

# HLG-C series 185~240W

## Features

- Constant current mode
- Universal AC input (90 to 305VAC)/ Full range
- High efficiency up to 94%
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires (HLG-240H-C)
- Suitable for dry, damp, and wet location
- Suitable for outdoor LED lighting applications
- Protections: Short circuit / Over voltage / Over temperature
- 7 years warranty

- Multiple models for choice:

**A-Type:** IP65 rated. Io adjustable through built-in potentiometer  
**B-Type:** IP67 rated. 3 in 1 dimming function (1~10Vdc, 10V PWM signal and resistance)

**AB-Type:** IP65 rated. Io adjustable through built-in potentiometer & 3 in 1 dimming function.

**D-Type (option):** IP67 rated. Timer dimming function, contact MEAN WELL for details(HLG-185H-C only)

**D2-Type (option):** IP67 rated. Smart timer dimming function\*, contact MEAN WELL for details (HLG-240H-C)

|                                                                                                                                                                                                                                         | HLG-185H-C | HLG-240H-C |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|
| <div> <div>INPUT</div> <div>ACL<br/>ACN<br/>FG</div> </div> <div> <div>OUTPUT<br/>(Non-Dimming Models)</div> <div>Vo-<br/>Vo+</div> </div> <div> <div>OUTPUT<br/>(Dimming Models)</div> <div>DIM-<br/>DIM+<br/>Vo+<br/>Vo-</div> </div> |            |            |

|                          |                                                                                                                                                 |                               |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| AC input voltage range   | 90~305VAC; 127VDC~431VDC                                                                                                                        |                               |
| AC inrush current (max.) | Cold start, 55A at 230VAC                                                                                                                       | Cold start, 75A at 230VAC     |
| Current adjustment range | 50%~100% via potentiometer (A-Type only)                                                                                                        |                               |
| Short circuit protection | Constant current limiting, auto-recovery                                                                                                        |                               |
| Over voltage protection  | 105%~120%, Shut down o/p voltage, re-power on to recover                                                                                        |                               |
| Setup time               | 500ms at full load and 230VAC                                                                                                                   | 500ms at full load and 230VAC |
| Withstand voltage        | I/P-O/P:3.75kVAC, I/P-FG:2kVAC, O/P-FG:1.5kVAC                                                                                                  |                               |
| Working temperature      | -40~+90°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                               |                               |
| Safety standards         | UL8750, BS EN/AS/NZS61347-1,-2-13, BS EN62384, GB19510.1, GB19510.14, EAC TP TC 004; PSE J61347-1, J61347-2-13(HLG-185H-C A-Type only) approved |                               |
| EMC standards            | BS EN55015, BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, GB17743, GB17625.1, EAC TP TC 020                  |                               |
| Connection               | Please refer to page 66                                                                                                                         |                               |
| Dimension (LxWxH)(mm)    | 228x 68x 38.8                                                                                                                                   | 244.2x 68x 38.8               |



### HLG-185H-C Series (200W)

| Model No.         | Output          | Io Tol. | Io Ripple | Effi. |
|-------------------|-----------------|---------|-----------|-------|
| HLG-185H-C500(A)  | 200~400V, 500mA | ±5%     | 5% max.   | 94%   |
| HLG-185H-C700(A)  | 143~286V, 700mA | ±5%     | 5% max.   | 94%   |
| HLG-185H-C1050(A) | 95~190V, 1050mA | ±5%     | 5% max.   | 94%   |
| HLG-185H-C1400(A) | 71~143V, 1400mA | ±5%     | 5% max.   | 94%   |

○ = A, B, AB or D



### HLG-240H-C Series (250W)

| Model No.         | Output           | Io Tol. | Io Ripple | Effi. |
|-------------------|------------------|---------|-----------|-------|
| HLG-240H-C700(A)  | 178~357V, 700mA  | ±5%     | 5% max.   | 93.5% |
| HLG-240H-C1050(A) | 119~238V, 1050mA | ±5%     | 5% max.   | 93.5% |
| HLG-240H-C1400(A) | 89~179V, 1400mA  | ±5%     | 5% max.   | 94%   |
| HLG-240H-C1750(A) | 71~143V, 1750mA  | ±5%     | 5% max.   | 94%   |
| HLG-240H-C2100(A) | 59~119V, 2100mA  | ±5%     | 5% max.   | 93.5% |

○ = A, B, AB or D2

\*MEAN WELL Smart timer dimming primarily provides the adaptive proportion dimming profile for the output constant current level.

# HLG-C series 320~480W

## Features

- **Constant current mode**
- Universal AC input (90 to 305VAC)/ Full range
- High efficiency up to 95%
- **Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires**
- Suitable for dry, damp, and wet location
- Suitable for outdoor LED lighting applications
- Protections: Short circuit / Over voltage / Over temperature
- **Environment-adaptive driving capability (HLG-480H-C)**
- **7 years warranty**

- Multiple models for choice:

**A-Type:** IP65 rated. Io adjustable through built-in potentiometer

**B-Type:** IP67 rated. 3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)

**AB-Type:** IP65 rated. Io adjustable through built-in potentiometer & 3 in 1 dimming function.

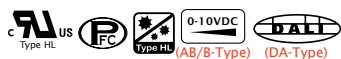
**D2-Type (option):** IP67 rated. **Smart timer dimming function\***, contact MEAN WELL for details

**DA-Type (option):** IP67 rated. **DALI control technology** (HLG-320H-C only)

|                                       |                            |
|---------------------------------------|----------------------------|
| <b>INPUT</b>                          | ACL<br>ACN<br>FG           |
| <b>OUTPUT</b><br>(Non-Dimming Models) | Vo-<br>Vo+                 |
| <b>OUTPUT</b><br>(Dimming Models)     | DIM-<br>DIM+<br>Vo+<br>Vo- |



|                          |                                                                                                                                  |                                                   |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| AC input voltage range   | 90~305VAC; 127VDC~431VDC                                                                                                         |                                                   |
| AC inrush current (max.) | Cold start, 70A at 230VAC                                                                                                        | Cold start, 35A at 230VAC                         |
| Current adjustment range | 50%~100% via potentiometer (A-Type only)                                                                                         |                                                   |
| Short circuit protection | Constant current limiting, auto-recovery                                                                                         |                                                   |
| Over voltage protection  | 105%~120%, Shut down o/p voltage, re-power on to recover                                                                         |                                                   |
| Setup time               | 500ms at full load and 230VAC                                                                                                    |                                                   |
| Withstand voltage        | I/P-O/P:3.75kVAC, I/P-FG:2kVAC, O/P-FG:1.5kVAC                                                                                   |                                                   |
| Working temperature      | -40~+85°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                | -40~+90°C (refer to "OUTPUT LOAD vs TEMPERATURE") |
| Safety standards         | UL8750, AS/NZS60950.1 (HLG-480-C), ENEC BS EN61347-1, BS EN61347-2-13, BS EN62384, GB19510.14, GB19510.1, EAC TP TC 004 approved |                                                   |
| EMC standards            | BS EN55015, BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, GB17743, GB17625.1, EAC TP TC 020   |                                                   |
| Connection               | Please refer to page 66                                                                                                          |                                                   |
| Dimension (LxWxH)(mm)    | 252x 90x 43.8                                                                                                                    | 262x 125x 43.8                                    |



### HLG-320H-C Series (320W)

| Model No.         | Output            | Io Tol. | Io Ripple | Effi. |
|-------------------|-------------------|---------|-----------|-------|
| HLG-320H-C700(A)  | 214~428V, 700mA   | ±5%     | 5% max.   | 94.0% |
| HLG-320H-C1050(A) | 152~305V, 1050mA  | ±5%     | 5% max.   | 94.0% |
| HLG-320H-C1400(A) | 114~229V, 1400mA  | ±5%     | 5% max.   | 94.0% |
| HLG-320H-C1750(A) | 91~183V, 1750mA   | ±5%     | 5% max.   | 94.0% |
| HLG-320H-C2100(A) | 76 ~ 152V, 2100mA | ±5%     | 5% max.   | 94.0% |
| HLG-320H-C2800(A) | 57~114V, 2800mA   | ±5%     | 5% max.   | 94.0% |
| HLG-320H-C3500(A) | 46~91V, 3500mA    | ±5%     | 5% max.   | 94.0% |

○ = A, B, AB, D2 or DA



### HLG-480H-C Series (480W)

| Model No.         | Output           | Io Tol. | Io Ripple | Effi. |
|-------------------|------------------|---------|-----------|-------|
| HLG-480H-C1400(A) | 171~341V, 1400mA | ±5%     | 5% max.   | 95.0% |
| HLG-480H-C1750(A) | 137~274V, 1750mA | ±5%     | 5% max.   | 95.0% |
| HLG-480H-C2100(A) | 114~229V, 2100mA | ±5%     | 5% max.   | 95.0% |
| HLG-480H-C2800(A) | 85~171V, 2800mA  | ±5%     | 5% max.   | 95.0% |
| HLG-480H-C3500(A) | 68~137V, 3500mA  | ±5%     | 5% max.   | 95.0% |

○ = A, B, AB or D2

\*MEAN WELL Smart timer dimming primarily provides the adaptive proportion dimming profile for the output constant current level.

# HVG series 65~100W

## Features

- Constant voltage+constant current modes
- 180~528VAC wide input range
- Class 2 power unit / Pass LPS
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires (HVG-100)
- Suitable for dry, damp, and wet location
- Suitable for outdoor LED lighting applications
- Protections: Short circuit / Over current / Over voltage / Over temperature
- 5 years warranty

- Multiple models for choice:

**A-Type:** IP65 rated. Io and Vo adjustable through built-in potentiometer

**B-Type:** IP67 rated. 3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)

**AB-Type:** IP65 rated. Io and Vo(for HVG-100 only) adjustable through built-in potentiometer & 3 in 1 dimming function.

**D-Type (option):** IP67 rated. Timer dimming function, contact MEAN WELL for details

|                                       |                            |
|---------------------------------------|----------------------------|
| <b>INPUT</b>                          | ACL<br>ACN<br>FG           |
| <b>OUTPUT</b><br>(Non-Dimming Models) | Vo-<br>Vo+                 |
| <b>OUTPUT</b><br>(Dimming Models)     | DIM+<br>DIM-<br>Vo-<br>Vo+ |



|                           |        |           |                                                                                                                                  |  |                                                   |
|---------------------------|--------|-----------|----------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------|
| AC input voltage range    |        |           | 180~528VAC (single phase); 254~747VDC                                                                                            |  |                                                   |
| AC inrush current (max.)  |        |           | Cold start, 25A at 480VAC                                                                                                        |  | Cold start, 25A at 480VAC                         |
| DC adjustment range       |        |           | ±10% rated output voltage (A-Type only)                                                                                          |  |                                                   |
| Current adjustment range  |        |           | 60%~100% via potentiometer (A-Type only)                                                                                         |  | 55%~100% via potentiometer (A-Type only)          |
| Over current protection   |        |           | 95%~108% constant current limiting, auto-recovery                                                                                |  |                                                   |
| Over voltage protection   |        |           | 110%~140% rated output voltage                                                                                                   |  |                                                   |
| Setup, rise, hold up time |        |           | 400ms, 80ms, 16ms at full load and 347VAC/480VAC                                                                                 |  | 500ms, 80ms, 30ms at full load and 347VAC/480VAC  |
| Withstand voltage         |        |           | I/P-O/P: 3.75kVAC, I/P-FG: 2kVAC, O/P-FG: 1.5kVAC                                                                                |  |                                                   |
| Working temperature       |        |           | -40~+80°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                |  | -40~+90°C (refer to "OUTPUT LOAD vs TEMPERATURE") |
| Safety standards          |        |           | UL8750, CSA C22.2 No. 250.0-13, EAC TP TC 004 IP65 or IP67 approved                                                              |  |                                                   |
| EMC standards             |        |           | BS EN55015, BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547,EAC TP TC 020, FCC part 15 subpart B |  |                                                   |
| Connection                | Input  |           | UL rated, STW 18AWGx3C (30cm)                                                                                                    |  |                                                   |
|                           | Output | A&D-Type  | SVT 18AWGx2C (30cm)                                                                                                              |  |                                                   |
|                           |        | B/AB-Type | SVT 18AWGx2C (30cm)+UL2517 18AWGx2C (30cm)                                                                                       |  |                                                   |
| Dimension (LxWxH)(mm)     |        |           | 189x 61.5x 36.8                                                                                                                  |  | 236x 68x 38.8                                     |

## HVG-65 Series



| Model No.  | Output       | Tol.  | R&N   | Effi. |
|------------|--------------|-------|-------|-------|
| HVG-65-12Ⓐ | 12V, 0~5A    | ±2.0% | 120mV | 86.5% |
| HVG-65-15Ⓐ | 15V, 0~4.3A  | ±2.0% | 150mV | 87.5% |
| HVG-65-20Ⓐ | 20V, 0~3.25A | ±1.0% | 150mV | 88.5% |
| HVG-65-24Ⓐ | 24V, 0~2.71A | ±1.0% | 150mV | 89.0% |
| HVG-65-30Ⓐ | 30V, 0~2.17A | ±1.0% | 200mV | 89.0% |
| HVG-65-36Ⓐ | 36V, 0~1.81A | ±1.0% | 200mV | 89.5% |
| HVG-65-42Ⓐ | 42V, 0~1.55A | ±1.0% | 300mV | 89.5% |
| HVG-65-48Ⓐ | 48V, 0~1.36A | ±1.0% | 300mV | 90.0% |
| HVG-65-54Ⓐ | 54V, 0~1.21A | ±1.0% | 300mV | 90.0% |

○ = A, B, AB or D

## HVG-100 Series



| Model No.   | Output       | Tol.  | R&N   | Effi. |
|-------------|--------------|-------|-------|-------|
| HVG-100-15Ⓐ | 15V, 0~5A    | ±2.0% | 150mV | 89.0% |
| HVG-100-20Ⓐ | 20V, 0~4.8A  | ±1.0% | 150mV | 90.0% |
| HVG-100-24Ⓐ | 24V, 0~4A    | ±1.0% | 150mV | 91.0% |
| HVG-100-30Ⓐ | 30V, 0~3.2A  | ±1.0% | 200mV | 91.0% |
| HVG-100-36Ⓐ | 36V, 0~2.65A | ±1.0% | 200mV | 90.5% |
| HVG-100-42Ⓐ | 42V, 0~2.28A | ±1.0% | 200mV | 90.5% |
| HVG-100-48Ⓐ | 48V, 0~2A    | ±1.0% | 200mV | 91.0% |
| HVG-100-54Ⓐ | 54V, 0~1.77A | ±1.0% | 200mV | 91.0% |

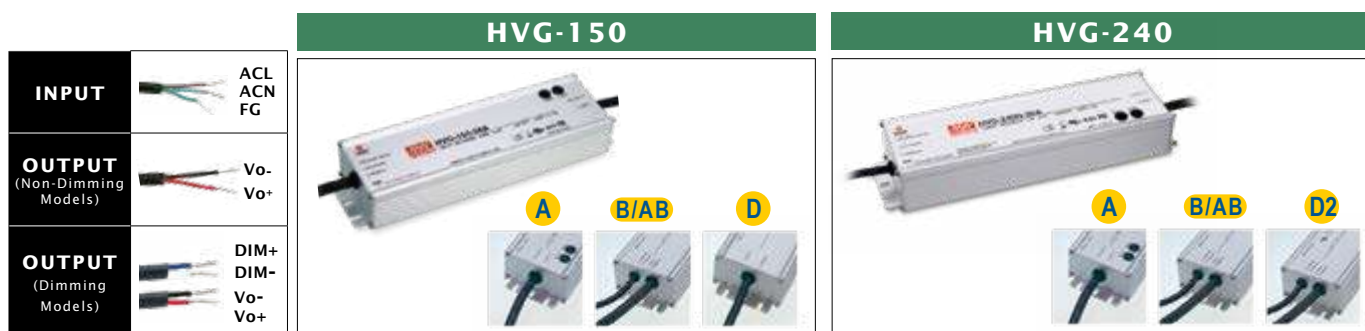
○ = A, B, AB or D

# HVG series 150~240W

## Features

- Constant voltage+constant current modes
- 180~528VAC wide input range
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires
- Suitable for dry, damp, and wet location
- Suitable for outdoor LED lighting applications
- Protections: Short circuit / Over current / Over voltage / Over temperature
- 5 years warranty

- Multiple models for choice:  
**A-Type:** IP65 rated. Io and Vo adjustable through built-in potentiometer  
**B-Type:** IP67 rated. 3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)  
**AB-Type:** IP65 rated. Io and Vo adjustable through built-in potentiometer & 3 in 1 dimming function.  
**D-Type (option):** IP67 rated. Timer dimming function, contact MEAN WELL for details (HVG-150 only)  
**D2-Type (option):** IP67 rated. **Smart timer dimming function\*** (HVG-240 only)



|                             |        |           |                                                                                                                                   |  |                                                                               |
|-----------------------------|--------|-----------|-----------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------|
| AC input voltage range      |        |           | 180~528VAC (single phase); 254~747VDC                                                                                             |  |                                                                               |
| AC inrush current (max.)    |        |           | Cold start, 35A at 480VAC                                                                                                         |  | Cold start, 50A at 480VAC                                                     |
| DC adjustment range         |        |           | ±10% rated output voltage (A-Type only)                                                                                           |  | ±7% rated output voltage (A-Type only)                                        |
| Current adjustment range    |        |           | 55%~100% via potentiometer (A-Type only)                                                                                          |  | 50%~100% via potentiometer (A-Type only)                                      |
| Over current protection     |        |           | 95%~108% constant current limiting, auto-recovery                                                                                 |  |                                                                               |
| Over voltage protection     |        |           | 110%~140% rated output voltage                                                                                                    |  |                                                                               |
| Over temperature protection |        |           | Shut down and latch off o/p voltage, re-power on to recover                                                                       |  |                                                                               |
| Setup, rise, hold up time   |        |           | 500ms, 80ms, 18ms at full load and 347VAC/480VAC                                                                                  |  | 500ms, 150ms, 12ms at full load and 347VAC/480VAC                             |
| Withstand voltage           |        |           | I/P-O/P: 3.75kVAC, I/P-FG: 2kVAC, O/P-FG: 1.5kVAC                                                                                 |  |                                                                               |
| Working temperature         |        |           | -40~+85°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                 |  | -40~+90°C (refer to "OUTPUT LOAD vs TEMPERATURE")                             |
| Safety standards            |        |           | UL8750, CSA C22.2 No. 250.0-08, EAC TP TC 004                                                                                     |  |                                                                               |
| EMC standards               |        |           | BS EN55015, BS EN61000-3-2 class C, EAC TP TC 020, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, FCC part 15 subpart B |  | FCC Part 15 subpart B, EAC TP TC 020, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547 |
| Connection                  | Input  |           | UL rated, STW 18AWGx3C (30cm)                                                                                                     |  |                                                                               |
|                             | Output | A&D-Type  | SJTW 14AWGx2C (30cm)                                                                                                              |  |                                                                               |
|                             |        | B/AB-Type | SJTW 14AWGx2C (30cm)+<br>UL2517 18AWGx2C (30cm)                                                                                   |  | SJTW 14AWGx2C (30cm)+<br>UL2517 22AWGx2C (30cm)                               |
| Dimension (LxWxH)(mm)       |        |           | 245x 68x 38.8                                                                                                                     |  | 254.2x 68x 38.8                                                               |

## HVG-150 Series



| Model No.     | Output       | Tol.  | R&N   | Effi. |
|---------------|--------------|-------|-------|-------|
| HVG-150-12(A) | 12V, 0~10A   | ±2.5% | 150mV | 87.0% |
| HVG-150-15(A) | 15V, 0~10A   | ±2.0% | 150mV | 89.0% |
| HVG-150-20(A) | 20V, 0~7.5A  | ±1.0% | 150mV | 90.5% |
| HVG-150-24(A) | 24V, 0~6.25A | ±1.0% | 150mV | 91.0% |
| HVG-150-30(A) | 30V, 0~5A    | ±1.0% | 200mV | 91.0% |
| HVG-150-36(A) | 36V, 0~4.17A | ±1.0% | 200mV | 91.0% |
| HVG-150-42(A) | 42V, 0~3.58A | ±1.0% | 200mV | 91.0% |
| HVG-150-48(A) | 48V, 0~3.13A | ±1.0% | 200mV | 91.5% |
| HVG-150-54(A) | 54V, 0~2.78A | ±1.0% | 200mV | 91.5% |

## HVG-240 Series



| Model No.     | Output      | Tol. | R&N   | Effi. |
|---------------|-------------|------|-------|-------|
| HVG-240-24(A) | 24V, 0~10A  | ±1%  | 150mV | 92.5% |
| HVG-240-30(A) | 30V, 0~8A   | ±1%  | 200mV | 92.5% |
| HVG-240-36(A) | 36V, 0~6.7A | ±1%  | 250mV | 93%   |
| HVG-240-42(A) | 42V, 0~5.7A | ±1%  | 250mV | 93%   |
| HVG-240-48(A) | 48V, 0~5A   | ±1%  | 250mV | 92.5% |
| HVG-240-54(A) | 54V, 0~4.5A | ±1%  | 350mV | 93%   |

○ = A, B, AB or D

○ = A, B, AB or D2

\*MEAN WELL Smart timer dimming primarily provides the adaptive proportion dimming profile for the output constant current level.

# HVG series 320~480W

## Features

- Constant voltage+constant current modes
- 180~528VAC wide input range
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires
- Suitable for dry, damp, and wet location
- Suitable for outdoor LED lighting applications
- Protections: Short circuit / Over current / Over voltage / Over temperature
- 5 years warranty

• Multiple models for choice:

**A-Type:** IP65 rated. Io and Vo adjustable through built-in potentiometer

**B-Type:** IP67 rated. 3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)

**AB-Type:** IP65 rated. Io and Vo adjustable through built-in potentiometer & 3 in 1 dimming function.

**D2-Type (option):** IP67 rated. **Smart timer dimming function\***, contact MEAN WELL for details



|                             |        |                               |                                                                               |  |                                                   |
|-----------------------------|--------|-------------------------------|-------------------------------------------------------------------------------|--|---------------------------------------------------|
| AC input voltage range      |        |                               | 180~528VAC ; 254~747VDC                                                       |  |                                                   |
| AC inrush current (max.)    |        |                               | Cold start 50A at 480VAC                                                      |  | Cold start 40A at 480VAC                          |
| DC adjustment range         |        |                               | -10%~+8% rated output voltage (A-Type only)                                   |  | -15%~+5% rated output voltage                     |
| Current adjustment range    |        |                               | 50%~100% via potentiometer (A-Type only)                                      |  |                                                   |
| Over current protection     |        |                               | 95%~108% constant current limiting, auto-recovery                             |  |                                                   |
| Over voltage protection     |        |                               | 110%~140% shut down o/p voltage, re-power on to recover                       |  | 108%~125%                                         |
| Over temperature protection |        |                               | Shut down and latch off o/p voltage, re-power on to recover                   |  |                                                   |
| Setup, rise, hold up time   |        |                               | 500ms, 150ms, 15ms at full load and 347VAC/480VAC                             |  | 500ms, 100ms, 16ms at full load and 347VAC/480VAC |
| Withstand voltage           |        |                               | I/P-O/P: 3.75KVAC, I/P-FG:2KVAC, O/P-FG:1.5KVAC                               |  |                                                   |
| Working temperature         |        |                               | -40~+85°C (refer to "OUTPUT LOAD vs TEMPERATURE")                             |  |                                                   |
| Safety standards            |        |                               | UL8750, CSA C22.2 No. 250.13-12, EAC TP TC 004                                |  |                                                   |
| EMC standards               |        |                               | FCC Part 15 Subpart B, EAC TP TC 020, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547 |  | FCC Part 15 Subpart B, EAC TP TC 020              |
| Connection                  | Input  | UL rated, STW 18AWGx3C (30cm) |                                                                               |  |                                                   |
|                             | Output | A-Type                        | SJTW 14AWGx2C (30cm)                                                          |  |                                                   |
|                             |        | B/AB/D2-Type                  | SJTW 14AWGx2C (30cm) + UL2517 22AWGx2C (30cm)                                 |  |                                                   |
| Dimension (LxWxH)(mm)       |        |                               | 262x 90x 43.8                                                                 |  | 262x 125x 43.8                                    |

## HVG-320 Series



| Model No.     | Output       | Tol. | R&N   | Effi. |
|---------------|--------------|------|-------|-------|
| HVG-320-24(A) | 24V, 0~13.4A | ±1%  | 150mV | 92.5% |
| HVG-320-30(A) | 30V, 0~10.7A | ±1%  | 200mV | 93.0% |
| HVG-320-36(A) | 36V, 0~8.9A  | ±1%  | 250mV | 93.5% |
| HVG-320-42(A) | 42V, 0~7.6A  | ±1%  | 250mV | 93.5% |
| HVG-320-48(A) | 48V, 0~6.7A  | ±1%  | 250mV | 94.0% |
| HVG-320-54(A) | 54V, 0~6A    | ±1%  | 350mV | 94.0% |

## HVG-480 Series



| Model No.     | Output       | Tol. | R&N   | Effi. |
|---------------|--------------|------|-------|-------|
| HVG-480-24(A) | 24V, 0~20A   | ±1%  | 200mV | 94.0% |
| HVG-480-30(A) | 30V, 0~16A   | ±1%  | 200mV | 94.0% |
| HVG-480-36(A) | 36V, 0~13.3A | ±1%  | 250mV | 94.5% |
| HVG-480-42(A) | 42V, 0~11.4A | ±1%  | 250mV | 95.0% |
| HVG-480-48(A) | 48V, 0~10A   | ±1%  | 250mV | 95.0% |
| HVG-480-54(A) | 54V, 0~8.9A  | ±1%  | 350mV | 95.0% |

○ = A, B, AB or D2

○ = A, B, AB or D2

\*MEAN WELL Smart timer dimming primarily provides the adaptive proportion dimming profile for the output constant current level.

# HVGC series 65~150W

## Features

- Constant current mode
- 180~528VAC wide input range
- High efficiency up to 91%
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires (HVGC-150)
- Suitable for dry, damp, and wet location
- Suitable for outdoor LED lighting applications
- Protections: Short circuit / Over voltage / Over temperature
- 5 years warranty

- Multiple models for choice:

**A-Type:** IP65 rated. Io adjustable through built-in potentiometer

**B-Type:** IP67 rated. 3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)

**AB-Type:** IP65 rated. Io adjustable through built-in potentiometer & 3 in 1 dimming function.

**D-Type (option):** IP67 rated. Timer dimming function, contact MEAN WELL for details

|                                |                                                                                                                 |                               | HVGC-65                                                                                                                                                                                                                              | HVGC-100               | HVGC-150                                       |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------------------------------|
| INPUT                          | <br>ACL<br>ACN<br>FG           |                               | <br>                                                            |                        |                                                |
| OUTPUT<br>(Non-Dimming Models) | <br>Vo-<br>Vo+                 |                               |                                                                                                                                                                                                                                      |                        |                                                |
| OUTPUT<br>(Dimming Models)     | <br>DIM+<br>DIM-<br>Vo-<br>Vo+ |                               |                                                                                                                                                                                                                                      |                        |                                                |
| AC input voltage range         |                                                                                                                 |                               | 180~528VAC (single phase); 254~747VDC                                                                                                                                                                                                |                        |                                                |
| AC inrush current (max.)       |                                                                                                                 |                               | Cold start, 25A at 480VAC                                                                                                                                                                                                            |                        | Cold start, 35A at 480VAC                      |
| Current adjustment range       |                                                                                                                 |                               | 60%~100% via potentiometer (A-Type only)                                                                                                                                                                                             |                        |                                                |
| Over voltage protection        |                                                                                                                 |                               | 105%~115% rated output voltage                                                                                                                                                                                                       |                        |                                                |
| Setup time                     |                                                                                                                 |                               | 400ms at 347VAC/480VAC                                                                                                                                                                                                               | 500ms at 347VAC/480VAC | 400ms at 347VAC/480VAC                         |
| Withstand voltage              |                                                                                                                 |                               | I/P-O/P: 3.75kVAC, I/P-FG: 2kVAC, O/P-FG: 1.5kVAC                                                                                                                                                                                    |                        |                                                |
| Working temperature            |                                                                                                                 |                               | -40~+80°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                                                                                                                    |                        |                                                |
| Safety standards               |                                                                                                                 |                               | UL8750 (for HVGC-65/100), UL8750(type"HL"fro HVGC-150)CSA C22.2 No. 250.0-08, TUV BS EN61347-1, BS EN61347-2-13, BS EN62384, independent (for HVGC-65),EAC TP TC 004, IP65 or IP67 approved;design refer to UL60950-1 (for HVGC-100) |                        |                                                |
| EMC standards                  |                                                                                                                 |                               | BS EN55015, BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547,FCC part 15 subpart B, EAC TP TC 020                                                                                                     |                        |                                                |
| Connection                     | Input                                                                                                           | UL rated, STW 18AWGx3C (30cm) |                                                                                                                                                                                                                                      |                        |                                                |
|                                | Output                                                                                                          | A&D-Type                      | SJTW 18AWGx2C (30cm)                                                                                                                                                                                                                 |                        | STW 18AWGx2C (30cm)                            |
|                                |                                                                                                                 | B/AB Type                     | SJTW 18AWGx2C (30cm)+UL2517 18AWGx2C (30cm)                                                                                                                                                                                          |                        | STW 18AWGx2C (30cm)+<br>UL2517 18AWGx2C (30cm) |
| Dimension (LxWxH)(mm)          |                                                                                                                 |                               | 189x 61.5x 36.8                                                                                                                                                                                                                      | 236x 68x 38.8          | 245x 68x 38.8                                  |

## HVGC-65 Series

| Model No.       | Output         | Io Tol. | Io Ripple | Effi. |
|-----------------|----------------|---------|-----------|-------|
| HVGC-65-350(A)  | 18~186V, 350mA | ±5%     | 5% max.   | 90.0% |
| HVGC-65-500(A)  | 13~130V, 500mA | ±5%     | 5% max.   | 90.5% |
| HVGC-65-700(A)  | 9~93V, 700mA   | ±5%     | 5% max.   | 90.5% |
| HVGC-65-1050(A) | 6~62V, 1050mA  | ±5%     | 5% max.   | 90.0% |

○ = A, B, AB or D

## HVGC-100 Series

| Model No.       | Output         | Io Tol. | Io Ripple | Effi. |
|-----------------|----------------|---------|-----------|-------|
| HVGC-100-350(A) | 29~285V, 350mA | ±5%     | 5% max.   | 91%   |
| HVGC-100-700(A) | 15~142V, 700mA | ±5%     | 5% max.   | 91%   |

○ = A, B, AB or D

## HVGC-150 Series

| Model No.        | Output          | Io Tol. | Io Ripple | Effi. |
|------------------|-----------------|---------|-----------|-------|
| HVGC-150-350(A)  | 42~428V, 350mA  | ±5%     | 5% max.   | 91%   |
| HVGC-150-500(A)  | 30~300V, 500mA  | ±5%     | 5% max.   | 91%   |
| HVGC-150-700(A)  | 21~215V, 700mA  | ±5%     | 5% max.   | 91%   |
| HVGC-150-1050(A) | 15~143V, 1050mA | ±5%     | 5% max.   | 90%   |
| HVGC-150-1400(A) | 12~107V, 1400mA | ±5%     | 5% max.   | 90%   |

○ = A, B, AB or D

# HVGC series 240~320W

## Features

- Constant current mode
- 180~528VAC wide input range
- High efficiency up to 93.5%
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires
- Suitable for dry, damp, and wet location
- Suitable for outdoor LED lighting applications
- Protections: Short circuit / Over voltage / Over temperature
- 5 years warranty

- Multiple models for choice:

**A-Type:** IP65 rated. Io adjustable through built-in potentiometer

**B-Type:** IP67 rated. 3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)

**AB-Type:** IP65 rated. Io adjustable through built-in potentiometer & 3 in 1 dimming function.

**D2-Type (option):** IP67 rated. **Smart timer dimming function\***, contact MEAN WELL for details



|                          |        |              |                                                                                                                                      |                                                  |
|--------------------------|--------|--------------|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| AC input voltage range   |        |              | 180~528VAC ; 254~747VDC                                                                                                              |                                                  |
| AC inrush current (max.) |        |              | Cold start, 50A at 480VAC                                                                                                            |                                                  |
| Current adjustment range |        |              | 50%~100% via potentiometer (A-Type only)                                                                                             |                                                  |
| Over voltage protection  |        |              | 105%~110% shut down o/p voltage, re-power on to recover                                                                              |                                                  |
| Setup time               |        |              | 500ms at 347VAC/480VAC                                                                                                               |                                                  |
| Withstand voltage        |        |              | I/P-O/P:3.75KVAC, I/P-FG:2KVAC, O/P-FG:1.5KVAC                                                                                       |                                                  |
| Working temperature      |        |              | -40~+90°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                    |                                                  |
| Safety standards         |        |              | UL8750 (type"HL"), EAC TP TC 004 approved, IEC/BS EN61347-1,IEC/BS EN61347-2-13                                                      |                                                  |
| EMC standards            |        |              | FCC Part 15 subpart B, BS EN55015, BS EN61000-3-2(@load≥50%), BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, EAC TP TC 020 |                                                  |
| Connection               | Input  |              | UL rated, STW 18AWGx3C (30cm)                                                                                                        |                                                  |
|                          | Output | A-Type       | STW 18AWGx2C (30cm)                                                                                                                  | SJTW 14AWGx2C (30cm)                             |
|                          |        | B/AB/D2-Type | STW 18AWGx2C (30cm) +<br>UL2517 22AWGx2C (30cm)                                                                                      | SJTW 14AWGx2C (30cm) +<br>UL2517 22AWGx2C (30cm) |
| Dimension (LxWxH)(mm)    |        |              | 254.2x 68x 38.8                                                                                                                      | 262x 90x 43.8                                    |



### HVGC-240 Series

| Model No.        | Output               | Io Tol. | Io Ripple | Effi. |
|------------------|----------------------|---------|-----------|-------|
| HVGC-240-700(A)  | 171.4~342.8V, 700mA  | ±5%     | 5% max.   | 93.5% |
| HVGC-240-1050(A) | 114.3~228.6V, 1050mA | ±5%     | 5% max.   | 93.0% |
| HVGC-240-1400(A) | 85.7~171.4V, 1400mA  | ±5%     | 5% max.   | 93.0% |
| HVGC-240-1750(A) | 68.5~137.1V, 1750mA  | ±5%     | 5% max.   | 93.0% |
| HVGC-240-2100(A) | 57.2~114.3V, 2100mA  | ±5%     | 5% max.   | 92.5% |
| HVGC-240-2800(A) | 42.9~85.7V, 2800mA   | ±5%     | 5% max.   | 92.5% |
| HVGC-240-3500(A) | 34.3~68.6V, 3500mA   | ±5%     | 5% max.   | 92.5% |

○ = A, B, AB or D2



### HVGC-320 Series

| Model No.        | Output               | Io Tol. | Io Ripple | Effi. |
|------------------|----------------------|---------|-----------|-------|
| HVGC-320-700(A)  | 214~428V, 700mA      | ±5%     | 5% max.   | 93.5% |
| HVGC-320-1050(A) | 152.4~304.8V, 1050mA | ±5%     | 5% max.   | 93.5% |
| HVGC-320-1400(A) | 114.3~228.6V, 1400mA | ±5%     | 5% max.   | 93.5% |
| HVGC-320-1750(A) | 91.4~182.8V, 1750mA  | ±5%     | 5% max.   | 93.5% |
| HVGC-320-2100(A) | 76.2~152.4V, 2100mA  | ±5%     | 5% max.   | 93.5% |
| HVGC-320-2800(A) | 57~114.3V, 2800mA    | ±5%     | 5% max.   | 93.5% |
| HVGC-320-3500(A) | 45.7~91.4V, 3500mA   | ±5%     | 5% max.   | 93%   |

○ = A, B, AB or D2

\*MEAN WELL Smart timer dimming primarily provides the adaptive proportion dimming profile for the output constant current level.

# HVGC series 480~650W

## Features

- Constant power mode
- 180~528VAC wide input range
- High efficiency up to 95.5%
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires
- Suitable for dry, damp, and wet location
- Suitable for outdoor LED lighting applications
- Protections: Short circuit / Over voltage / Over temperature
- With auxiliary DC output power (optional for HVGC-650)
- 5 years warranty

• Multiple models for choice:

**Blank-Type(option):** IP67 rated. Io and Vo fixed. (For harsh environment) (HVGC-480 only)

**AB-Type:** IP67 rated. Standard constant power output with 3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance) and built-in potentiometer

**D2-Type (option):** IP67 rated. Built-in Smart timer dimming and programmable function

**DA-Type (option):** IP67 rated. DALI control technology (HVGC-650 only)

**ADA-Type(option):** IP65 rated. DALI control technology with Io adjustable via build-in Potentiometer (HVGC-480 only)

|                                       |                                    |
|---------------------------------------|------------------------------------|
| <b>INPUT</b>                          | ACL<br>ACN<br>FG                   |
| <b>OUTPUT</b><br>(Non-Dimming Models) | Vo-<br>Vo+                         |
| <b>OUTPUT</b><br>(Dimming Models)     | DIM+/DA+<br>DIM-/DA-<br>Vo-<br>Vo+ |



|                             |                                                                               |                                                  |
|-----------------------------|-------------------------------------------------------------------------------|--------------------------------------------------|
| AC input voltage range      | 180~528VAC ; 254~747VDC                                                       |                                                  |
| AC inrush current (max.)    | Cold start, 40A at 480VAC                                                     |                                                  |
| Current adjustment range    | 50%~100% via potentiometer (A-Type only)                                      |                                                  |
| Over voltage protection     | 105%~110% shut down o/p voltage, re-power on to recover                       |                                                  |
| Setup time                  | 500ms at 347VAC/480VAC                                                        |                                                  |
| Withstand voltage           | I/P-O/P:3.75KVAC I/P-FG:2KVAC<br>O/P-FG:1.5KVAC                               | I/P-O/P:4.2KVAC I/P-FG:2.1KVAC<br>O/P-FG:1.5KVAC |
| Working temperature (Tcase) | -40~+90°C (refer to "OUTPUT LOAD vs TEMPERATURE")                             |                                                  |
| Safety standards            | UL8750, CSA C22.2 No. 250.13-12, IP65 or IP67, EAC TP TC 004 approved         |                                                  |
| EMC standards               | FCC Part 15 subpart B, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, EAC TP TC 020 |                                                  |
| Connection                  | Please refer to page 66                                                       |                                                  |
| Dimension (LxWxH)(mm)       | 262x 125x 43.8                                                                | 280x 144x 48.5                                   |

**HVGC-480 Series**

(for ADA-Type only)

(AB/B-Type)

| Model No.   | Output                    | Io Tol. | Io Ripple | Effi. |
|-------------|---------------------------|---------|-----------|-------|
| HVGC-480-L- | 137~343V,<br>1400~1750mA  | ±5%     | 5% max.   | 94.5% |
| HVGC-480-M- | 92~228.5V,<br>2100~2625mA | ±5%     | 5% max.   | 94.5% |
| HVGC-480-H- | 68~171.5V,<br>2800~3500mA | ±5%     | 5% max.   | 94.5% |

= AB, blank, D2 or ADA

**HVGC-650 Series**

(for DA-Type only)

(AB/B-Type)

| Model No.    | Output                   | Io Tol. | Io Ripple | Effi. |
|--------------|--------------------------|---------|-----------|-------|
| HVGC-650--L- | 93~232V,<br>2800~3500mA  | ±5%     | 5% max.   | 95%   |
| HVGC-650--M- | 62~155V,<br>4200~5250mA  | ±5%     | 5% max.   | 95%   |
| HVGC-650--H- | 47~116V,<br>5600~7000mA  | ±5%     | 5% max.   | 95%   |
| HVGC-650--U- | 24~58V,<br>11200~14000mA | ±5%     | 5% max.   | 95.5% |

= Blank, A ;

Blank: without auxiliary function, A: with auxiliary DC output power  
= AB, D2 or DA

\*MEAN WELL Smart timer dimming primarily provides the adaptive proportion dimming profile for the output constant current level.

# HVGC&FDL series

## Features(HVGC)

- Constant power mode output
- Wide input range 180~528VAC with active PFC
- Metal housing with Class I design
- Surge protection with 8KV/4KV
- Suitable for outdoor LED lighting applications
- Auxiliary DC output available
- 5 years warranty

- Protections: Short circuit / Over voltage / Over temperature
- Multiple models for choice:

**AB-Type:** IP67 rated. Standard constant power output with 3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance) and built-in potentiometer

**D2-Type (option):** IP67 rated. Built-in Smart timer dimming and programmable function

**DA-Type (option):** IP67 rated. DALI-2 control technology with I<sub>o</sub> adjustable via build-in Potentiometer

| HVGC-1000                                                                                           |                                                                                                    | FDL-65                                                                              |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>INPUT</b><br>   | <br><b>AB</b>     |  |
|                                                                                                     |                                                                                                    |                                                                                     |
| <b>OUTPUT</b><br> | <br><b>D2/DA</b> |                                                                                     |

|                             |                                                                                                                                                                                                               |                                                                                                                                                                 |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AC input voltage range      | 180~528VAC; 254~747VDC                                                                                                                                                                                        | 180~295VAC                                                                                                                                                      |
| AC inrush current (max.)    | Cold start 40A at 480VAC                                                                                                                                                                                      | Cold start 11A at 230VAC                                                                                                                                        |
| Current adjustment range    | 50%~100% via potentiometer (AB-Type only)                                                                                                                                                                     | /                                                                                                                                                               |
| Over voltage protection     | 105%~110% shut down o/p voltage, re-power on to recover                                                                                                                                                       | 46~56V for FDL-65-1550, 40~48V for FDL-65-1800, shut down o/p voltage, re-power on to recover                                                                   |
| Setup time                  | 500ms/230VAC, 347VAC, 480VAC                                                                                                                                                                                  | 50ms/230VAC                                                                                                                                                     |
| Withstand voltage           | I/P-O/P:4.2KVAC I/P-FG:2.1KVAC O/P-FG:1.5KVAC                                                                                                                                                                 | I/P-O/P:3.75KVAC, I/P-FG:2KVAC, O/P-FG:1.5KVAC                                                                                                                  |
| Working temperature (Tcase) | -40~+90°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                                                                                             |                                                                                                                                                                 |
| Safety standards            | UL8750 (type"HL"), CSA C22.2 No. 250.13-14, ENEC BS EN61347-1, BS EN61347-2-13 independent, BS EN62384, CCC GB19510.1, GB19510.14; EAC TP TC 004, IP67 approved EAC TP TC 004, IP67, BS EN62386(DA type only) | LVD BS EN61347-1, BS EN61347-2-13 Independent, GB19510.1, GB19510.14, EAC TP TC 004, IP65 approved                                                              |
| EMC standards               | FCC Part 15 class B, BS EN55015, BS EN61000-3-2 Class C (@ load ≥ 50%); BS EN61000-3-3, BS EN61000-4-2, 3, 4, 5, 6, 8, 11, EAC TP TC 020, BS EN61547, CCC GB/T17743 and GB17625                               | Compliance to BS EN55015, BS EN61000-3-2 Class C (load ≥ 60%); BS EN61000-3-3, GB17743, GB17625.1, EAC TP TC 020, BS EN61000-4-2, 3, 4, 5, 6, 8, 11; BS EN61547 |
| Connection                  | Input                                                                                                                                                                                                         | H05RN 1.0mm <sup>2</sup> *2C                                                                                                                                    |
|                             | Output                                                                                                                                                                                                        | H05RN 1.0mm <sup>2</sup> *2C                                                                                                                                    |
| Dimension (LxWxH)(mm)       | 310x 144x 48.5                                                                                                                                                                                                | 151x 53x 31.5                                                                                                                                                   |

## HVGC-1000 Series



| Model No.                                                                      | Output                | I <sub>o</sub> Tol. | I <sub>o</sub> Ripple | Effi. |
|--------------------------------------------------------------------------------|-----------------------|---------------------|-----------------------|-------|
| HVGC-1000A-L- <span style="border: 1px solid black; padding: 0 2px;">AB</span> | 150~380V, 1320~3280mA | ±5%                 | 3% max.               | 95.5% |
| HVGC-1000A-M- <span style="border: 1px solid black; padding: 0 2px;">AB</span> | 95~240V, 2100~5250mA  | ±5%                 | 3% max.               | 96%   |
| HVGC-1000A-H- <span style="border: 1px solid black; padding: 0 2px;">AB</span> | 70~180V, 2800~7000mA  | ±5%                 | 3% max.               | 96%   |

## FDL-65 Series



| Model No.   | Output   | I <sub>o</sub> | Tol. | Effi. |
|-------------|----------|----------------|------|-------|
| FDL-65-1550 | 25.2~42V | 770~1550mA     | ±5%  | 90%   |
| FDL-65-1800 | 21.6~36V | 900~1800mA     | ±5%  | 90%   |

   = AB, D2 or DA

\*MEAN WELL Smart timer dimming primarily provides the adaptive proportion dimming profile for the output constant current level.

# Globally Certified Cable Adoption for HLG/HVGC

## HLG-40H/60H/80H/100H/120H Series

|            |        |                                                                                                                                                                                             |
|------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connection | Input  | SJOW 17AWG & H05RN-F 1.0mm <sup>2</sup> x3C (30cm)                                                                                                                                          |
|            | Output | A/D/Blank-Type: SJOW 17AWG & H05RN-F 1.0 mm <sup>2</sup> x2C (30cm);<br>B/AB-Type: SJOW 17AWG & H05RN-F 1.0 mm <sup>2</sup> x2C (30cm) + SJOW 17AWG & H05RN-F 1.0mm <sup>2</sup> x2C (30cm) |

## HLG-150H/185H/240H Series

|            |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connection | Input  | SJOW 17AWG & H05RN-F 1.0mm <sup>2</sup> x3C (30cm); Terminal block for HLG-240H C-Type                                                                                                                                                                                                                                                                                                                                                                                                                         |
|            | Output | <ul style="list-style-type: none"> <li>A/D/Blank-Type: SJOW 14AWGx2C (30cm) for 150H-12V, 185H-12~15V, 240H-12V~20V; SJOW 17AWG &amp; H05RN-F1.0mm<sup>2</sup>x2C (30cm) for others</li> <li>B/AB-Type: SJOW 14AWGx2C (30cm) + SJOW 17AWG &amp; H05RN-F1.0mm<sup>2</sup>x2C (30cm) for 150H 12V, 185H-12~15V, 240H-12V~20V; SJOW 17AWG &amp; H05RN-F1.0mm<sup>2</sup>x2C (30cm) + SJOW 17AWG&amp; H05RN-F1.0mm<sup>2</sup>x2C (30cm) for others</li> <li>C-Type: Terminal block for HLG-240H C-Type</li> </ul> |

## HLG-320H Series

|            |        |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connection | Input  | <ul style="list-style-type: none"> <li>A/B/D/Blank-Type: SJOW 17AWG &amp; H05RN-F 1.0mm<sup>2</sup> x3C (30cm)</li> <li>C-Type: Terminal block</li> </ul>                                                                                                                                                                                                                                                                            |
|            | Output | <ul style="list-style-type: none"> <li>A/D/Blank-Type: SJOW 14AWGx2C (30cm) for 12V~30V ; SJOW 17AWG &amp; H05RN-F1.0mm<sup>2</sup>x2C (30cm) for others</li> <li>B/AB-Type: SJOW 14AWGx2C (30cm) + SJOW 17AWG &amp; H05RN-F1.0mm<sup>2</sup>x2C (30cm) for 12V~30V; SJOW 17AWG &amp; H05RN-F1.0mm<sup>2</sup>x2C (30cm) + SJOW 17AWG &amp; H05RN-F1.0mm<sup>2</sup>x2C (30cm) for others</li> <li>C-Type: Terminal block</li> </ul> |

## HLG-480H Series

|            |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connection | Input  | A/B/D2/Blank-Type: SJOW 17AWGx3C & H05RN-F 3G 1.0mm <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|            | Output | <ul style="list-style-type: none"> <li>A/Blank-Type: SJOW 17AWGx2C &amp; H05RN-F1.0mm<sup>2</sup> (30cm) + SJOW 17AWGx2C &amp; H05RN-F2x1.0mm<sup>2</sup> (30cm) for 24~42V; SJOW 17AWGx2C &amp; H05RN-F1.0mm<sup>2</sup> (30cm) for others</li> <li>B/AB/D2-Type: SJOW 17AWGx2C &amp; H05RN-F1.0mm<sup>2</sup> (30cm) + SJOW 17AWGx2C &amp; H05RN-F2x1.0mm<sup>2</sup> (30cm) + SJOW 17AWGx2C &amp; H05RN-F1.0mm<sup>2</sup> (33cm) for 24V~42V SJOW 17AWGx2C &amp; H05RN-F1.0mm<sup>2</sup> (30cm) + SJOW 17AWGx2C &amp; H05RN-F2x1.0mm<sup>2</sup> (33cm) for others</li> </ul> |

## HLG-600H Series

|            |        |                                                                                                                                                                                        |
|------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connection | Input  | SJTW 17AWGx3C (30cm)                                                                                                                                                                   |
|            | Output | A-Type: SJTW 14AWGx2C (30cm) + SJTW 14AWGx2C (30cm) + UL2517 22AWGx3C(30cm)<br>B/AB-Type: SJTW 14AWGx2C (30cm) + SJTW 14AWGx2C (30cm) + UL2517 22AWGx3C(30cm) + UL2517 18AWGx2C (30cm) |

## HLG-60H/80H/120H-C Series

|            |        | HLG-60H/80H-C                                                                                                               | HLG-120H-C                                                                                                                                                                                                                                                                                                                                                                                   |
|------------|--------|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connection | Input  | SJOW 17AWG & H05RN-F 1.0mm <sup>2</sup> x3C(30cm)                                                                           |                                                                                                                                                                                                                                                                                                                                                                                              |
|            | Output | A&D-Type: SJOW 17AWG & H05RN-F 1.0mm <sup>2</sup> x2C(30cm)<br>B/AB-Type: SJOW 17AWG & H05RN-F 1.0mm <sup>2</sup> x2C(30cm) | A&D-Type: SOOW 17AWG & H07RN-F 1.0mm <sup>2</sup> (30cm) for HLG-120H-C350; SJOW 17AWG & H05RN-F 1.0mm <sup>2</sup> (30cm) for others<br>B/AB-Type: SJOW 17AWG & H05RN-F 1.0mm <sup>2</sup> x2C(30cm) + SOOW 17AWG & H07RN-F 1.0mm <sup>2</sup> (30cm) for HLG-120H-C350; SJOW 17AWG & H07RN-F 1.0mm <sup>2</sup> x2C (30cm) + SJOW 17AWG & H05RN-F 1.0mm <sup>2</sup> x2C (30cm) for others |

## HLG-185H/240H-C Series

|            |        | HLG-185H-C                                                                                                                                                                         | HLG-240H-C                                                                                                                                                                      |
|------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connection | Input  | SJOW 17AWG & H05RN-F1.0mm <sup>2</sup> x3C (30cm)                                                                                                                                  |                                                                                                                                                                                 |
|            | Output | ★ A/D-Type: SJOW 17AWG & H05RN-F1.0mm <sup>2</sup> x2C (30cm)<br>★ B/AB-Type: SJOW 17AWG & H05RN-F1.0mm <sup>2</sup> x2C (30cm)+ SJOW 17AWG & H05RN-F1.0mm <sup>2</sup> x2C (30cm) | A-Type: SJOW 17AWG & H05RN-F1.0mm <sup>2</sup> x2C (30cm)<br>B/AB/D2-Type: SJOW 17AWG & H05RN-F1.0mm <sup>2</sup> x2C (30cm)+ SJOW 17AWG & H05RN-F1.0mm <sup>2</sup> x2C (30cm) |

★ For the output cable of HLG-185H-C500 & C700 and HLG-240H-C700, please refer to the specification.

## HLG-320H/480H-C Series

|            |        | HLG-320H-C                                                                                                                                                                          | HLG-480H-C                                                                                                                                                               |
|------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connection | Input  | SJOW 17AWG & H05RN-F1.0mm <sup>2</sup> x3C (30cm)                                                                                                                                   |                                                                                                                                                                          |
|            | Output | ★ A-Type: SJOW17AWG & H05RN-F1.0mm <sup>2</sup> x2C (30cm)<br>★ B/AB/DA/D2-Type: SJOW17AWG & H05RN-F1.0mm <sup>2</sup> x2C (30cm)+ SJOW17AWG & H05RN-F1.0mm <sup>2</sup> x2C (30cm) | A-Type: SOOW17AWG & H07RN-F 2x1.0mm <sup>2</sup> (30cm)<br>B/AB/D2-Type: SOOW17AWG & H07RN-F 2x1.0mm <sup>2</sup> (30cm)+ SOOW17AWG & H07RN-F2x1.0mm <sup>2</sup> (30cm) |

★ For the output cable of HLG-320H-C700 & C1050 and HLG-480H-C1400 & C1750, please refer to the specification.

## HVGC-480 Series

|            |        |                                                                                                                                                                                             |
|------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connection | Input  | AB-Type: SOOW 17AWGx3C & H07RN-F 3x1.0mm <sup>2</sup> (30cm)                                                                                                                                |
|            | Output | AB/D2/DA-Type: SOOW 17AWGx2C & H07RN-F 2x 1.0mm <sup>2</sup> (30cm)+SJOW 17AWGx2C & H07RN-F 2x1.0mm <sup>2</sup> (30cm)<br>Blank-Type: SOOW 17AWGx2C & H07RN-F 2x 1.0mm <sup>2</sup> (30cm) |

## HVGC-650/1000 Series

|            |        | HVGC-650                                            | HVGC-1000                                           |
|------------|--------|-----------------------------------------------------|-----------------------------------------------------|
| Connection | Input  | SOOW 17AWGx3C & H07RN-F 2x1.0mm <sup>2</sup> (30cm) | SOOW 17AWGx3C & H07RN-F 2x1.0mm <sup>2</sup> (30cm) |
|            | Output | SJOW 17AWGx4C & H05RN-F 2x1.0mm <sup>2</sup> (30cm) | SOOW 17AWGx2C & H07RN-F 2x1.0mm <sup>2</sup> (30cm) |
|            | DIM    | SJOW 17AWGx2C & H05RN-F 2x1.0mm <sup>2</sup> (30cm) | SJOW 17AWGx2C & H05RN-F 2x1.0mm <sup>2</sup> (35cm) |
|            | AUX    | SJOW 17AWGx2C & H05RN-F 2x1.0mm <sup>2</sup> (30cm) | SJOW 17AWGx2C & H05RN-F 2x1.0mm <sup>2</sup> (35cm) |

# Circular Metal Case

with PFC+ Cable

68 XBG Series (100~240W)

69 HBG Series (60~240W)

71 HBGC Series (300W)

Non PFC

72 ERP Series (200~350W)

72 ERPF Series (400W)



**Luxtronik**  
CERTIFIED PARTNER

The common application of bay lighting and flood light are in warehouses and stadiums. As conventional bay lights are operated with mercury bulbs or MHL multi-metal bulbs, concerns about power consumption and pre-heating before turn-on. To tackle such application in the market, MEAN WELL specifically develops circular shape patent design LED driver, HBG-60/100/160/200/240 and 300W series. In addition, 0-10V or DALI dimming functions are provided for smart lighting control. Other outdoor power supplies such as XLG/ELG(C)/HLG(C)/HVG(C) series can also be used in the bay light and flood light fixtures. MEAN WELL is not only the leader in (UFO) bay lighting design, but makes LED bay lighting utilization much more convenient.

The new highlight of this year is the new XBG-100/160/240 series (100/160/240W), which adopts the constant power mode design, offering more flexibility for pairing with various luminaires.

## Application

### XBG/HBG Series



### ERP Series



# XBG series 100~240W

## Features

- Full power output at 70~100% constant power mode operation
  - Wide input range 90 ~ 305VAC with active PFC function
  - Circular metal housing design with IP67
  - AC input cable with connector type for flexible Installation
  - Protections: Short circuit / Over voltage / Over temp.
  - Isolation design between output and dimming circuit
  - 5 years warranty
- Multiple models for choice
- A-Type:** IP67 rated. constant power adjustable via built-in potentiometer
- AB-Type:** IP67 rated. constant power adjustable via built-in potentiometer & 3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistor)

| INPUT<br>(AC with connector)   |                                                                                   |                   |  | XBG-100                                                                                                                                                                       | XBG-160                                                                            | XBG-240                                                                             |
|--------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| INPUT<br>(Fixed cable )        |  |                                                                                                    |  |                                                                                              |  |  |
| OUTPUT<br>(Non-Dimming Models) |  |                                                                                                    |  |                                                                                                                                                                               |                                                                                    |                                                                                     |
| OUTPUT<br>(Dimming Models)     |  |                                                                                                    |  |                                                                                                                                                                               |                                                                                    |                                                                                     |
| AC input voltage range         |                                                                                   |                                                                                                    |  | 90~305VAC                                                                                                                                                                     |                                                                                    |                                                                                     |
| AC inrush current (max.)       |                                                                                   |                                                                                                    |  | Cold start, 50A at 230VAC                                                                                                                                                     |                                                                                    | Cold start, 75A at 230VAC                                                           |
| Setup time                     |                                                                                   |                                                                                                    |  | 500ms/230VAC,<br>1200ms/115VAC                                                                                                                                                | 500ms/230VAC,<br>2000ms/115VAC                                                     | 500ms/230VAC,<br>1200ms/115VAC                                                      |
| Withstand voltage              |                                                                                   |                                                                                                    |  | I/P-O/P: 3.75kVAC, I/P-FG: 2kVAC, O/P-FG: 1.5kVAC                                                                                                                             |                                                                                    |                                                                                     |
| Working temperature            |                                                                                   |                                                                                                    |  | -40~+90°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                                                             |                                                                                    |                                                                                     |
| Safety standards               |                                                                                   |                                                                                                    |  | UL8750(type"HL"), CSA C22.2 No. 250.13-12; ENEC BS EN61347-1, BS EN61347-2-13 independent, BS EN62384;GB19510.1,GB19510.14; IP67 approved                                     |                                                                                    |                                                                                     |
| EMC standards                  |                                                                                   |                                                                                                    |  | UL8750(type"HL"), CSA C22.2 No. 250.13-12; ENEC BS EN61347-1, BS EN61347-2-13 independent, BS EN62384;IS15885(Part2/Sec13); GB19510.1,GB19510.14, IP67;EAC TP TC 004 approved |                                                                                    |                                                                                     |
| Connection                     | Input                                                                             | SJOW 17AWGx3C & H05RN-F 3x 1.0mm²(30cm)                                                            |  |                                                                                                                                                                               |                                                                                    |                                                                                     |
|                                | Output                                                                            | A & A-C Type: SJTW 18AWGx2C (20cm)<br>AB & AB-C Type: SJTW 18AWGx2C (20cm) +UL2517 22AWGx2C (30cm) |  |                                                                                                                                                                               |                                                                                    |                                                                                     |
| Dimension (DxH)(mm)            |                                                                                   |                                                                                                    |  | φ130x 56                                                                                                                                                                      | φ151.5x 60                                                                         | φ191x 63                                                                            |

### XBG-100 Series



| Model No.   | Output             | Io Tol. | Io Ripple  | Effi. |
|-------------|--------------------|---------|------------|-------|
| XBG-100-□-○ | 27~56V, 875~2780mA | ±5%     | 3.0% (max) | 92%   |

### XBG-160 Series



| Model No.   | Output              | Io Tol. | Io Ripple  | Effi. |
|-------------|---------------------|---------|------------|-------|
| XBG-160-□-○ | 34~56V, 1425~4100mA | ±5%     | 5.0% (max) | 93%   |

### XBG-240 Series



| Model No.   | Output              | Io Tol. | Io Ripple  | Effi. |
|-------------|---------------------|---------|------------|-------|
| XBG-240-□-○ | 30~60V, 2850~5700mA | ±5%     | 4.0% (max) | 93%   |

□ = A, AB  
○ = Blank, C; Blank: AC input with fixed cable, C: AC input with connector

### AC input with connector Pin No: Assignment

| Pin No. | Assignment | Drawing |
|---------|------------|---------|
| 1       | AC/L       |         |
| 2       | AC/N       |         |
| 3       | FG ±       |         |

### AC input cable (Additional cost)

| Item  | Order part NO.       | Remark     |
|-------|----------------------|------------|
| 100cm | F61-XBG-AC-CABLE-100 | In stock   |
| 200cm | F61-XBG-AC-CABLE-200 | By request |
| 300cm | F61-XBG-AC-CABLE-300 | By request |

\* 100cm without MOQ, others with MOQ.

# HBG series 60~160W

## Features

- Constant current mode (HBG-60/100)
- Constant voltage+constant current modes (HBG-160)
- Universal AC input 90 to 305VAC
- Circular metal housing design for HBG-100/160
- Fully isolated plastic case (HBG-60)
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires (HBG-100/160)
- Isolation class II/2, no F.G. (HBG-60)
- Suitable for dry, damp, and wet location
- Protections: Short circuit / Over current / Over voltage / Over temp. (Short circuit / Over temp. for HBG-60)

- Multiple models for HBG-100/160

**Blank-Type:** IP67 rated. Cable for I/O connection (For harsh environment)

**A-Type:** IP65 rated. Constant current level can be adjusted through internal potentiometer

**B-Type:** IP67 rated and built-in 3 in 1 dimming function (1~10VDC, PWM signal, or resistance)

**AB-Type:** IP65 rated. Constant current level can be adjusted through internal potentiometer, 3 in 1 dimming function

**DA-Type:** IP67 rated. DALI control technology

- 5 years warranty

|                                       |                                                                                   | HBG-60                                                                                                                             | HBG-100(DA)                                                                                            | HBG-160(DA)                                                                                                                     |
|---------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| <b>INPUT</b><br>(HBG-60)              |  |                                                   |                      |                                              |
| <b>INPUT</b><br>(HBG-100/160/240)     |  |                                                                                                                                    |                                                                                                        |                                                                                                                                 |
| <b>OUTPUT</b><br>(Non-Dimming Models) |  |                                                                                                                                    |                                                                                                        |                                                                                                                                 |
| <b>OUTPUT</b><br>(Dimming Models)     |  |                                                                                                                                    |                                                                                                        |                                                                                                                                 |
| AC input voltage range                |                                                                                   | 90~295VAC ; 127~417VDC                                                                                                             | 90~305VAC ; 127~431VDC                                                                                 |                                                                                                                                 |
| AC inrush current (max.)              |                                                                                   | Cold start, 45A at 230VAC                                                                                                          | Cold start, 60A at 230VAC                                                                              | Cold start, 65A at 230VAC                                                                                                       |
| Setup, rise, hold up time             |                                                                                   | 500ms<br>at 230VAC for setup time                                                                                                  | 500ms, 80ms, 12ms<br>at full load and 230VAC                                                           | 500ms, 200ms, 12ms<br>at full load and 230VAC                                                                                   |
| Withstand voltage                     |                                                                                   | I/P-O/P: 3.75kVAC                                                                                                                  | I/P-O/P: 3.75kVAC, I/P-FG: 2kVAC, O/P-FG: 1.5kVAC                                                      |                                                                                                                                 |
| Working temperature                   |                                                                                   | -40~+85°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                  |                                                                                                        |                                                                                                                                 |
| Safety standards                      |                                                                                   | UL8750, ENEC BS EN61347-1, BS EN61347-2-13, BS EN62384 ,<br>GB19510.14, GB19510.1, EAC TP TC 004,<br>BS EN62386(DA type only )     |                                                                                                        | UL8750, TUV BS EN61347-1,<br>BS EN61347-2-13,<br>GB19510.14, GB19510.1,<br>EAC TP TC 004 approved,<br>BS EN62386(DA type only ) |
| EMC standards                         |                                                                                   | BS EN55015, BS EN61000-3-2 Class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11 ; BS EN61547,<br>GB17743, GB17625.1, EAC TP TC 020 |                                                                                                        |                                                                                                                                 |
| Connection                            | Input                                                                             | SJTW 18AWGx2C (30cm)                                                                                                               | SJTW 18AWGx3C (30cm)                                                                                   |                                                                                                                                 |
|                                       | Output                                                                            | SVT 18AWGx2C (20cm)                                                                                                                | A & Blank Type:<br>SJTW 18AWGx2C (20cm)<br>B Type:<br>SJTW 18AWGx2C (20cm) +<br>UL2517 22AWGx2C (30cm) | A & Blank Type:<br>SJTW 18AWGx2C (20cm)<br>B Type:<br>SJTW 18AWGx2C (20cm) +<br>SVT 18AWGx2C (30cm)                             |
| Dimension (DxH)(mm)                   |                                                                                   | φ110x 60.5                                                                                                                         | φ130x 66.5                                                                                             | φ151.68x 66.5                                                                                                                   |

## HBG-60 Series (C.C. mode)

| Model No.   | Output         | Io Tol. | Effi. |
|-------------|----------------|---------|-------|
| HBG-60-1050 | 37~55V, 1050mA | ±5%     | 90%   |
| HBG-60-1400 | 28~43V, 1400mA | ±5%     | 89%   |
| HBG-60-2100 | 19~29V, 2100mA | ±5%     | 89%   |

## HBG-100 Series (C.C. mode)

| Model No.     | Output      | Io Tol. | Effi. |
|---------------|-------------|---------|-------|
| HBG-100-24(A) | 24V, 0~4A   | ±5%     | 90.5% |
| HBG-100-36(A) | 36V, 0~2.7A | ±5%     | 91.0% |

| Model No.     | Output      | Io Tol. | Effi. |
|---------------|-------------|---------|-------|
| HBG-100-48(A) | 48V, 0~2A   | ±5%     | 91.0% |
| HBG-100-60(A) | 60V, 0~1.6A | ±5%     | 91.5% |

○ = A, B, AB, DA or Blank



## HBG-160 Series

| Model No.     | Output      | Tol. | Effi. |
|---------------|-------------|------|-------|
| HBG-160-24(A) | 24V, 0~6.5A | ±2%  | 92.0% |
| HBG-160-36(A) | 36V, 0~4.4A | ±2%  | 92.0% |
| HBG-160-48(A) | 48V, 0~3.3A | ±2%  | 93.0% |
| HBG-160-60(A) | 60V, 0~2.6A | ±2%  | 93.5% |

○ = A, B, AB, DA or Blank

# HBC series 200~240W

## Features

- Constant voltage+constant current modes
- Universal AC input (90 to 305VAC)
- High efficiency up to 93.5%
- Circular metal housing design
- Suitable for dry, damp, and wet location
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Optional RCM models available
- 5 years warranty

- Multiple models for choice:

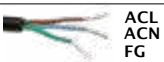
**Blank-Type:** IP67 rated. Cable for I/O connection (For harsh environment)

**A-Type:** IP65 rated. Constant current level can be adjusted through internal potentiometer

**B-Type:** IP67 rated and built-in 3 in 1 dimming function, PWM signal, or resistance, 0~10VDC (HBG-200), 1~10VDC (HBG-240)

**AB-Type:** IP65 rated. Constant current level can be adjusted through internal potentiometer, 3 in 1 dimming function

**DA-Type:** IP67 rated. DALI control technology

|                                                                                                                                                                                                                                                                                                              |        | HBG-200(DA)                                                                                                                                                           | HBG-240(DA)                                                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| <b>INPUT</b><br><br><b>INPUT</b><br><br><b>OUTPUT</b><br> |        |                                                                                      |              |
|                                                                                                                                                                                                                                                                                                              |        |                                                                                                                                                                       |                                                                                                |
|                                                                                                                                                                                                                                                                                                              |        |                                                                                                                                                                       |                                                                                                |
| AC input voltage range                                                                                                                                                                                                                                                                                       |        | 90~305VAC ; 127~431VDC                                                                                                                                                |                                                                                                |
| AC inrush current (max.)                                                                                                                                                                                                                                                                                     |        | Cold start, 85A at 230VAC                                                                                                                                             | Cold start, 75A at 230VAC                                                                      |
| Setup, rise, hold up time                                                                                                                                                                                                                                                                                    |        | 500ms, 200ms/230VAC; 2500ms, 200ms/115VAC                                                                                                                             |                                                                                                |
| Withstand voltage                                                                                                                                                                                                                                                                                            |        | I/P-O/P: 3.75kVAC, I/P-FG: 2kVAC, O/P-FG: 0.5kVAC                                                                                                                     |                                                                                                |
| Working temperature                                                                                                                                                                                                                                                                                          |        | -40~+85°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                                                     | -40~+75°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                              |
| Safety standards                                                                                                                                                                                                                                                                                             |        | UL8750, ENEC BS EN61347-1, BS EN61347-2-13, BS EN62384, GB19510.14, GB19510.1, BIS ISI5885(refer to spec for HBG-240 models), EAC TP TC 004, BS EN62386(DA type only) |                                                                                                |
| EMC standards                                                                                                                                                                                                                                                                                                |        | BS EN55015, BS EN61000-3-2 Class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, GB17743, GB17625.1, EAC TP TC 020                                        |                                                                                                |
| Connection                                                                                                                                                                                                                                                                                                   | Input  | SJTW 18AWGx3C (30cm)                                                                                                                                                  | SJTW 18AWGx3C (30cm)                                                                           |
|                                                                                                                                                                                                                                                                                                              | Output | A & Blank-Type: SJTW 18AWGx2C (20cm)<br>B & AB & DA-Type: SJTW 18AWGx2C (20cm)+ SVT 18AWGx2C (30cm)                                                                   | A & Blank-Type: SJTW 18AWGx3C (30cm)<br>B&DA-Type : SJTW 14AWGx2C (30cm) + SVT 18AWGx2C (30cm) |
| Dimension (DxH)(mm)                                                                                                                                                                                                                                                                                          |        | φ151.68x 66.5                                                                                                                                                         | φ191.5x 69                                                                                     |

**HBG-200 Series**









(OPTIONAL) (for DA-Type only)

0-10VDC

| Model No.     | Output      | Tol. | Effi. |
|---------------|-------------|------|-------|
| HBG-200-36(A) | 36V, 0~5.5A | ±2%  | 92%   |
| HBG-200-48(A) | 48V, 0~4.1A | ±2%  | 93%   |
| HBG-200-60(A) | 60V, 0~3.3A | ±2%  | 93.5% |

○ = A, B, AB, DA or Blank

**HBG-240 Series**









(OPTIONAL) (for DA-Type only)

0-10VDC

| Model No.     | Output      | Tol. | Effi. |
|---------------|-------------|------|-------|
| HBG-240-24(A) | 24V, 0~10A  | ±2%  | 92.5% |
| HBG-240-36(A) | 36V, 0~6.7A | ±2%  | 92.5% |
| HBG-240-48(A) | 48V, 0~5A   | ±2%  | 93.0% |
| HBG-240-60(A) | 60V, 0~4A   | ±2%  | 93.5% |

○ = A, B, AB, DA or Blank

# HBGC series 300W

## Features

- Constant power mode (full power at 60~100% max current)
- Universal AC input (90 to 305VAC)
- High efficiency up to 94.5%
- Circular metal housing design with IP67
- Isolation design between output and dimming circuit
- Protections:  
Short circuit / Over current / Over voltage / Over temperature
- 5 years warranty
- Multiple models for choice:
  - A-Type:** IP67 rated. Constant power level can be adjusted through internal potentiometer
  - AB-Type:** IP67 rated and built-in 3 in 1 dimming function (0~10VDC, PWM signal, or resistance)
  - ADA-Type:** IP67 rated. DALI-2 control technology with Io adjustable via build-in Potentiometer

| HBGC-300(ADA)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                           |                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| <div><div><div><div>INPUT</div><div></div><div>ACL<br/>ACN<br/>FG</div></div><div><div>INPUT</div><div></div><div>DIM-/DA-<br/>DIM+/DA+</div></div><div><div>OUTPUT</div><div></div><div>Vo-<br/>Vo+</div></div></div><div></div></div> |                                                                                                                                                           |                                                                                          |
| AC input voltage range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 90~305VAC ; 127~431VDC                                                                                                                                    |                                                                                          |
| AC inrush current (max.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Cold start, 45A at 230VAC                                                                                                                                 |                                                                                          |
| Withstand voltage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | I/P-O/P: 3.75kVAC, I/P-FG: 2kVAC, O/P-FG: 1.5kVAC                                                                                                         |                                                                                          |
| Working temperature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Tcase=-40~+80°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                                                                   |                                                                                          |
| Safety standards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | UL8750(type "HL"), CSA C22.2 No. 250.13-12, ENEC BS EN61347-1, BS EN61347-2-13 independent, BS EN62384, EAC TP TC 004, GB19510.1, GB19510.14              |                                                                                          |
| EMC standards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | BS EN55015, BS EN61000-3-2 Class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, GB17743, GB17625.1,EAC TP TC 020, BS EN62386(ADA type only ) |                                                                                          |
| Connection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Input                                                                                                                                                     | SJTW 18AWGx3C (30cm)                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Output                                                                                                                                                    | A-Type: SJTW 14AWGx2C (30cm)<br>AB/ADA-Type: SJTW 14AWGx2C (30cm)+UL2517 20AWGx2C (30cm) |
| Dimension (DxH)(mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                           | φ191.5x 69                                                                               |



| Model No.    | Output               | Tol. | Effi. |
|--------------|----------------------|------|-------|
| HBGC-300-L-□ | 116~232V, 650~2170mA | ±5%  | 94.5% |
| HBGC-300-M-□ | 58~116V, 1300~4330mA | ±5%  | 93.5% |
| HBGC-300-H-□ | 29~58V, 2600~8670mA  | ±5%  | 92.5% |

□= A, AB or ADA



# ERP series 200~400W

## Features

- Constant voltage mode output
- Built-in active PFC function (for ERPF-400 only)
- Withstand 300VAC surge input for 5 seconds
- Design against rain splash
- LED indicator for power on
- Protections: Short circuit / Over voltage / Over temp.
- 3 years warranty

## Applications

- LED strip lighting
- LED channel letters
- LED decoration lighting
- LED signage & display

|                        | ERP-200                                                                                        | ERP-350                                                                            | ERPF-400                                                                                                                                                         |
|------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        |               |  |                                                                               |
| AC input voltage range | 180~264VAC ; 254~370VDC                                                                        |                                                                                    | 90~264VAC ; 127~370VDC                                                                                                                                           |
| AC inrush current      | 90A/230VAC                                                                                     |                                                                                    | cold start45A/115VAC,90A/230VAC                                                                                                                                  |
| Setup, rise time       | 1500ms, 200ms/230VAC                                                                           |                                                                                    | 2000ms,100ms/230VAC;3000ms,100ms/115VAC at full load                                                                                                             |
| Withstand voltage      | I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC                                                      |                                                                                    |                                                                                                                                                                  |
| Working temperature    | -30~+60°C(Refer to output load derating curve)                                                 |                                                                                    |                                                                                                                                                                  |
| Safety standards       | IEC/BS EN 62368-1,GB4943.1-2011(except for ERP-200-12), EAC TP TC 004, IS13252(Part1) approved |                                                                                    | UL 60950-1,IEC/BS EN62368-1,CCC GB4943.1-2011, EAC TP TC 004, IS13252(Part1)(for ERPF-400-12/24 only) approved                                                   |
| EMC standards          | BS EN55022 (CISPR22) class A, BS EN61000-4-5; light industry level, criteria A, EAC TP TC 020  |                                                                                    | BS EN55032 (CISPR32) class A, GB9254 classA, GB17625.1; BS EN61000-3-2;BS EN61000-3-3, EAC TP TC 020;BS EN61000-4-2,3,4,5,6,8,11;light industry level,criteria A |
| Dimension (DxH)(mm)    | 200x 120x 40                                                                                   | 220.4x 130x 48                                                                     |                                                                                                                                                                  |

## ERP-200 Series



| Model No.  | Output       | Tol.  | R&N   | Effi. |
|------------|--------------|-------|-------|-------|
| ERP-200-12 | 12V, 0~16.8A | ±1.0% | 150mV | 87%   |
| ERP-200-24 | 24V, 0~8.33A | ±1.0% | 150mV | 89%   |

## ERP-350 Series



| Model No.  | Output       | Tol.  | R&N   | Effi. |
|------------|--------------|-------|-------|-------|
| ERP-350-12 | 12V, 0~26.7A | ±1.0% | 150mV | 87%   |
| ERP-350-24 | 24V, 0~14.6A | ±1.0% | 150mV | 89%   |
| ERP-350-36 | 36V, 0~9.7A  | ±1.0% | 240mV | 90%   |
| ERP-350-48 | 48V, 0~7.3A  | ±1.0% | 240mV | 90%   |

## ERPF-400 Series



| Model No.   | Output       | Tol.  | R&N   | Effi. |
|-------------|--------------|-------|-------|-------|
| ERPF-400-12 | 12V, 0~30A   | ±1.0% | 150mV | 89%   |
| ERPF-400-24 | 24V, 0~16.7A | ±1.0% | 150mV | 90%   |
| ERPF-400-48 | 48V, 0~8.3A  | ±1.0% | 240mV | 91%   |

# PCB Type

with PFC

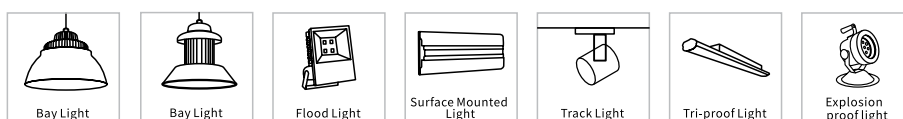
- 74 HBG-P Series (60~240W)
- 75 IDPV Series (25~65W)
- 76 IDPC Series (25~65W)
- 77 PLP Series (30~60W)
- 78 HLP Series (40~80W)



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Light Future  
CERTIFIED PARTNER

The PCB LED drivers provide customers for built-in design choice. All series with constant voltage output IDPV series and constant current output IDPC/PLP/HLP series, also circular shape HBG-P series, are designed with 0~10V and DALI dimming functions. (except for PLP series). The voltage input design is either 90-295V or 90-305V with the Class II/2 design for any luminaire design to avoid luminaire lifetime issue. Please make sure the ambient temperature inside the luminaire does not exceed the operating ambient temperature of LED driver specification.

## Application



# HBG-P series 60~240W

## Features

- Constant current mode (HBG-60P/100P)
- Constant voltage+constant current modes (HBG-160P/240P)
- Universal AC input (90 to 305VAC) / Full range (up to 295VAC for HBG-60P)
- High efficiency up to 93.5%
- Class II/2 power unit, no F.G. (HBG-60P)
- Suitable for dry, damp, and wet location
- Protections: Short circuit / Over temperature
- 5 years warranty
- Multiple models for HBG-100P/160P/240P
- A-Type:** Constant current level can be adjusted through internal potentiometer
- B-Type:** Built-in 3 in 1 dimming function (1~10VDC, PWM signal, or resistance)
- DA-Type:** DALI control technology

| <div>INPUT<br/>(HBG-60P)</div> <div>ACL<br/>ACN</div>                           |        | HBG-60-P                                                                                                                       | HBG-100P<br>HBG-100P(DA)                                                                       | HBG-160P<br>HBG-160P(DA)                                                                    | HBG-240P                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| <div>INPUT<br/>(HBG-100P/160P/240P)</div> <div>ACL<br/>ACN<br/>FG</div>         |        |                                               |               |           |          |
| <div>OUTPUT<br/>(Non-Dimming Models)</div> <div>Vo-<br/>Vo+</div>               |        |                                                                                                                                |                                                                                                |                                                                                             |                                                                                             |
| <div>OUTPUT<br/>(Dimming Models)</div> <div>DIM+<br/>DIM-<br/>Vo+<br/>Vo-</div> |        |                                                                                                                                |                                                                                                |                                                                                             |                                                                                             |
| AC input voltage range                                                                                                                                           |        | 90~295VAC ; 127~417VDC                                                                                                         | 90~305VAC ; 127~431VDC                                                                         |                                                                                             |                                                                                             |
| AC inrush current (max.)                                                                                                                                         |        | Cold start, 45A at 230VAC                                                                                                      | Cold start, 60A at 230VAC                                                                      | Cold start, 65A at 230VAC                                                                   | Cold start, 75A at 230VAC                                                                   |
| Over temp. protection                                                                                                                                            |        | Shut down o/p voltage, re-power on to recover                                                                                  |                                                                                                | Shut down o/p voltage, auto-recovery                                                        |                                                                                             |
| Setup, rise, hold up time                                                                                                                                        |        | 500ms at 230VAC for setup time                                                                                                 |                                                                                                | 500ms, 200ms, 12ms at full load and 230VAC                                                  | 500ms, 120ms, 15ms at full load and 230VAC                                                  |
| Withstand voltage                                                                                                                                                |        | I/P-O/P: 3.75kVAC                                                                                                              |                                                                                                |                                                                                             |                                                                                             |
| Working temperature                                                                                                                                              |        | -40~+70°C                                                                                                                      | -40~+45°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                              |                                                                                             |                                                                                             |
| Safety standards                                                                                                                                                 |        | UL8750, ENEC BS EN61347-1, BS EN61347-2-13, BS EN62384, GB19510.14, GB19510.1, EAC TP TC 004 approved                          |                                                                                                |                                                                                             |                                                                                             |
| EMC standards                                                                                                                                                    |        | BS EN55015, BS EN61000-3-2 Class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, GB17743, GB17625.1, EAC TP TC 020 |                                                                                                |                                                                                             |                                                                                             |
| Connection                                                                                                                                                       | Input  | UL1015 18AWGx2C (30cm)                                                                                                         | SJTW 18AWGx3C (30cm)                                                                           |                                                                                             |                                                                                             |
|                                                                                                                                                                  | Output | UL1015 18AWGx2C (30cm)                                                                                                         | A Type:<br>SJTW 18AWGx2C (20cm)<br>B Type:<br>SJTW 18AWGx2C (20cm) +<br>UL2517 22AWGx2C (30cm) | A Type:<br>SJTW 18AWGx2C (20cm)<br>B Type:<br>SJTW 18AWGx2C (20cm) +<br>SVT 18AWGx2C (30cm) | A Type:<br>SJTW 14AWGx2C (30cm)<br>B Type:<br>SJTW 14AWGx2C (30cm) +<br>SVT 18AWGx2C (30cm) |
| Dimension (DxH)(mm)                                                                                                                                              |        | φ99 x 26                                                                                                                       | φ104x 34                                                                                       | φ124.6x 34                                                                                  | φ144x 31                                                                                    |

## HBG-60-P Series (C.C. mode)

| Model No.    | Output         | Io Tol. | Effi. |
|--------------|----------------|---------|-------|
| HBG-60-1050P | 37~55V, 1050mA | ±5%     | 90%   |
| HBG-60-1400P | 28~43V, 1400mA | ±5%     | 89%   |
| HBG-60-2100P | 19~29V, 2100mA | ±5%     | 89%   |

## HBG-100P Series (C.C. mode)

| Model No.      | Output      | Tol. | Effi. |
|----------------|-------------|------|-------|
| HBG-100P-36(A) | 36V, 0~2.7A | ±5%  | 91.0% |
| HBG-100P-48(A) | 48V, 0~2A   | ±5%  | 91.0% |
| HBG-100P-60(A) | 60V, 0~1.6A | ±2%  | 91.5% |

○ = A, B, or DA

## HBG-160P Series

| Model No.      | Output      | Tol. | Effi. |
|----------------|-------------|------|-------|
| HBG-160P-36(A) | 36V, 0~4.4A | ±2%  | 92.0% |
| HBG-160P-48(A) | 48V, 0~3.3A | ±2%  | 93.0% |
| HBG-160P-60(A) | 60V, 0~2.6A | ±2%  | 93.5% |

○ = A, B, or DA

## HBG-240P Series

| Model No.      | Output      | Tol. | Effi. |
|----------------|-------------|------|-------|
| HBG-240P-36(A) | 36V, 0~6.7A | ±2%  | 92.5% |
| HBG-240P-48(A) | 48V, 0~5A   | ±2%  | 93.0% |
| HBG-240P-60(A) | 60V, 0~4.0A | ±2%  | 93.5% |

○ = A or B

# IDPV series 25~65W

## Features

- **Constant voltage PWM style output mode**
- IDPV-25/45: 90~295VAC input
- IDPV-65: 180~295VAC input only
- High efficiency up to 90%
- **No load power consumption <0.5W (Blank-Type)**
- Miniature PCB size
- Isolation class II, no F.G.
- Built-in 2 in 1 dimming function (0~10VDC or PWM signal)
- **Built-in 12V/50mA auxiliary output (A-Type)**
- Suitable for indoor LED strip lighting
- Protection: Short circuit
- 3 years warranty

|                            | IDPV-25(A)                                                                                                      | IDPV-45(A)                                                                        | IDPV-65(A)                                                                        |
|----------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <b>INPUT</b>               |                                |  |  |
| <b>OUTPUT (Blank-Type)</b> |                                |  |  |
| <b>OUTPUT (A-Type)</b>     |                                |  |  |
| AC input voltage range     | 90 ~ 295VAC ; 127 ~ 417VDC                                                                                      |                                                                                   | 180 ~ 295VAC ; 254~417VDC                                                         |
| AC inrush current (max.)   | Cold start, 30A at 230VAC                                                                                       |                                                                                   |                                                                                   |
| Setup time                 | 500ms / 230VAC                                                                                                  |                                                                                   |                                                                                   |
| PWM dimming signal         | 10V PWM signal, frequency range 300Hz~3kHz                                                                      |                                                                                   |                                                                                   |
| Total harmonic distortion  | THD<20%                                                                                                         |                                                                                   |                                                                                   |
| Short circuit protection   | Shut down o/p voltage, re-power on to recover                                                                   |                                                                                   |                                                                                   |
| Withstand voltage          | I/P-O/P: 3.75KVAC                                                                                               |                                                                                   |                                                                                   |
| Working temperature        | -20~+45°C                                                                                                       |                                                                                   | -20~+40°C                                                                         |
| Safety standards           | UL8750, ENEC BS EN61347-1, BS EN61347-2-13, BS EN62384, GB19510.14, GB19510.1 approved                          |                                                                                   |                                                                                   |
| EMC standards              | BS EN55015, BS EN61000-3-2 Class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, GB17743, GB17625.1 |                                                                                   |                                                                                   |
| Connection (Input/Output)  | Blank-Type: 4+4P push-in terminal block, A-Type: 4+6P push-in terminal block                                    |                                                                                   |                                                                                   |
| Dimension (LxWxH) mm       | 114.5x 72.5x 20                                                                                                 | 120 x 66.5 x 22                                                                   | 130 x 67.5 x 22                                                                   |

## IDPV-25/25A Series



| Model No.   | Output       | Tol. | Effi. |
|-------------|--------------|------|-------|
| IDPV-25□-12 | 12V, 0~1.8A  | ±10% | 80%   |
| IDPV-25□-24 | 24V, 0~1.05A | ±10% | 81%   |
| IDPV-25□-36 | 36V, 0~0.7A  | ±10% | 82%   |
| IDPV-25□-48 | 48V, 0~0.52A | ±10% | 83%   |
| IDPV-25□-60 | 60V, 0~0.42A | ±10% | 84%   |

□ = Blank/A; Blank: without auxiliary output, A: with auxiliary function

## IDPV-45/45A Series



| Model No.   | Output       | Tol. | Effi. |
|-------------|--------------|------|-------|
| IDPV-45□-12 | 12V, 0~3A    | ±10% | 84%   |
| IDPV-45□-24 | 24V, 0~1.88A | ±10% | 86%   |

| Model No.   | Output       | Tol. | Effi. |
|-------------|--------------|------|-------|
| IDPV-45□-36 | 36V, 0~1.25A | ±10% | 88%   |
| IDPV-45□-48 | 48V, 0~0.94A | ±10% | 88%   |
| IDPV-45□-60 | 60V, 0~0.75A | ±10% | 90%   |

□ = Blank/A; Blank: without auxiliary output, A: with auxiliary function

## IDPV-65/65A Series



| Model No.   | Output       | Tol. | Effi. |
|-------------|--------------|------|-------|
| IDPV-65□-12 | 12V, 0~4.2A  | ±10% | 85%   |
| IDPV-65□-24 | 24V, 0~2.4A  | ±10% | 87%   |
| IDPV-65□-36 | 36V, 0~1.8A  | ±10% | 88%   |
| IDPV-65□-48 | 48V, 0~1.35A | ±10% | 89%   |
| IDPV-65□-60 | 60V, 0~1.08A | ±10% | 90%   |

□ = Blank/A; Blank: without auxiliary output, A: with auxiliary function

# IDPC series 25~65W

## Features

- Constant current mode
- Flicker free design
- IDPC-25/45: 90~295VAC input  
IDPC-65: 180~295VAC input only
- No load power consumption <0.5W (Blank/DA-Type)  
No load power consumption <1.2W (A-Type)
- Miniature PCB size
- Isolation class II, no F.G.
- Built-in DALI interface (IDPC-45/65-DA)
- Built-in 2 in 1 dimming function (0~10VDC or PWM signal)
- Built-in 12V/50mA auxiliary output (A-Type)
- Suitable for indoor LED lighting applications
- Protection: Short circuit
- 3 years warranty

|                                  | IDPC-25(A)                                                                                                                     | IDPC-45(A)<br>IDPC-45-DA                                                           | IDPC-65(A)<br>IDPC-65-DA                                                            |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>INPUT</b>                     |                                               |  |  |
| <b>OUTPUT</b><br>(Blank/DA-Type) |                                               |                                                                                    |                                                                                     |
| <b>OUTPUT</b><br>(A-Type)        |                                               |                                                                                    |                                                                                     |
| AC input voltage range           | 90 ~ 295VAC ; 127 ~ 417VDC                                                                                                     |                                                                                    | 180 ~ 295VAC ; 254~417VDC                                                           |
| AC inrush current (max.)         | Cold start, 30A at 230VAC                                                                                                      |                                                                                    |                                                                                     |
| Setup time                       | 500ms / 230VAC                                                                                                                 |                                                                                    |                                                                                     |
| Short circuit protection         | Hiccup mode, auto-recovery                                                                                                     |                                                                                    |                                                                                     |
| Withstand voltage                | I/P-O/P: 3.75KVAC                                                                                                              |                                                                                    |                                                                                     |
| Working temperature              | -20~+50°C                                                                                                                      |                                                                                    | -20~+40°C                                                                           |
| Safety standards                 | UL8750, ENEC BS EN61347-1, BS EN61347-2-13, BS EN62384, GB19510.14, GB19510.1, EAC TP TC 004 approved                          |                                                                                    |                                                                                     |
| DALI standards                   | IEC 62386-101, 102 (DA-Type only)                                                                                              |                                                                                    |                                                                                     |
| EMC standards                    | BS EN55015, BS EN61000-3-2 Class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, GB17743, GB17625.1, EAC TP TC 020 |                                                                                    |                                                                                     |
| Connection (Input/Output)        | Blank/DA-Type: 4+4P push-in terminal block, A-Type: 4+6P push-in terminal block                                                |                                                                                    |                                                                                     |
| Dimension (LxWxH) mm             | 114.5x 72.5x 20                                                                                                                | 120 x 66.5 x 25                                                                    | 130 x 67.5 x 20.5                                                                   |

### IDPC-25/25A Series

| Model No.    | Output          | Tol. | Effi. |
|--------------|-----------------|------|-------|
| IDPC-25□-350 | 49 ~ 70V, 350mA | ±7%  | 82%   |
| IDPC-25□-500 | 35 ~ 50V, 500mA | ±7%  | 81.5% |

□ = Blank/A; Blank: without auxiliary output, A: with auxiliary function

### IDPC-45/45A Series

| Model No.     | Output           | Tol. | Effi. |
|---------------|------------------|------|-------|
| IDPC-45□-350  | 57 ~ 95V, 350mA  | ±7%  | 86%   |
| IDPC-45□-500  | 54 ~ 90V, 500mA  | ±7%  | 85%   |
| IDPC-45□-700  | 38 ~ 64V, 700mA  | ±7%  | 85%   |
| IDPC-45□-1050 | 26 ~ 43V, 1050mA | ±7%  | 84%   |
| IDPC-45□-1400 | 19 ~ 32V, 1400mA | ±7%  | 83%   |

□ = Blank/A; Blank: without auxiliary output, A: with auxiliary function

### IDPC-45-DA Series

| Model No.      | Output           | Tol. | Effi. |
|----------------|------------------|------|-------|
| IDPC-45-350DA  | 57 ~ 95V, 350mA  | ±7%  | 86%   |
| IDPC-45-500DA  | 54 ~ 90V, 500mA  | ±7%  | 85%   |
| IDPC-45-700DA  | 38 ~ 64V, 700mA  | ±7%  | 85%   |
| IDPC-45-1050DA | 26 ~ 43V, 1050mA | ±7%  | 84%   |
| IDPC-45-1400DA | 19 ~ 32V, 1400mA | ±7%  | 83%   |

### IDPC-25/25A Series

| Model No.     | Output           | Tol. | Effi. |
|---------------|------------------|------|-------|
| IDPC-25□-700  | 25 ~ 36V, 700mA  | ±7%  | 81.5% |
| IDPC-25□-1050 | 17 ~ 24V, 1050mA | ±7%  | 80%   |

□ = Blank/A; Blank: without auxiliary output, A: with auxiliary function

### IDPC-65/65A Series

| Model No.     | Output           | Tol. | Effi. |
|---------------|------------------|------|-------|
| IDPC-65□-700  | 69 ~ 93V, 700mA  | ±7%  | 89%   |
| IDPC-65□-1050 | 46 ~ 62V, 1050mA | ±7%  | 87%   |
| IDPC-65□-1400 | 34 ~ 46V, 1400mA | ±7%  | 86%   |
| IDPC-65□-1750 | 27 ~ 36V, 1750mA | ±7%  | 86%   |

□ = Blank/A; Blank: without auxiliary output, A: with auxiliary function

### IDPC-65-DA Series

| Model No.      | Output           | Tol. | Effi. |
|----------------|------------------|------|-------|
| IDPC-65-700DA  | 69 ~ 93V, 700mA  | ±7%  | 89%   |
| IDPC-65-1050DA | 46 ~ 62V, 1050mA | ±7%  | 87%   |
| IDPC-65-1400DA | 34 ~ 46V, 1400mA | ±7%  | 86%   |
| IDPC-65-1750DA | 27 ~ 36V, 1750mA | ±7%  | 86%   |

# PLP series 30~60W

## Features

- Constant current mode
- Universal AC input / Full range
- Class 2 power unit / Pass LPS
- Suitable for built-in LED lighting systems
- Protections: Short circuit / Over current / Over voltage
- Cooling by free air convection
- 2 years warranty

| PLP-30                                                                            |                                                                                                            | PLP-45/60                                                                           |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |                                                                                                            |  |
| AC input voltage range                                                            | 90~264VAC; 127~370VDC                                                                                      |                                                                                     |
| AC inrush current (max.)                                                          | Cold start, 25A at 230VAC                                                                                  | PLP-45: Cold start, 30A at 230VAC<br>PLP-60: Cold start, 35A at 230VAC              |
| Current adjustment range                                                          | 75%~100%                                                                                                   |                                                                                     |
| Over current protection                                                           | Range                                                                                                      | 100%~110%                                                                           |
|                                                                                   | Type                                                                                                       | Constant current limiting, auto-recovery                                            |
| Setup time                                                                        | 500ms at full load and 230VAC                                                                              |                                                                                     |
| Withstand voltage                                                                 | I/P-O/P: 3.75kVAC, I/P-FG: 2kVAC, O/P-FG: 0.5kVAC                                                          |                                                                                     |
| Working temperature                                                               | -30~+70°C (refer to "OUTPUT LOAD vs TEMPERATURE")                                                          |                                                                                     |
| Safety standards                                                                  | UL8750, TUV BS EN61347-1, BS EN61347-2-13, EAC TP TC 004 approved                                          |                                                                                     |
| EMC standards                                                                     | BS EN55015, BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, EAC TP TC 020 |                                                                                     |
| Connection                                                                        | 3+2P / 3.96mm pitch, JST P/N: B3P / B2P-VH                                                                 |                                                                                     |
| Dimension (LxWxH)(mm)                                                             | 101.6x 50.8x 26.6                                                                                          | 101.6x 50.8x 29.6                                                                   |

### PLP-30 Series



| Model No. | Output       | Tol. | R&N  | Effi. |
|-----------|--------------|------|------|-------|
| PLP-30-12 | 12V, 0~2.5A  | ±10% | 2.0V | 83.0% |
| PLP-30-24 | 24V, 0~1.3A  | ±10% | 2.4V | 85.5% |
| PLP-30-48 | 48V, 0~0.63A | ±10% | 4.8V | 86.5% |

| Model No. | Output       | Tol. | R&N  | Effi. |
|-----------|--------------|------|------|-------|
| PLP-45-24 | 24V, 0~1.9A  | ±10% | 3.8V | 89%   |
| PLP-45-48 | 48V, 0~0.95A | ±10% | 4.8V | 89%   |

### PLP-45 Series



| Model No. | Output      | Tol. | R&N  | Effi. |
|-----------|-------------|------|------|-------|
| PLP-45-12 | 12V, 0~3.8A | ±10% | 4.2V | 86%   |

### PLP-60 Series



| Model No. | Output      | Tol. | R&N  | Effi. |
|-----------|-------------|------|------|-------|
| PLP-60-12 | 12V, 0~5.0A | ±10% | 4.5V | 84%   |
| PLP-60-24 | 24V, 0~2.5A | ±10% | 4.5V | 88%   |
| PLP-60-48 | 48V, 0~1.3A | ±10% | 4.8V | 89%   |

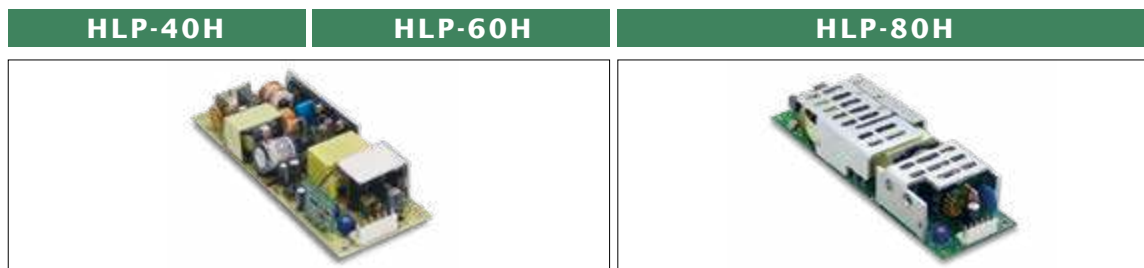
## ► Special Symbols for EN61347-2-13

|                                                                                     |                                                                                                                                                                                    |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Protection against overheating to prevent the lamp controlgear case temperature under any conditions of use from exceeding the indicated value (110°C)                             |
|  | Suitable for direct mounting on normally flammable surfaces, such as wood (>2mm)                                                                                                   |
|  | Based on VDE0710-14, can be installed inside a wooden material like wooden cabinet. The minimum distance between the product enclosure to wooden material in each side is defined. |
| <b>LPS</b>                                                                          | Limited power source                                                                                                                                                               |
| t <sub>c</sub> : 80°C<br>t <sub>a</sub> : 40°C                                      | Full load operation up to 40°C with surface temperature of case < 80°C                                                                                                             |
| <b>SELV</b>                                                                         | Vo < 120VDC can have this mark on the unit, also design with isolation between primary and secondary                                                                               |

# HLP series 40~80W

## Features

- Constant current mode
- Universal AC input (up to 305VAC) / Full range
- Built-in 3 in 1 dimming function (1~10VDC, PWM signal, or resistance)
- Class 2 power unit / Pass LPS
- Suitable for built-in LED lighting system
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Cooling by free air convection
- 3 years warranty



| HLP-40H                                                                           |        | HLP-60H                                                                                                                                                                                       | HLP-80H                                    |
|-----------------------------------------------------------------------------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
|  |        |                                                                                                            |                                            |
| AC input voltage range                                                            |        | 90~305VAC ; 127~431VDC                                                                                                                                                                        |                                            |
| AC inrush current (max.)                                                          |        | Cold start, 50A at 230VAC                                                                                                                                                                     | Cold start, 55A at 230VAC                  |
| DC adjustment range                                                               |        | ±10% rated output voltage                                                                                                                                                                     |                                            |
| Current adjustment range                                                          |        | 60%~100%                                                                                                                                                                                      | 80%~100%                                   |
| Over current protection                                                           |        | 95%~108% constant current limiting, auto-recovery                                                                                                                                             |                                            |
| Over voltage protection                                                           |        | 109%~145% rated output voltage                                                                                                                                                                |                                            |
| Setup, rise, hold up time                                                         |        | 500ms, 80ms, 16ms at full load and 230VAC                                                                                                                                                     | 500ms, 200ms, 16ms at full load and 230VAC |
| Withstand voltage                                                                 |        | I/P-O/P: 3.75kVAC, I/P-FG: 2kVAC, O/P-FG:0.5kVAC                                                                                                                                              |                                            |
| Working temperature                                                               |        | -40~+70°C (refer to output derating curve)                                                                                                                                                    |                                            |
| Safety standards                                                                  |        | UL8750, CSA C22.2 No. 250.0-08 (except for 48V, 54V), BS EN61347-1, BS EN61347-2-13, GB19510.14, GB19510.1, EAC TP TC 004 approved ; design refer to UL60950-1, BS EN60335-1(for HLP-40H/60H) |                                            |
| EMC standards                                                                     |        | BS EN55015, BS EN61000-3-2 class C, BS EN61000-3-3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, GB17743, GB17625.1, EAC TP TC 020                                                                |                                            |
| Connection                                                                        | Input  | 6+6P/3.96mm pitch, JST P/N: B6P-VH                                                                                                                                                            |                                            |
|                                                                                   | Output |                                                                                                                                                                                               |                                            |
| Dimension (LxWxH) (mm)                                                            |        | 147x 53x 27                                                                                                                                                                                   | 167x 53x 29.5                              |

## HLP-40H Series

| Model No.  | Output       | Tol.  | R&N   | Effi. |
|------------|--------------|-------|-------|-------|
| HLP-40H-12 | 12V, 0~3.33A | ±2.5% | 150mV | 87.0% |
| HLP-40H-15 | 15V, 0~2.67A | ±2.0% | 150mV | 87.0% |
| HLP-40H-20 | 20V, 0~2.00A | ±1.0% | 150mV | 88.0% |
| HLP-40H-24 | 24V, 0~1.67A | ±1.0% | 150mV | 88.0% |
| HLP-40H-30 | 30V, 0~1.34A | ±1.0% | 200mV | 88.5% |
| HLP-40H-36 | 36V, 0~1.12A | ±1.0% | 200mV | 89.0% |
| HLP-40H-42 | 42V, 0~0.96A | ±1.0% | 300mV | 89.0% |
| HLP-40H-48 | 48V, 0~0.84A | ±1.0% | 300mV | 89.5% |
| HLP-40H-54 | 54V, 0~0.75A | ±1.0% | 300mV | 89.5% |

## HLP-60H Series

| Model No.  | Output      | Tol.  | R&N   | Effi. |
|------------|-------------|-------|-------|-------|
| HLP-60H-15 | 15V, 0~4.0A | ±2.0% | 150mV | 88.0% |
| HLP-60H-20 | 20V, 0~3.0A | ±1.0% | 150mV | 89.0% |
| HLP-60H-24 | 24V, 0~2.5A | ±1.0% | 150mV | 89.5% |
| HLP-60H-30 | 30V, 0~2.0A | ±1.0% | 200mV | 90.0% |

| Model No.  | Output       | Tol.  | R&N   | Effi. |
|------------|--------------|-------|-------|-------|
| HLP-60H-36 | 36V, 0~1.70A | ±1.0% | 200mV | 90.0% |
| HLP-60H-42 | 42V, 0~1.45A | ±1.0% | 300mV | 90.0% |
| HLP-60H-48 | 48V, 0~1.30A | ±1.0% | 300mV | 90.5% |
| HLP-60H-54 | 54V, 0~1.15A | ±1.0% | 300mV | 90.5% |

## HLP-80H Series

| Model No.  | Output       | Tol.  | R&N   | Effi. |
|------------|--------------|-------|-------|-------|
| HLP-80H-12 | 12V, 0~5.0A  | ±2.5% | 150mV | 87.5% |
| HLP-80H-15 | 15V, 0~5.0A  | ±2.0% | 150mV | 88.5% |
| HLP-80H-20 | 20V, 0~4.0A  | ±1.0% | 150mV | 89.5% |
| HLP-80H-24 | 24V, 0~3.4A  | ±1.0% | 150mV | 90.0% |
| HLP-80H-30 | 30V, 0~2.7A  | ±1.0% | 200mV | 90.0% |
| HLP-80H-36 | 36V, 0~2.3A  | ±1.0% | 200mV | 90.0% |
| HLP-80H-42 | 42V, 0~1.95A | ±1.0% | 200mV | 90.0% |
| HLP-80H-48 | 48V, 0~1.7A  | ±1.0% | 200mV | 90.0% |
| HLP-80H-54 | 54V, 0~1.5A  | ±1.0% | 200mV | 90.0% |

# DC-DC LED Driver

- 80 LDH Series (250~1750mA)
- 82 NLDD-H Series(350-1400mA)
- 82 LDDS-H Series(250-1000mA)
- 83 LDD-H Series (300~1500mA)
- 83 LDB-L Series (300~600mA)
- 84 LDD-DA Series (350~1400mA)
- 85 LDD-L Series(300-1500mA)

## DC HOUSE

- 87 NHDD Series

## Accessory & Controller

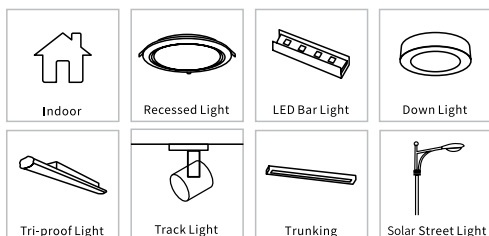
- 88 SPD Series
- 89 ICL-16R/L (Inrush current limiter)
- 89 PIR-045 (Motion sensor)
- 90 DAP Series  
(DALI to PWM Converter)
- 91 SDP-001  
(Smart Timer Dimming  
Programmer)



DC-DC products are DC input, constant current output LED drives, which are mainly used in the DC voltage source environment. All 12V/24V/48V/380V DC bus voltage can directly be used with this series to drive the LED engine(chip). LDD series is Step-Down design. LDB series is Buck-Boost and LDH is Step-up design. Users can choose a suitable product according to their own DC source environment. DC Bus design can reduce the risk of electric shock and total cost of system. The PWM dimming and DALI dimming are also available. Besides, DC-DC driver can be applied to solar lighting solution with a controller, reducing design issue and optimizing the reliability.

### Selection guide

#### Application



| Topology   | Series                        | DC source | Application             |
|------------|-------------------------------|-----------|-------------------------|
| Step-Up    | LDH                           | 12V/24V   | Solar lighting/Vehicle  |
| Step-Down  | NLDD-H/LDD-H/<br>LDD-L/LDDS-H | 24V/48V   | 48V DC Bus(Track light) |
| Step-Down  | NHDD                          | 380V      | DC house/DC lighting    |
| Buck-Boost | LDB-L                         | 12V/24V   | Vehicle/Yacht/DC Bus    |

# LDH series 25-45W DC/DC LED Driver

## Features

- Constant current step-up mode
- Wide input and output voltage range
- High efficiency up to 95%
- 2 in 1 dimming(0~10V, PWM)
- Comply with BS EN55015/FCC part 15 for radiation emission without Additional input filter and capacitors.
- Class III safety voltage application
- DALI dimming function for DA and WDA type(LDH-45)
- Fully enclosed plastic case (UL 94V-0)
- Economic, high reliability
- Protections: Short circuit / Over voltage / Under voltage
- 3 years warranty

| LDH-25                                                                            |               | LDH-45<br>LDH-45DA                                                                  |
|-----------------------------------------------------------------------------------|---------------|-------------------------------------------------------------------------------------|
|  |               |  |
| Output current accuracy (Typ.)                                                    |               | ±5% at 12V or 24V DC input (Typical)                                                |
| Analog/PWM dimming & ON/OFF control                                               | Remote ON/OFF | Leave open if not used                                                              |
|                                                                                   | PWM frequency | 1KHz-3KHz 10V PWM signal or 0-10V DC input                                          |
| Short circuit protection                                                          |               | Power OFF and fuse open                                                             |
| Over voltage protection                                                           |               | >115% rated output voltage                                                          |
| Working temperature                                                               |               | -40~+70°C                                                                           |
| Safety standards                                                                  |               | BS EN61347-1, BS EN61347-2-13, EAC TP TC 004 approved                               |
| EMC standards                                                                     |               | BS EN55015, BS EN61547, BS EN61000-4-2,3,4,6,8, EAC TP TC 020                       |
| Dimension (LxWxH)(mm)                                                             |               | 52.4x 27.2x 24                                                                      |
|                                                                                   |               | 75x 53x 22.7                                                                        |

## LDH-25 Series



| Model No.    | Input (VDC) | Output        |              | Io Tol. | Effi. | Dimming      |
|--------------|-------------|---------------|--------------|---------|-------|--------------|
|              |             | Voltage (VDC) | Current (mA) |         |       |              |
| LDH-25-250 ○ | 9.5~32      | 12~84         | 250          | ±5%     | 89%   | 0~10V<br>PWM |
| LDH-25-350 ○ | 9.5~32      | 12~72         | 350          | ±5%     | 90%   |              |
| LDH-25-500 ○ | 9.5~32      | 12~50         | 500          | ±5%     | 90%   |              |
| LDH-25-700 ○ | 9.5~32      | 12~36         | 700          | ±5%     | 90%   |              |

○=Blank, W; Blank: pin style, PWM+analog dimming; W: Wire style, PWM+analog dimming

## LDH-45A/B Series



| Model No.      | Input (VDC) | Output        |              | Io Tol. | Effi. | Dimming                |
|----------------|-------------|---------------|--------------|---------|-------|------------------------|
|                |             | Voltage (VDC) | Current (mA) |         |       |                        |
| LDH-45A-350 ○  | 9~18        | 12~86         | 350          | ±5%     | 91%   | Blank&W:<br>PWM+Analog |
| LDH-45A-500 ○  | 9~18        | 12~86         | 500          | ±5%     | 90%   |                        |
| LDH-45A-700 ○  | 9~18        | 12~64         | 700          | ±5%     | 90%   |                        |
| LDH-45A-1050 ○ | 9~18        | 12~43         | 1050         | ±5%     | 91%   |                        |
| LDH-45B-350 ○  | 18~32       | 21~126        | 350          | ±5%     | 93%   | Blank&W:<br>PWM+Analog |
| LDH-45B-500 ○  | 18~32       | 21~86         | 500          | ±5%     | 94%   |                        |
| LDH-45B-700 ○  | 18~32       | 21~64         | 700          | ±5%     | 95%   |                        |
| LDH-45B-1050 ○ | 18~32       | 21~43         | 1050         | ±5%     | 95%   |                        |

○=Blank, W; Blank: pin style, PWM+analog dimming; W: Wire style, PWM+analog dimming

## LDH-45A/B-DA Series



| Model No.         | Input (VDC) | Output        |              | Io Tol. | Effi. | Dimming |
|-------------------|-------------|---------------|--------------|---------|-------|---------|
|                   |             | Voltage (VDC) | Current (mA) |         |       |         |
| LDH-45A-350 ○ DA  | 9~18        | 24~86         | 350          | ±5%     | 91%   | DALI    |
| LDH-45A-500 ○ DA  | 9~18        | 24~86         | 500          | ±5%     | 90%   |         |
| LDH-45A-700 ○ DA  | 9~18        | 24~64         | 700          | ±5%     | 90%   |         |
| LDH-45A-1050 ○ DA | 9~18        | 24~43         | 1050         | ±5%     | 91%   |         |
| LDH-45B-350 ○ DA  | 18~32       | 36~126        | 350          | ±5%     | 93%   | DALI    |
| LDH-45B-500 ○ DA  | 18~32       | 36~86         | 500          | ±5%     | 94%   |         |
| LDH-45B-700 ○ DA  | 18~32       | 36~64         | 700          | ±5%     | 95%   |         |
| LDH-45B-1050 ○ DA | 18~32       | 36~43         | 1050         | ±5%     | 95%   |         |

○=Blank, W; Blank: pin style, DALI dimming; W: Wire style, DALI dimming

# LDH series 65W DC/DC LED Driver

## Features

- Constant current step-up mode
- Wide input and output voltage range
- High efficiency up to 90%
- 2 in 1 dimming(0~10V, PWM)
- Comply with BS EN55015/FCC part 15 for radiation emission without Additional input filter and capacitors.
- Class III safety voltage application
- Cooling by free air convection
- Fully encapsulated plastic case(UL 9440)
- Economic, high reliability
- Protections: Short circuit / Over voltage / Under voltage
- 3 years warranty

### LDH-65



|                                     |                                                               |                                                                                                                                               |
|-------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Output current accuracy (Typ.)      | ±5% at 12V or 24V DC input (Typical)                          |                                                                                                                                               |
| Analog/PWM dimming & ON/OFF control | Remote ON/OFF                                                 | Leave open if not used<br>■ Power ON with dimming: PWM DIM+ ~ DIM-> 0~10VDC or open circuit<br>■ Power OFF: PWM DIM+ ~ DIM- < 0.5VDC or short |
|                                     | PWM frequency                                                 | 1KHz-3KHz 10V PWM signal or 0-10V DC input                                                                                                    |
|                                     | Short circuit protection                                      | Power OFF and fuse open                                                                                                                       |
| Working temperature                 | -40~+60°C                                                     |                                                                                                                                               |
| Safety standards                    | BS EN61347-1, BS EN61347-2-13, EAC TP TC 004 approved         |                                                                                                                                               |
| EMC standards                       | BS EN55015, BS EN61547, BS EN61000-4-2,3,4,6,8, EAC TP TC 020 |                                                                                                                                               |
| Dimension (LxWxH)(mm)               | 75x 53x 22.7                                                  |                                                                                                                                               |

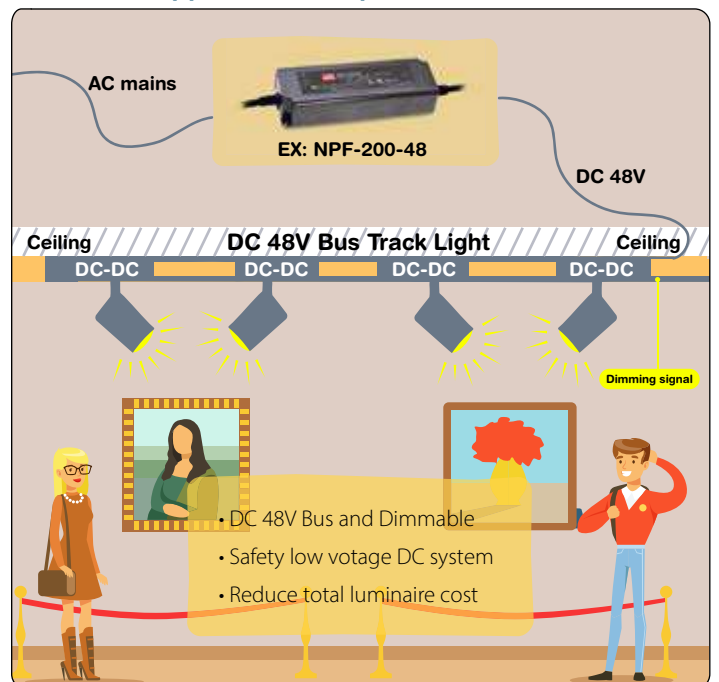
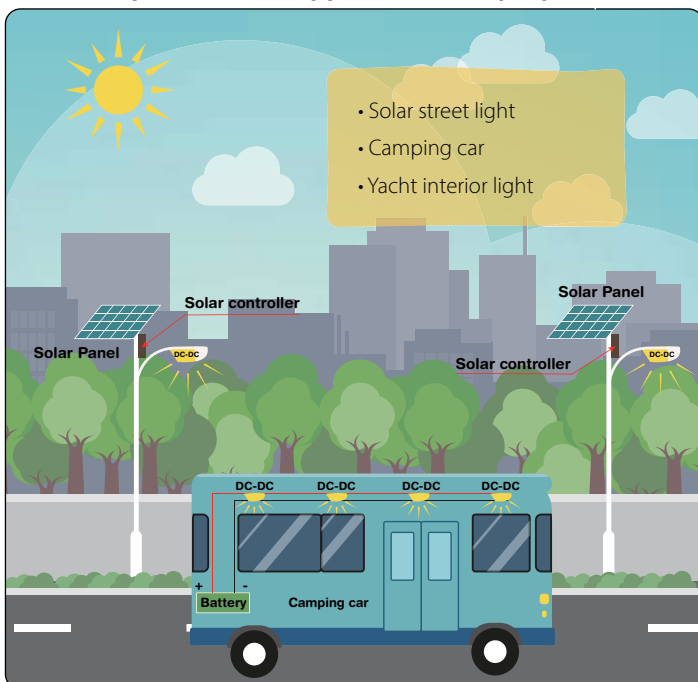
## LDH-65 Series



| Model No.     | Input (VDC) | Output        |              | Io Tol. | Effi. | Dimming   |
|---------------|-------------|---------------|--------------|---------|-------|-----------|
|               |             | Voltage (VDC) | Current (mA) |         |       |           |
| LDH-65-700 ○  | 9.5~32      | 12~80         | 700          | ±5%     | 89%   | 0~10V PWM |
| LDH-65-1050 ○ | 9.5~32      | 12~60         | 1050         | ±5%     | 90%   |           |
| LDH-65-1400 ○ | 9.5~32      | 12~46         | 1400         | ±5%     | 90%   |           |
| LDH-65-1750 ○ | 9.5~32      | 12~37         | 1750         | ±5%     | 90%   |           |

○=Blank, W; Blank: pin style, PWM+analog dimming; W: Wire style, PWM+analog dimming

## ► Battery DC Source application (Step-Up LED Driver) ► DC Bus application (Step-Down LED Driver)



# NLDD&LDDS series DC/DC LED Driver

## Features

- Constant current step-down mode ;
- Wide input and output voltage range
- High efficiency up to 96%
- Comply with BS EN55015 regulation without additional input filter and capacitors
- PWM dimming and remote ON/OFF control
- Protections: Short circuit / Over temperature
- Fully enclosed plastic case (UL 94V-0)
- Class III safety voltage application
- 3 years warranty(NLDD-H)
- 5 years warranty(LDDS-H)



|                              |               |                                                                                                                                           |                                                                                                                  |
|------------------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Output current accuracy      |               | ±5% at 48VDC input (Typical)                                                                                                              | ±5% at 48VDC input (Typical)                                                                                     |
| PWM dimming & ON/OFF control | Remote ON/OFF | Leave open if not used<br>■ Power ON with dimming:<br>DIM ~ -Vin >2.5~5VDC or open circuit<br>■ Power OFF:<br>DIM ~ -Vin <0.8VDC or short | ■ Power ON with dimming:<br>DIM ~ -Vin >2.5~15VDC or open circuit<br>■ Power OFF:<br>DIM ~ -Vin <0.3VDC or short |
|                              | PWM frequency | 100~1KHz                                                                                                                                  |                                                                                                                  |
| Short circuit                |               | Regulated at rated output current, can be continued, auto-recovery                                                                        |                                                                                                                  |
| Over temperature protection  |               | Shut down, recovers automatically after temperature goes down                                                                             |                                                                                                                  |
| Working temperature          |               | -40~+50°C                                                                                                                                 | -40~+55°C                                                                                                        |
| EMC standards                |               | BS EN55015, BS EN61547, BS EN61000-4-2,3,4,6,8                                                                                            |                                                                                                                  |
| Operating case temp. (max.)  |               | 90°C                                                                                                                                      | 90°C                                                                                                             |
| Dimension (LxWxH)(mm)        |               | NLDD-H/HW: 32.1x 20.5x 12.5mm                                                                                                             | 47x 12x 7mm                                                                                                      |

## NLDD-H Series



| Model No.   | Input (VDC) | Output        |              | Io Tol. | Effi. |
|-------------|-------------|---------------|--------------|---------|-------|
|             |             | Voltage (VDC) | Current (mA) |         |       |
| NLDD-350H□  | 10~56       | 6~52          | 350          | ±5%     | 96%   |
| NLDD-500H□  | 10~56       | 6~52          | 500          | ±5%     | 96%   |
| NLDD-700H□  | 10~56       | 6~52          | 700          | ±5%     | 96%   |
| NLDD-1050H□ | 10~56       | 6~52          | 1050         | ±5%     | 96%   |
| NLDD-1200H□ | 10~56       | 6~46          | 1200         | ±5%     | 95%   |
| NLDD-1400H□ | 10~56       | 6~46          | 1400         | ±5%     | 95%   |

□ = Blank, W ; Blank: pin style, W: wire style

## LDDS-H Series



| Model No.    | Input (VDC) | Output        |              | Io Tol. | Effi. |
|--------------|-------------|---------------|--------------|---------|-------|
|              |             | Voltage (VDC) | Current (mA) |         |       |
| LDDS-250HW□  | 12~56       | 2~45          | 250          | ±5%     | 94%   |
| LDDS-300HW□  | 12~56       | 2~45          | 300          | ±5%     | 95%   |
| LDDS-350HW□  | 12~56       | 2~45          | 350          | ±5%     | 95%   |
| LDDS-500HW□  | 12~56       | 2~45          | 500          | ±5%     | 95%   |
| LDDS-700HW□  | 12~56       | 2~45          | 700          | ±5%     | 95%   |
| LDDS-1000HW□ | 12~56       | 2~45          | 1000         | ±5%     | 96%   |

□ = Blank, B ; Blank: without Dimming, B: with 3in1 Dimming

# LDD-H&LDB-L series

DC/DC LED Driver

## Features

- Constant current step-down mode (LDD-H) ;  
Constant current buck-boost mode (LDB-L)
- Wide input and output voltage range
- High efficiency up to 97%
- Comply with BS EN55015 and FCC part 15  
without additional input filter and capacitors
- PWM dimming and remote ON/OFF control
- Protections: Short circuit / Over temperature
- Fully enclosed plastic case (UL 94V-0)
- Class III safety voltage application
- 3 years warranty

|                              |               | LDD-300~1000H/HW/HS<br>LDD-1200/1500H/HW                                                                                                                                    | LDB-300~600L/LW                                                                                                                                                            |
|------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              |               |                                                                                            |                                                                                         |
| Output current accuracy      |               | ±3% at 24VDC input;<br>±4% at 48VDC input for LDD-H/HW;<br>±5% at 48VDC input for LDD-HS                                                                                    | ±5% at 24VDC input (Typical)                                                                                                                                               |
| PWM dimming & ON/OFF control | Remote ON/OFF | Leave open if not used                                                                                                                                                      |                                                                                                                                                                            |
|                              |               | <ul style="list-style-type: none"> <li>Power ON with dimming:<br/>DIM ~ -Vin &gt;2.5~6VDC or open circuit</li> <li>Power OFF:<br/>DIM ~ -Vin &lt;0.8VDC or short</li> </ul> | <ul style="list-style-type: none"> <li>Power ON with dimming:<br/>DIM ~ -Vin &gt;2~10VDC or open circuit</li> <li>Power OFF:<br/>DIM ~ -Vin &lt;0.5VDC or short</li> </ul> |
|                              | PWM frequency | 100~1KHz                                                                                                                                                                    | 1 KHz                                                                                                                                                                      |
| Short circuit                |               | Regulated at rated output current, can be continued, auto-recovery                                                                                                          |                                                                                                                                                                            |
| Over temperature protection  |               | Shut down, recovers automatically after temperature goes down                                                                                                               |                                                                                                                                                                            |
| Working temperature          |               | -40~+85°C (refer to output derating curve)                                                                                                                                  | -40~+71°C (refer to output derating curve)                                                                                                                                 |
| EMC standards                |               | BS EN55015, BS EN61547, BS EN61000-4-2,3,4,6,8, FCC part 15 class B                                                                                                         |                                                                                                                                                                            |
| Operating case temp. (max.)  |               | 100°C                                                                                                                                                                       | 110°C                                                                                                                                                                      |
| Dimension (LxWxH)(mm)        |               | LDD-H/HW: 31.8x 20.3x 12.2<br>LDD-HS: 31.8x 20.3x 11.4                                                                                                                      | 31.8x 20.3x 12.2                                                                                                                                                           |

## LDD-H Series



| Model No.  | Input (VDC) | Output        |              | Io Tol. | Effi. |
|------------|-------------|---------------|--------------|---------|-------|
|            |             | Voltage (VDC) | Current (mA) |         |       |
| LDD-300H□  | 9~56        | 2~52          | 300          | ±4%     | 97%   |
| LDD-350H□  | 9~56        | 2~52          | 350          | ±4%     | 97%   |
| LDD-500H□  | 9~56        | 2~52          | 500          | ±4%     | 97%   |
| LDD-600H□  | 9~56        | 2~52          | 600          | ±4%     | 97%   |
| LDD-700H□  | 9~56        | 2~52          | 700          | ±4%     | 97%   |
| LDD-1000H□ | 9~56        | 2~52          | 1000         | ±4%     | 97%   |
| LDD-1200H△ | 9~52        | 2~46          | 1200         | ±5%     | 95%   |
| LDD-1500H△ | 9~52        | 2~46          | 1500         | ±5%     | 96%   |

□ = Blank, W, S ; Blank: pin style, W: wire style, S: SMD style  
△ = Blank, W ; Blank: pin style, W: wire style

## LDB-L Series



| Model No. | Input (VDC) | Output        |              | Io Tol. | Effi. |
|-----------|-------------|---------------|--------------|---------|-------|
|           |             | Voltage (VDC) | Current (mA) |         |       |
| LDB-300L△ | 9~36        | 2~40          | 300          | ±5%     | 90%   |
| LDB-350L△ | 9~36        | 2~40          | 350          | ±5%     | 90%   |
| LDB-500L△ | 9~30        | 2~32          | 500          | ±5%     | 91%   |
| LDB-600L△ | 9~28        | 2~30          | 600          | ±5%     | 91%   |

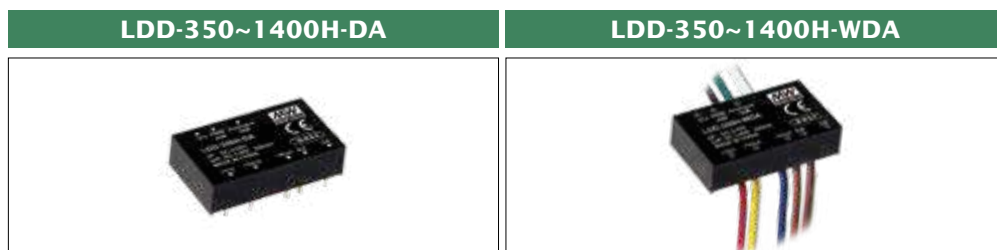
△ = Blank, W ; Blank: pin style, W: wire style

# LDD-DA series

## DC/DC LED Driver

### Features

- Constant current step-down mode
- Wide input and output voltage range
- High efficiency up to 95%
- Comply with BS EN55015/FCC part 15 for radiation emission without Additional input filter and capacitors.
- Class III safety voltage application
- DALI dimming function
- Protections: Short circuit / Input under voltage lockout
- Fully enclosed plastic case
- 3 years warranty



|                                 |                   |                                                                                                                                                                                   |
|---------------------------------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Output current accuracy (Typ.)  |                   | ±5% at 48VDC input (350~1050mA), 24VDC input (1400mA) (Typical)                                                                                                                   |
| PWM dimming & ON/OFF control    | Remote ON/OFF     | Leave open if not used<br>• Power ON with dimming : PWM DIM~Vin >1.2 ~5VDC or open circuit<br>• Power OFF: PWM DIM~Vin <0.1 VDC or short<br>• Max operation voltage 5.5 VDC       |
|                                 | PWM frequency     | 200Hz only                                                                                                                                                                        |
| Analog dimming & ON/OFF control | Remote ON/OFF     | Leave open if not used<br>• Power ON with dimming : Analog DIM~Vin >0.1~2.5VDC or open circuit<br>• Power OFF: Analog DIM~Vin <0.1VDC or short<br>• Max operation voltage 5.5 VDC |
|                                 |                   |                                                                                                                                                                                   |
| Short circuit protection        |                   | Constant current with auto-recovery                                                                                                                                               |
| Input under voltage lockout     | Power up (Typ.)   | 4.2VDC                                                                                                                                                                            |
|                                 | Power down (Typ.) | 3.8VDC                                                                                                                                                                            |
| Working temperature             |                   | -40~+85°C (refer to output derating curve)                                                                                                                                        |
| Safety standards                |                   | EAC TP TC 004 approved                                                                                                                                                            |
| EMC standards                   |                   | BS EN55015, BS EN61547, BS EN61000-4-2,3,4,6,8, EAC TP TC 020                                                                                                                     |
| Operating case temp. (max.)     |                   | 100°C                                                                                                                                                                             |
| Dimension (LxWxH)(mm)           |                   | 40.6x 23.5x 10.1                                                                                                                                                                  |

### LDD-DA Series



| Model No.     | Input (VDC) | Output        |              | Io Tol. | Effi. | Dimming    |
|---------------|-------------|---------------|--------------|---------|-------|------------|
|               |             | Voltage (VDC) | Current (mA) |         |       |            |
| LDD-350H-□DA  | 6~50        | 3~45          | 350          | ±5%     | 95%   | PWM+Analog |
| LDD-700H-□DA  | 6~50        | 3~45          | 700          |         |       |            |
| LDD-1050H-□DA | 6~50        | 3~45          | 1050         |         |       |            |
| LDD-1400H-□DA | 6~40        | 3~36          | 1400         |         |       |            |

□ = Blank, W; Blank: pin style, W: Wire style

# LDD-L series DC/DC LED Driver

## Features

- Constant current step-down mode
- Wide input and output voltage range
- High efficiency up to 95%
- Comply with BS EN55015/FCC part 15 for radiation emission without Additional input filter and capacitors.
- Compact size
- Protections: Short circuit / Over temperature (LDD-300~700)
- Fully enclosed plastic case (UL 94V-0)
- Economic, high reliability
- Class III safety voltage application
- 3 years warranty



|                                 |               | LDD-300~700L/LW/LS                                                                                                                                                                            | LDD-1000~1500L/LW/LS                                                                                                                                                                            |
|---------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Output current accuracy (Typ.)  |               | ±5% at 24VDC input (Typical)                                                                                                                                                                  |                                                                                                                                                                                                 |
| PWM dimming & ON/OFF control    | Remote ON/OFF | Leave open if not used<br><ul style="list-style-type: none"> <li>Power ON with dimming: DIM ~ -Vin &gt;3.5~8VDC or open circuit</li> <li>Power OFF: DIM ~ -Vin &lt;0.5VDC or short</li> </ul> | <ul style="list-style-type: none"> <li>Power ON with dimming: DIM ~ -Vin &gt;2.6~5.5VDC or open circuit</li> <li>Power OFF: DIM ~ -Vin &lt;0.4VDC or short</li> </ul>                           |
|                                 | PWM frequency | 100~1000Hz                                                                                                                                                                                    | 100~500Hz                                                                                                                                                                                       |
| Analog dimming & ON/OFF control | Remote ON/OFF | None                                                                                                                                                                                          | Leave open if not used<br><ul style="list-style-type: none"> <li>Power ON with dimming: DIM ~ -Vin &gt;0.5~2.5VDC or open circuit</li> <li>Power OFF: DIM ~ -Vin &lt;0.4VDC or short</li> </ul> |
|                                 |               |                                                                                                                                                                                               |                                                                                                                                                                                                 |
| Short circuit protection        |               | Regulated at rated output current; can be continued, auto-recovery                                                                                                                            |                                                                                                                                                                                                 |
| Over temp. protection           |               | Shut down, auto-recovery                                                                                                                                                                      | None                                                                                                                                                                                            |
| Working temperature             |               | -40~+85°C                                                                                                                                                                                     | -40~+71°C                                                                                                                                                                                       |
| Safety standards                |               | EAC TP TC 004 approved                                                                                                                                                                        |                                                                                                                                                                                                 |
| EMC standards                   |               | BS EN55015, BS EN61547, BS EN61000-4-2,3,4,6,8, FCC part 15 class B, EAC TP TC 020                                                                                                            |                                                                                                                                                                                                 |
| Operating case temp. (max.)     |               | 100°C                                                                                                                                                                                         |                                                                                                                                                                                                 |
| Dimension (LxWxH)(mm)           |               | L/LW: 22.6x 9.9x 8.9<br>LS: 25.4x 10.5x 9.3                                                                                                                                                   | L/LW: 31.8x 20.3x 12.2<br>LS: 31.8x 20.3x 10.9                                                                                                                                                  |

## LDD-L Series



| Model No.   | Input (VDC)                | Output                     |              | Io Tol. | Effi. | Dimming    |
|-------------|----------------------------|----------------------------|--------------|---------|-------|------------|
|             |                            | Voltage (VDC)              | Current (mA) |         |       |            |
| LDD-300L □  | 9~36<br>(9~32 for S style) | 2~32<br>(2~28 for S style) | 300          | ±5%     | 95%   | PWM        |
| LDD-350L □  |                            |                            | 350          |         |       |            |
| LDD-500L □  |                            |                            | 500          |         |       |            |
| LDD-600L □  |                            |                            | 600          |         |       |            |
| LDD-700L □  |                            |                            | 700          |         |       |            |
| LDD-1000L □ | 6~36                       | 2~30                       | 1000         | ±5%     | 95%   | PWM+Analog |
| LDD-1200L □ |                            |                            | 1200         |         |       |            |
| LDD-1500L □ |                            |                            | 1500         |         |       |            |

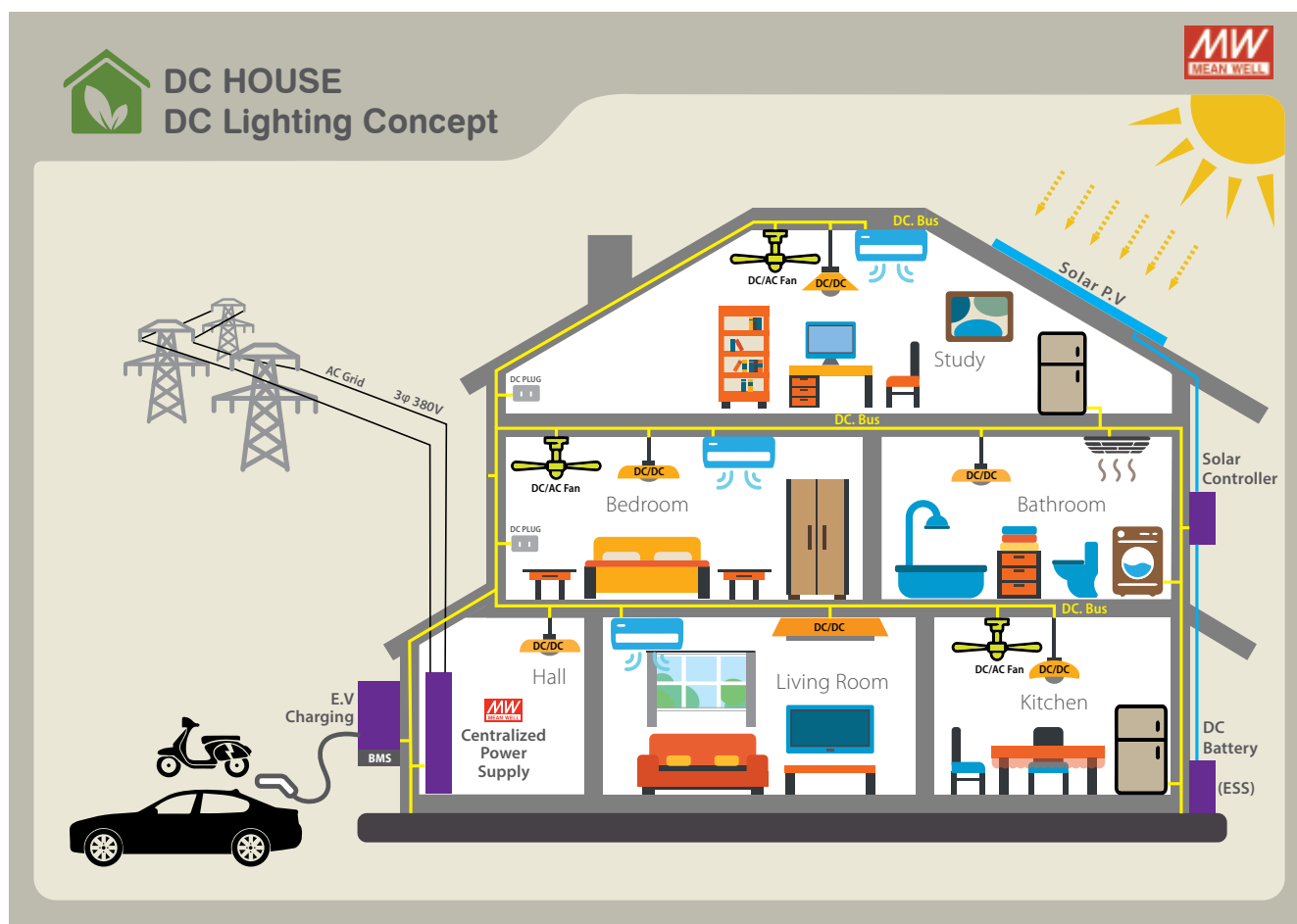
□ = Blank, W, S ; Blank: pin style, W: Wire style, S: SMD style

# DC House

As increases in energy costs and demands to reduce fossil-based emissions are accelerating a worldwide call for clean energy and efficient power consumption, the DC House is far beyond a concept but necessary infrastructure. MEAN WELL is proud to introduce a new DC centralized bus for indoor device applications to reduce power loss issue.

With nearly four decades of experience in power supply design and manufacturing, MEAN WELL provides power solutions for DC centralized bus and DC lighting applications with complete enclosed type and DC to DC LED driver product portfolios. The DC centralized bus is easily integrated into a renewable energy system to reduce power consumption and total cost.

Please refer to the below diagram for a brand new “DC WORLD”.



## DC Centralized Bus for Lighting Application Selection Guide

| Voltage type               | Front-end<br>(AC to DC Enclosed type)                                                                                               | Back-end<br>(DC to DC LED driver)                   | Dimming function                         |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|------------------------------------------|
| Low Voltage bus<br>(48V)   | UHP-1500(1Ø3W)<br>RST-5000/10000 (3Ø4W)<br>SHP-10K(3Ø3W) <i>Under Development</i>                                                   | NLDD-H series<br>LDDS-HWB series<br>LDD-H-DA series | ·PWM<br>·0-10V<br>·DALI                  |
| High Voltage bus<br>(380V) | UHP-1500(1Ø3W) <i>Releasing in 2021,Q4</i><br>RST-7K5/15K (3Ø4W) <i>Under Development</i><br>SHP-10K(3Ø3W) <i>Under Development</i> | NHDD series<br><i>Releasing in 2021,Q4</i>          | ·PWM<br>·Dim with DAP-04 for DALI system |

Note: For detail enclosed type specification, please refer our industrial power supply catalog.

# NHDD series DC/DC LED Driver

## Features

- Constant Current mode output
- For DC 380V BUS lighting luminaire
- Driver on Board (DoB) Solution available
- Plastic housing and Fully encapsulated
- Built-in PWM and Remote ON/OFF control
- Protections: short circuit/over temperature
- 5 years warranty



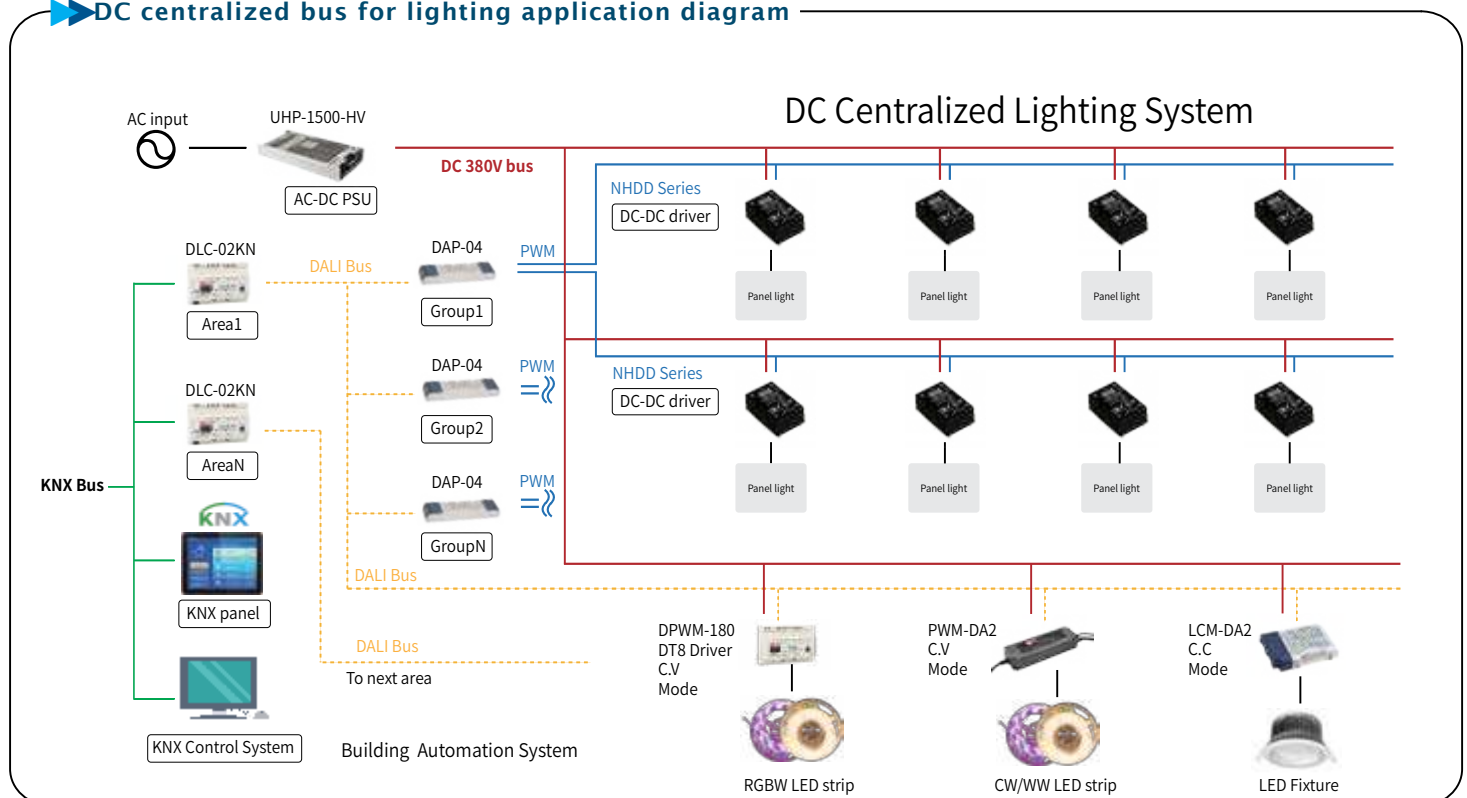
|                              |               |                                                                                                                                                                                 |
|------------------------------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Output current accuracy      |               | ±5% at 380VDC input (Typical)                                                                                                                                                   |
| PWM dimming & ON/OFF control | Remote ON/OFF | Leave open if not used                                                                                                                                                          |
|                              |               | <ul style="list-style-type: none"> <li>▪ Power ON with dimming:<br/>DIM ~ -Vin &gt;2.5~5VDC or open circuit</li> <li>▪ Power OFF:<br/>DIM ~ -Vin &lt;0.8VDC or short</li> </ul> |
|                              | PWM frequency | 100~1KHz                                                                                                                                                                        |
| Short circuit                |               | Hiccup mode, recovers automatically after fault condition is removed                                                                                                            |
| Over temperature protection  |               | Tcase>85℃±5℃, derate power automatically                                                                                                                                        |
| Working temperature          |               | -30 ~ +85℃ (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)                                                                                                               |
| EMC standards                |               | BS EN55015, BS EN61547, BS EN61000-4-2,3,4,6,8                                                                                                                                  |
| Operating case temp. (max.)  |               | <85℃                                                                                                                                                                            |
| Dimension (LxWxH)(mm)        |               | 32.1x 20.5x 12.5mm                                                                                                                                                              |



| Model No.     | Input    | Output         |         | Io Tol. | Effi. |
|---------------|----------|----------------|---------|---------|-------|
|               |          | Voltage        | Current |         |       |
| NHDD-40-100 □ | 360~400V | 355V (typical) | 100mA   | ±15%    | 95%   |

□ = Blank, W, ; Blank: pin style, W: Wire style,

## DC centralized bus for lighting application diagram



# SPD series Surge Protection Device

## SPD-10-320S

## SPD-10S-277S

## 10kA Surge Protection Device



- UL1449, Type 4, BS EN/IEC61643-11(SPD-10S)
- Line to Ground & Line to Line protected
- Series connection type
- LED status indicators
- IP67 (SPD-10-320S); IP66 (SPD-10S)
- Suitable for surge protection of LED drivers
- Thermally protected

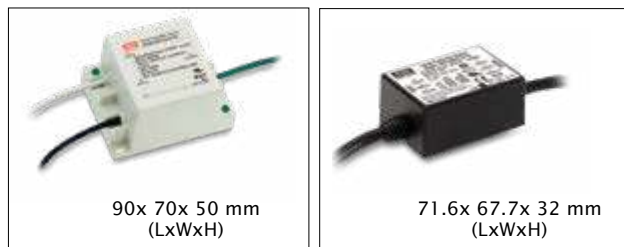


| Model No.                                | SPD-10-320S                                 | SPD-10S-277S                           |
|------------------------------------------|---------------------------------------------|----------------------------------------|
| Operating voltage                        | 120~320VAC, 50/60Hz                         | 120~277VAC, 50/60Hz                    |
| MCOV (Max. continuous operating voltage) | 320VAC                                      | 277VAC                                 |
| Continuous Current (max.)                | 5A                                          | 3.5A                                   |
| UP (Voltage protection level)            | L-N:1200V<br>L-G/PE: 1500V<br>N-G/PE: 1500V | L-N: 1260V<br>L-G: 1260V<br>N-G: 1300V |
| IN (Nominal discharge current)           | 5kA,8/20μs                                  |                                        |
| Max. surge current (8/20μs)              | 10kA,8/20μs                                 |                                        |
| Operating temperature                    | -40~+70°C                                   | -40~+85°C                              |
| Safety standard                          | BS EN61643-11: 2012                         | UL1449 Type 4, BS EN/IEC 61643-11      |

## SPD-20

## SPD-20HP

## 20kA Surge Protection Device



- UL1449, Type 2 (SPD-20), Type 4 (SPD-20HP) component assemblies
- Line to Ground & Line to Line protected
- Parallel (3 wires) connection style (SPD-20)
- Series connection style (SPD-20HP)
- LED status indicators
- IP67 (SPD-20); IP66 (SPD-20HP)
- Suitable for surge protection of LED drivers
- Thermally protected (SPD-20HP)



| Model No.                                   | SPD-20-240P                                                      | SPD-20-277P                                | SPD-20HP-277S                                                | SPD-20HP-480S                              |
|---------------------------------------------|------------------------------------------------------------------|--------------------------------------------|--------------------------------------------------------------|--------------------------------------------|
| Operating voltage                           | 240VAC, 50/60Hz                                                  | 277VAC, 50/60Hz                            | 120~277VAC, 50/60Hz                                          | 347~480VAC, 50/60Hz                        |
| MCOV (Max. continuous operating voltage)    | 300VAC                                                           | 320VAC                                     |                                                              | 510VAC                                     |
| MLV (Measured limiting voltage)             | ---                                                              |                                            | L-N:810V, L-G:1560V,<br>N-G: 1570V                           | L-N:1400V, L-G:1560V,<br>N-G: 1570V        |
| VPR (Voltage protection rating)             | ≤1500V (L-FG, N-FG, L-N)                                         |                                            | ---                                                          |                                            |
| UP (Voltage protection level)               | ---                                                              |                                            | L-N:1000V, L-G/PE:3800V,<br>N-G/PE: 2900V                    | ---                                        |
| IN (Nominal discharge current)              | 5kA                                                              |                                            | 10kA                                                         |                                            |
| Max. surge current (8/20μs)                 | 20kA                                                             |                                            |                                                              |                                            |
| SCCR (Short circuit current rating)         | 5kA                                                              |                                            | ---                                                          |                                            |
| Response time                               | <25ns                                                            |                                            | ---                                                          |                                            |
| Operating temperature                       | -40~+70°C                                                        |                                            | -40~+75°C                                                    |                                            |
| Safety standard                             | UL1449 3 <sup>rd</sup> Edition,<br>TUV BS EN61643-11<br>approved | UL1449 3 <sup>rd</sup> Edition<br>approved | UL1449 4 <sup>th</sup> Edition,<br>BS EN61643-11<br>approved | UL1449 4 <sup>th</sup> Edition<br>approved |
| Connection [L (Black)/N (White)/FG (Green)] | FEP 10AWG (15cm)                                                 |                                            | ---                                                          |                                            |

# ICL-16 & PIR-045

## ICL-16

## AC Inrush Current Limiter



- 23A inrush limiting current, 16A continuous
- 180~264VAC AC input
- Integrated bypass relay, no simple NTC
- Internal thermal protection
- Installed on DIN Rail TS-35/7.5 or 15 (ICL-16R)
- -30~+70°C wide working temperature

| Model No.                   | ICL-16R                                                                                           | ICL-16L     |
|-----------------------------|---------------------------------------------------------------------------------------------------|-------------|
| AC Input voltage            | 180 ~ 264VAC                                                                                      |             |
| Inrush current limiting     | 23A                                                                                               |             |
| Internal protection         | Thermal fuse protects overload and fire                                                           |             |
| AC continuous rated current | 16A continuous                                                                                    |             |
| Working temperature         | -30~+70°C                                                                                         |             |
| Safety standards            | IEC62368-1 (LVD)                                                                                  |             |
| EMC emission                | BS EN55032, BS EN61000-3-2,3, BS EN55024, BS EN55035, BS EN61000-6-2, BS EN61000-4-2,3,4,5,6,8,11 |             |
| Dimension(LxWxH)(mm)        | 35x 90x 54.5                                                                                      | 175x 42x 24 |

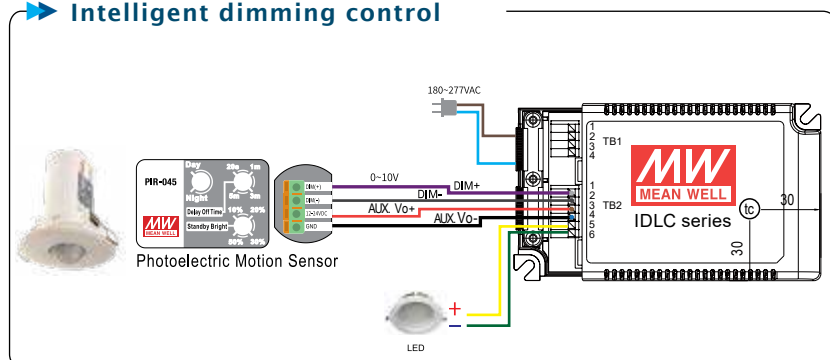
## PIR-045

## Photoelectric Motion Sensor

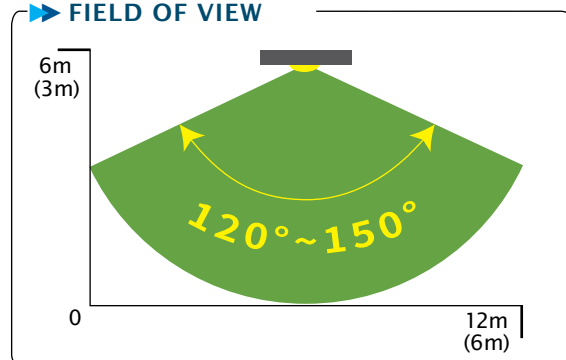


- Operating voltage: 12~24VDC
- Output dim voltage: High=10V ; Low=1V/2V/3V/5V selected by standby bright
- Sensing distance:  $\leq 6$  meters
- Sensing angle:  $<120^{\circ} \sim 150^{\circ}$
- Standby bright: 10%, 20%, 30%, 50%;
- Delay off time: 20s, 1 min, 3min, 5min
- Dimming mode: gradually ON and OFF
- Operating temperature: -10~+40°C
- Energy saving, high sensitivity and compatibility, easy to install
- Dimension(DxH): 60x 71.3mm
- 2 years warranty

### Intelligent dimming control



### FIELD OF VIEW

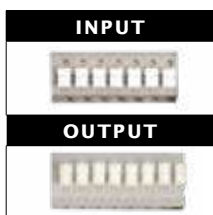


# DAP-04

DALI to PWM Converter

## Features

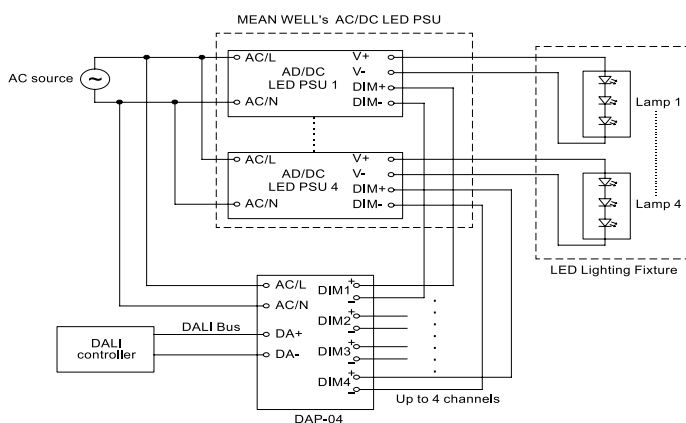
- Convert DALI signal to PWM signal
- Comply with DALI standards (IEC62386-101,102,207)
- Universal AC input (90 to 305VAC)
- 4 DALI addressable output channels
- Built-in push dim function
- Linear or logarithm dimming curve selectable (comply with IEC62386-207)
- Built-in relay for ON/OFF control of LED PSU
- Fully isolated plastic case
- Class II, no FG
- Power consumption < 0.5W
- Suitable to use along with MEAN WELL's AC/DC LED PSU with 3-in-1 dimming function
- Two models for choice:
  - Blank-Type:** 4 channels with 4 DALI addresses
  - S01-Type:** 4 channels with 4 or 1 DALI address selectable
- 3 years warranty



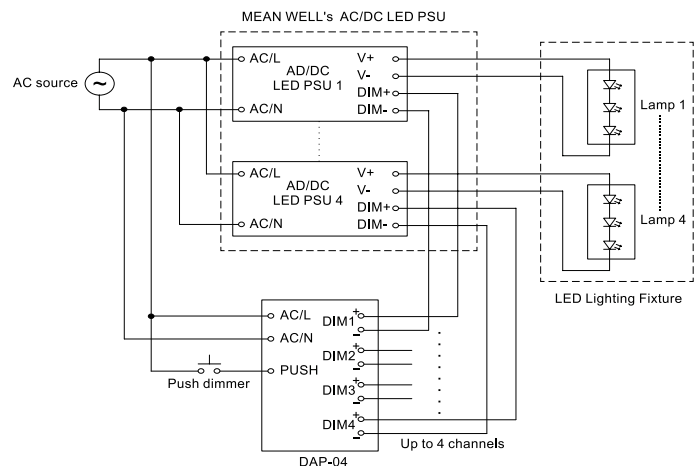
| Model No.               | DAP-04                                                                                            | DAP-04-S01                                     |
|-------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------|
| AC input voltage range  | 90~305VAC ; 127~431VDC                                                                            |                                                |
| Power consumption(typ.) | 0.5W                                                                                              |                                                |
| Dimming range           | 1~100%                                                                                            |                                                |
| Output signal           | PWM, 1KHz                                                                                         |                                                |
| Output channel          | 4 channels with 4 DALI addresses                                                                  | 4 channels with 4 or 1 DALI address selectable |
| Output PWM logic        | Active high or active low selectable                                                              | Active high                                    |
| Working temperature     | -30~+60°C (refer to output derating curve)                                                        |                                                |
| Safety standards        | BS EN61347-1, BS EN61347-2-11, BS EN61058-1 clause 8/17/20/25, EAC TP TC 004 AS/NZS62368 approved |                                                |
| DALI standards          | Comply with IEC62386-101, 102, 207                                                                |                                                |
| EMC standards           | BS EN55015, BS EN61000-3-2,3, BS EN61000-4-2,3,4,5,6,8,11, BS EN61547, EAC TP TC 020              |                                                |
| Dimension(LxWxH)(mm)    | 165x 46x 23                                                                                       |                                                |

## Connection of Dimming Operation

### DALI Dimming Solution



### Push Dimming Solution

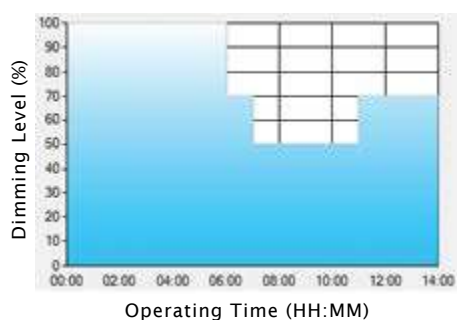


# Smart Timer Dimming

## Smart Timer Dimming Function

MEAN WELL Smart timer dimming primarily provides the adaptive proportion dimming profile for the output constant current level to perform up to 14 consecutive hours. 3 dimming profiles hereunder are defined accounting for the most frequently seen applications. If other options may be needed, please contact MEAN WELL for details.

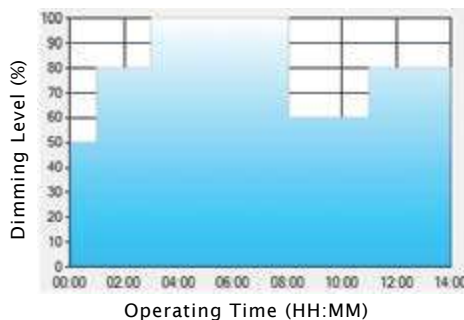
Ex : D01-Type: the profile recommended for residential lighting



Set up for D01-Type in Smart timer dimming software program

|         | T1    | T2    | T3    | T4  |
|---------|-------|-------|-------|-----|
| TIME**  | 06:00 | 07:00 | 11:00 | --- |
| LEVEL** | 100%  | 70%   | 50%   | 70% |

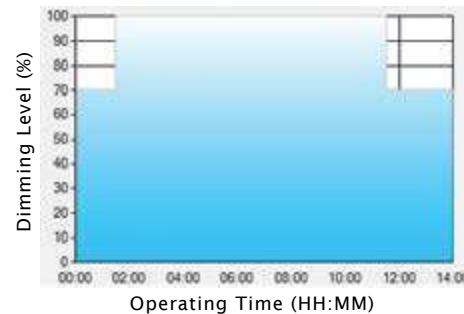
Ex : D02-Type: the profile recommended for street lighting



Set up for D02-Type in Smart timer dimming software program

|         | T1    | T2    | T3    | T4    | T5  |
|---------|-------|-------|-------|-------|-----|
| TIME**  | 01:00 | 03:00 | 08:00 | 11:00 | --- |
| LEVEL** | 50%   | 80%   | 100%  | 60%   | 80% |

Ex : D03-Type: the profile recommended for tunnel lighting



Set up for D03-Type in Smart timer dimming software program

|         | T1    | T2    | T3  |
|---------|-------|-------|-----|
| TIME**  | 01:30 | 11:00 | --- |
| LEVEL** | 70%   | 100%  | 70% |

\*\* : TIME matches Operating Time in the diagram whereas LEVEL matches Dimming Level.

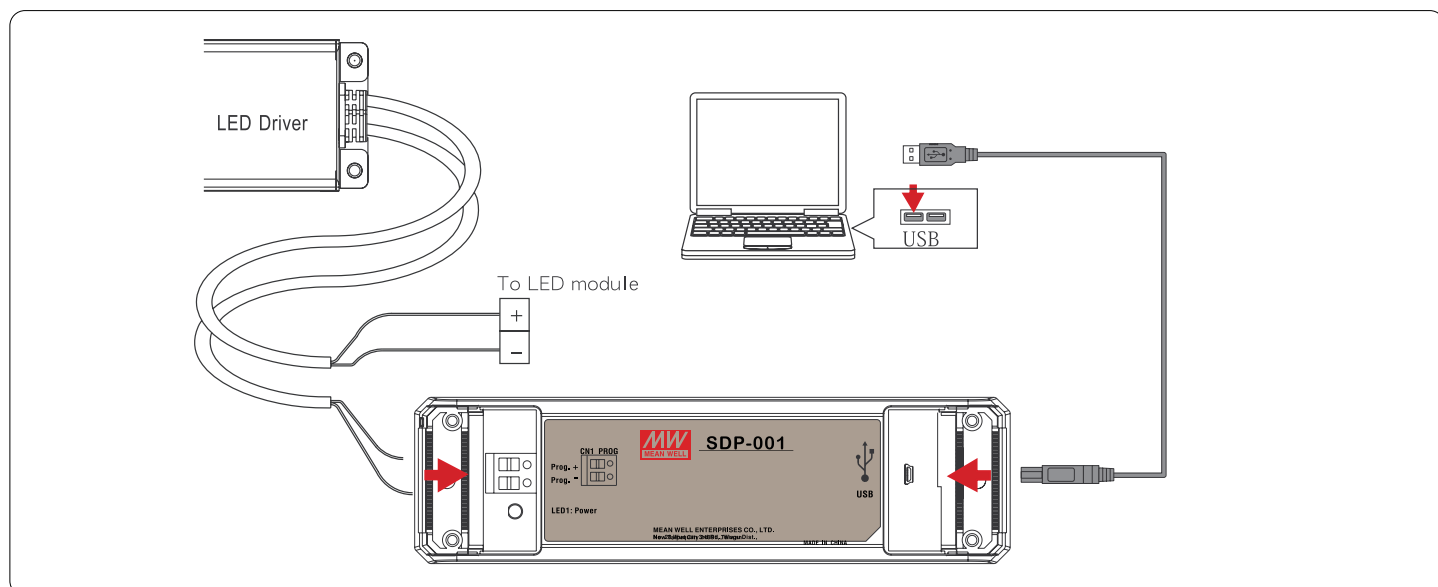
## SDP-001

## Smart Timer Dimming Programmer



SDP-001 is a programmer, particularly for MEAN WELL's Smart Timer Dimming Tool for LED lighting dimming function, reading or writing various parameters designated by users.

- Simple connection and configuration
- Push terminal and mini-USB port
- No need of battery or AC power



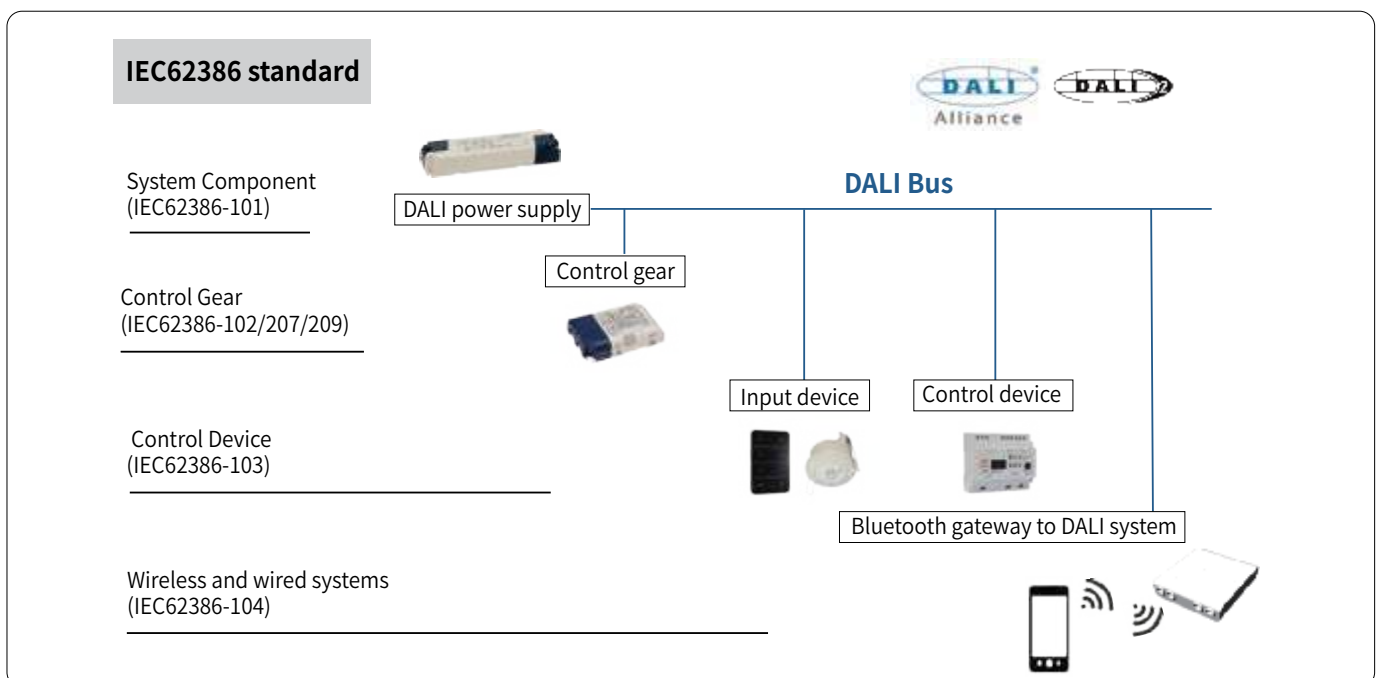
# DALI-2 Digital lighting system

- 93 DLP-04 DALI Power supply  
LCM-25/40/60DA2 (C.C Mode)  
PWM-60/90/120/200DA2 (C.V Mode)
- 94 DALI-2 Controller



Digital Addressable Lighting Interface(DALI) is a lighting control communication protocol based on IEC 62386 standard with interoperability of control devices in digitally control lighting systems.

A DALI network consists of a DALI power supply (Part-101),a control device (Part-103), or an input device(ex.PIR/Lux sensors and wall dimmer devices), and a control gear to connect with LED luminaires (Part-102).It enables the installer to modify grouping and scene-setting at any time without re-wiring,reducing reconstruction fee and time.



# DLP/LCM/PWM series

## DLP-04



DLP-04L

DLP-04R

## DALI Bus Power Supply

- Compact size with 25U(35mm) width(type R)
- Universal AC input / Full range
- Withstand 300VAC surge input for 5 seconds
- Isolation class II
- No load power consumption <0.5W(type L)
- Protections: Short circuit / Over voltage
- Cooling by free air convection
- 3 color LED for status indicator (type R)
- Installed on DIN rail TS-35/7.5 or 15(type R)
- 3 years warranty

| Model No.           | DLP-04L                                                                | DLP-04R              |
|---------------------|------------------------------------------------------------------------|----------------------|
| Rated DC voltage    | 16V                                                                    |                      |
| Rated current       | 240mA (max.)                                                           |                      |
| Input voltage range | 90~264VAC ; 120~370VDC                                                 |                      |
| Rated power         | 3.84W                                                                  |                      |
| Working temperature | -20~+60°C (refer to output derating curve)                             |                      |
| Safety standards    | BS EN61347-2-11, EAC TP TC 004 approved                                |                      |
| DALI standards      | Compliance to IEC62386-101                                             |                      |
| EMC emission        | Compliance to BS EN55015, BS EN61547, BS EN61000-3-2,-3, EAC TP TC 020 |                      |
| Dimension(mm)       | 145x 38x 22(LxWxH)                                                     | 35x 90x 54.5 (WxHxD) |

## LCM-25/40/60DA2



LCM-25DA2  
L105x W68x H23mm

LCM-40/60DA2  
L123.5x W81.5x H23mm

## 25~60W DALI-2 Constant Current LED Driver

- Constant Current mode output with multiple levels selectable by dip switch
- Emergency lighting application is available according to IEC61347-2-13
- Built-in active PFC function and class II design
- Standby power consumption <0.5W
- Functions: DALI-2 interface, push dimming synchronization up to 10units
- 3 years warranty

| Model No. | Output               | Io Tol. | Efficiency |
|-----------|----------------------|---------|------------|
| LCM-25DA2 | 350mA~1050mA, 6~54V  | ±5%     | 86%        |
| LCM-40DA2 | 350mA~1050mA, 2~100V | ±5%     | 91%        |
| LCM-60DA2 | 500mA~1400mA, 2~90V  | ±5%     | 92%        |

## PWM-60/90/120/200DA2



PWM-60DA2  
L150x W53x H35mm

PWM-90/120DA2  
L171x W63x H37.5mm(90W)  
L191x W63x H37.5mm(120W)

PWM-200DA2  
L195x W68x H39.5mm

## 60~200W DALI-2 Constant Voltage LED Driver

- Constant voltage PWM style output
- Emergency lighting application is available according to IEC61347-2-13
- Built-in active PFC function and class II design
- No load power consumption <0.5W/ standby power consumption <0.5W
- Fully encapsulated with IP67 level
- Function options: 3 in 1 dimming (dim-to-off); DALI/DALI-2
- Minimum dimming level 0.2%
- Typical lifetime>50000 hours and 5 years warranty

### PWM-60 Series

| Model No.    | Output      | Tol. | Effi. |
|--------------|-------------|------|-------|
| PWM-60-12DA2 | 12V, 0~5A   | ±4%  | 86.0% |
| PWM-60-24DA2 | 24V, 0~2.5A | ±3%  | 89.0% |

### PWM-120 Series

| Model No.     | Output     | Tol. | Effi. |
|---------------|------------|------|-------|
| PWM-120-12DA2 | 12V, 0~10A | ±4%  | 88.0% |
| PWM-120-24DA2 | 24V, 0~5A  | ±4%  | 90.0% |

### PWM-200 Series

| Model No.     | Output       | Tol. | Effi. |
|---------------|--------------|------|-------|
| PWM-200-12DA2 | 12V, 0~15A   | ±4%  | 92.0% |
| PWM-200-24DA2 | 24V, 0~8.3A  | ±4%  | 93.0% |
| PWM-200-36DA2 | 36V, 0~5.5A  | ±2%  | 94%   |
| PWM-200-48DA2 | 48V, 0~4.17A | ±1%  | 94%   |

### PWM-90 Series

| Model No.    | Output       | Tol. | Effi. |
|--------------|--------------|------|-------|
| PWM-90-12DA2 | 12V, 0~7.5A  | ±4%  | 88.0% |
| PWM-90-24DA2 | 24V, 0~3.75A | ±3%  | 90.5% |
| PWM-90-48DA2 | 48V, 0~1.88A | ±1%  | 90.5% |

# DLC-02 series

## DLC-02



NEW

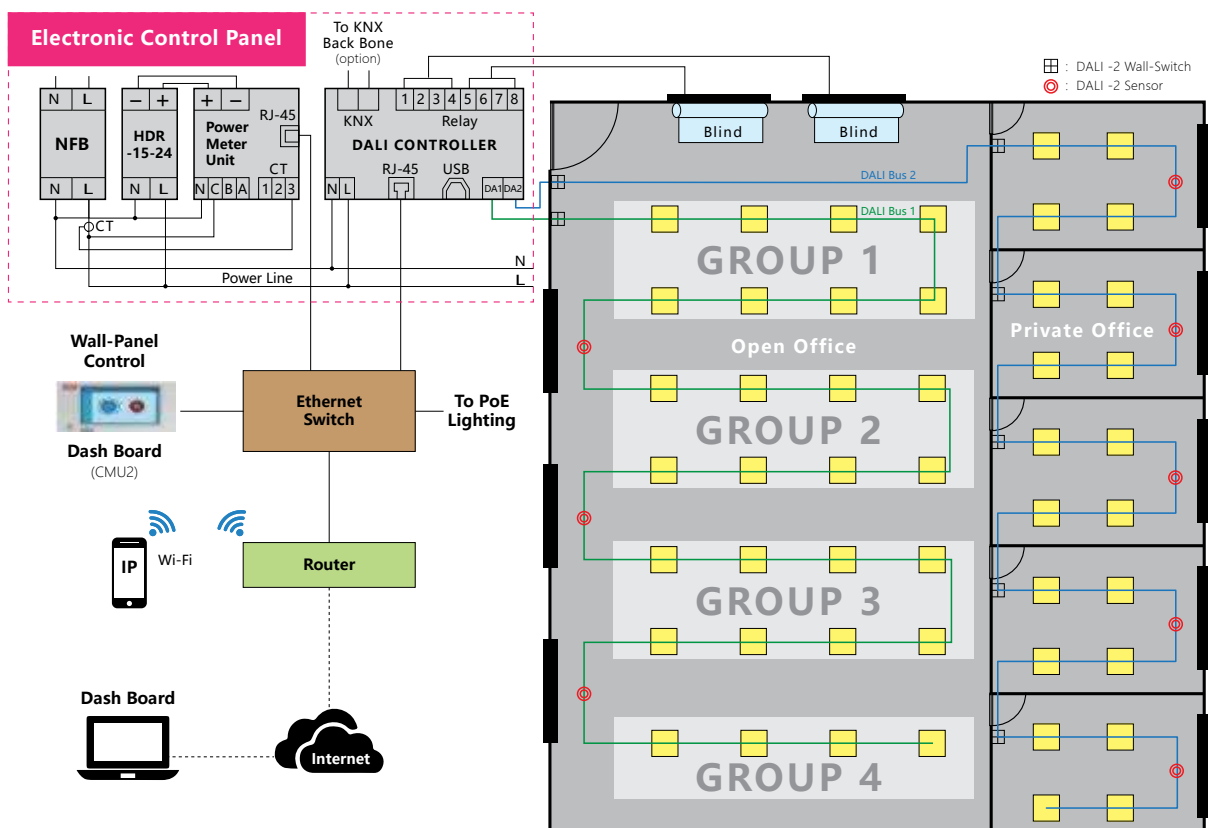


## DALI-2 Controller

- DALI-2 multi-master application controller
- Two independent DALI Bus channels with built in bus power supply (up to 250mA per bus)
- Connect up to 2x64 DALI ECGs/Driver and up to 2x12 DALI input devices
- LCD display, LED indicators and buttons for local operation
- Built in with 250V/10Ax4 relay
- Easy installation and configuration via PC software or web browser
- Simplify configuration, Plug and Play
- Multiple control effect based on the time event and input devices
- KNX to DALI gateway(KNX version)
- 5 years warranty

| Model No.                   | DLC-02                                                             |
|-----------------------------|--------------------------------------------------------------------|
| AC input Voltage Range      | 100-305VAC, 140~430VDC                                             |
| BUS Voltage                 | Two Built-in DALI bus ;Voltage range;2x16V                         |
| BUS Rated Current           | 2x240mA                                                            |
| BUS Channel                 | 2                                                                  |
| USB interface               | 1 USB slave connector.typeB                                        |
| Working Temperature         | -25~+45 °C                                                         |
| Ethernet communication port | 100MB/s via RJ45 connector                                         |
| Safety Standards            | EAC TP TC 004 approved; Compliance to BS EN61347-1;BS EN61347-2-11 |
| DALI Standards              | Comply with IEC62386-101/103                                       |
| EMC Emission                | Compliance to BS EN55015, EAC TP TC 020,BS EN63044-5-2/EN63044-5-3 |
| Dimension                   | 144*90*58mm (L*W*H) 8 units wide                                   |
| DIN RAIL Mounting           | 35mm rail                                                          |

## Application Diagram-Office lighting





# Building Automation Solutions

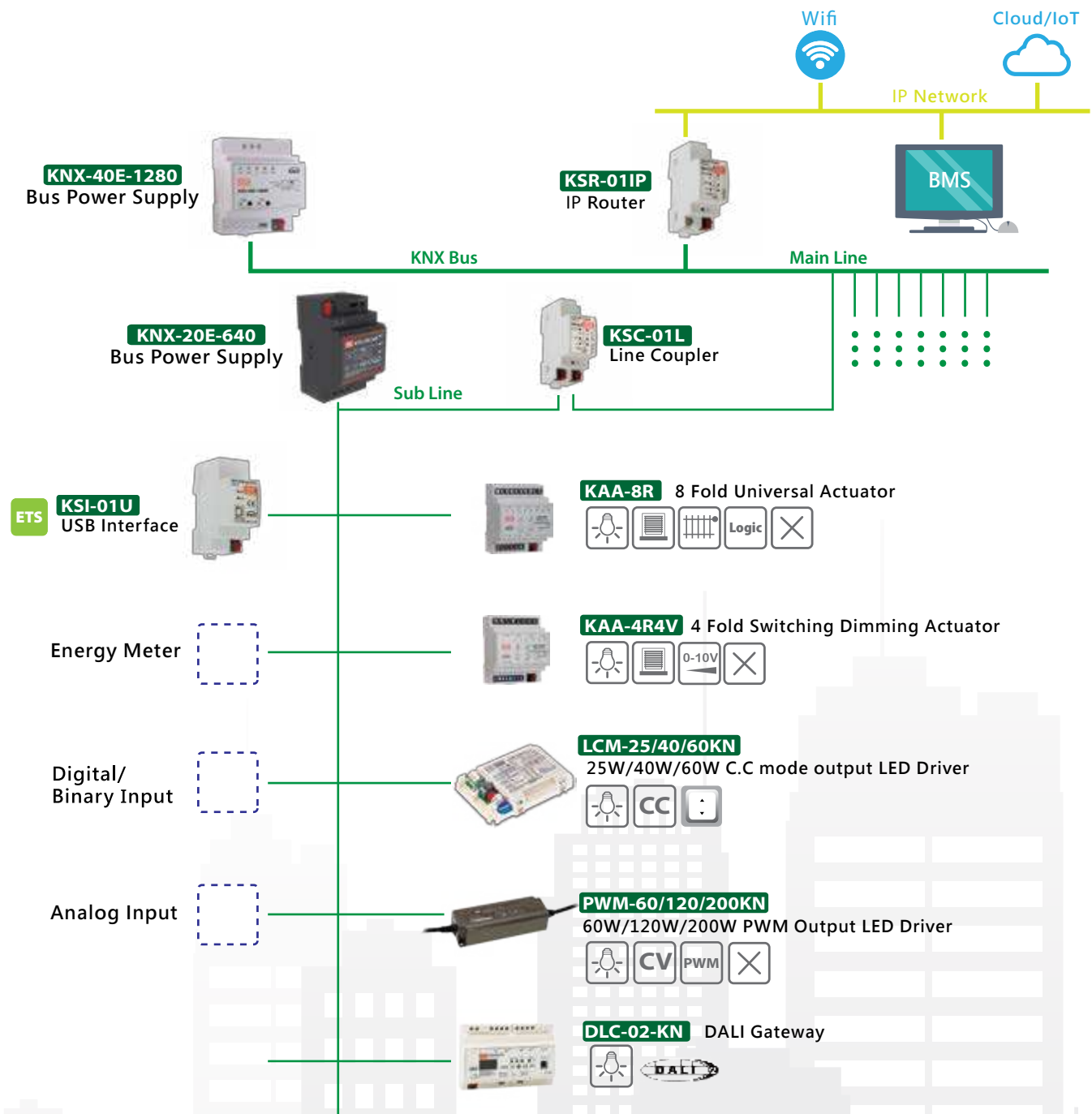
- 96 Product Tree
- 97 LCM/PWM Series
- 98 DLC-02-KN/KAA Series
- 99 KNX-20E-640  
KNX-40E-1280  
KSI-01U (USB Interface)  
KSR-01IP (IP Router)  
KSC-01L (Line Coupler)



**moorgen**  
CERTIFIED PARTNER

The MEAN WELL KNX product range includes components covering the complete applications found in modern buildings, Ranging from lighting, shutter control to heating, ventilation and many more. Furthermore, with over 35 years experience of the industrial power supply, MEAN WELL provides a variety of standard power supplies for all kinds of applications such as safety, surveillance, video, audio... etc.

# Product Tree



|  |                  |  |                       |  |                       |  |                               |  |                          |
|--|------------------|--|-----------------------|--|-----------------------|--|-------------------------------|--|--------------------------|
|  | Under Planning   |  | Blind/Shutter Control |  | Logic Function        |  | Constant Current Driving Mode |  | DC 0-10V Dimming Control |
|  | Lighting Control |  | Heating Control       |  | Push Button Interface |  | Constant Voltage Driving Mode |  | PWM Style Output Mode    |
|  | Data Secure      |  |                       |  |                       |  |                               |  |                          |



Fast and Multi Language Support for any question of KNX product within 24 hr.  
For the details please check the last page.



# LCM/PWM series

## LCM-25/40/60KN

## 25~60W KNX Constant Current LED Driver

EL     CB  CE



- KNX protocol
- Constant current mode output with multiple levels selectable by dip switch
- Support emergency lighting(EL)
- Constant lumen output
- Intergrated KNX push button interface
- Synchronization up to 10 units
- Functions: manual dim, operation hours, log/linear curve selection
- 3 years warranty

| Model No. | Output               | Io Tol. | Efficiency |
|-----------|----------------------|---------|------------|
| LCM-25KN  | 350mA~1050mA, 6~54V  | ±5%     | 86%        |
| LCM-40KN  | 350mA~1050mA, 2~100V | ±5%     | 90%        |
| LCM-60KN  | 500mA~1400mA, 2~90V  | ±5%     | 91%        |

## PWM-60/120/200KN

## 60~200W KNX Constant Voltage LED Driver

    CB  CE 



- KNX protocol
- Constant Voltage PWM style output with user changeable frequency up to 4KHz
- minimal dimming level 0.01%
- Built-in active PFC function
- Functions: operation hours, Constant lumen output, wattage feedback, log/linear/DALI curve selection
- 5 years warranty

| Model No.   | Output       | Vo Tol. | Efficiency |
|-------------|--------------|---------|------------|
| PWM-60-12□  | 12V, 0~5A    | ±4%     | 86%        |
| PWM-60-24□  | 24V, 0~2.5A  | ±3%     | 89%        |
| PWM-120-12□ | 12V, 0~10A   | ±4%     | 88%        |
| PWM-120-24□ | 24V, 0~5A    | ±4%     | 90%        |
| PWM-200-12□ | 12V, 0~15A   | ±4%     | 92%        |
| PWM-200-24□ | 24V, 0~8.3A  | ±4%     | 93%        |
| PWM-200-36□ | 36V, 0~5.5A  | ±4%     | 94%        |
| PWM-200-48□ | 48V, 0~4.17A | ±4%     | 94%        |

□ = KNX/KNBST KN: KNX control technology ; KNBST: KNX control technology with BST14 connector

# DLC&KAA series

KNX LED Dimmer/Universal/  
Actuator

## DLC-02-KN

## KNX to DALI Gateway



**NEW**



- DALI-2 multi-master application controller
- Two independent DALI Bus channels with built in bus power supply (up to 250mA per bus)
- Connect up to 2x64 DALI ECGs/Driver and up to 2x12 DALI input devices
- LCD display, LED indicators and buttons for local operation
- Built in with 250V/10Ax4 relay
- Easy installation and configuration via PC software or web browser
- Simplify configuration, Plug and Play
- Multiple control effect based on the time event and input devices
- KNX to DALI gateway(KNX version)
- 5 years warranty

| Model No.                   |                 | DLC-02-KN                                                          |
|-----------------------------|-----------------|--------------------------------------------------------------------|
| AC input                    | Voltage Range   | 100-277VAC, 120-370VDC                                             |
|                             | Frequency Range | 50-60Hz                                                            |
| Input KNX Bus               |                 | Standard KNX connector                                             |
| BUS Voltage                 |                 | Two Built-in DALI bus ;Voltage range;2x16V                         |
| BUS Rated Current           |                 | 2x240mA                                                            |
| BUS Channel                 |                 | 2                                                                  |
| USB Interface               |                 | 1USB slave connector, type-B                                       |
| Working Temperature         |                 | -25~+45 °C                                                         |
| Ethernet communication port |                 | 100MB/s via RJ45 connector                                         |
| Safety Standards            |                 | EAC TP TC 004 approved; Compliance to BS EN61347-1;BS EN61347-2-11 |
| DALI Standards              |                 | Comply with IEC62386-101/103                                       |
| EMC Emission                |                 | Compliance to BS EN55015, EAC TP TC 020,BS EN63044-5-2/EN63044-5-3 |
| Dimension                   |                 | 144*90*58mm (L*W*H) 8 units wide                                   |
| DIN RAIL Mounting           |                 | 35mm rail                                                          |

## KAA-4R4V/KAA-8R

## KNX LED Dimmer/Universal/Actuator



**NEW**



KAA-4R4V



KAA-8R

- Dimming and switching LED driver and conventional electronic ballast(for KAA-4R4V)
- Linear or logarithmic dimming curve programmable via ETS software(for KAA-4R4V)
- 8 channel actuator in a compact size(for KAA-8R)
- For AX,C-load, capacitive & inductive of loads (for KAA-8R)
- Manual control via Push button
- Programmable various time and scene function
- 3 years warranty

| Model No.                              | KAA-4R4V-10                                                                                | KAA-8R                          | KAA-8R-10                       |
|----------------------------------------|--------------------------------------------------------------------------------------------|---------------------------------|---------------------------------|
| KNX Bus voltage                        | 21~31V                                                                                     |                                 |                                 |
| Current consumption                    | <11mA                                                                                      | <6mA                            |                                 |
| Power consumption                      | <250mW                                                                                     | <180mW                          |                                 |
| Voltage range                          | 0-10V                                                                                      | ---                             |                                 |
| NO. of control output                  | 4                                                                                          | ---                             |                                 |
| MAX. current per output                | 50mA                                                                                       | ---                             |                                 |
| Nr. of relay                           | 4                                                                                          | 8                               |                                 |
| Independent & potential-free per relay | Yes                                                                                        | ---                             |                                 |
| Ohmic load/Capacitive load             | 10A/220μF                                                                                  | 16A/220μF                       | 10A/220μF                       |
| MAX. inrush current                    | 400A(max. 200μs),80A(max. 20ms)                                                            | 800A(max. 200μs),165A(max.20ms) | 400A(max. 200μs),80A(max. 20ms) |
| Safety standards                       | BS EN50491-3, BS EN60669-1, BS EN60669-2-1, BS EN60669-2-5                                 |                                 |                                 |
| EMC emission                           | BS EN50491-5-1,-2,-3, BS EN50090-2-2, BS EN60669-2-1, BS EN60669-2-5, BS EN63044-5-1,-2,-3 |                                 |                                 |
| Dimension(WxHxD)(mm)                   | 72x 90x 57                                                                                 |                                 |                                 |

# KNX System Component

## KNX-20E/40E

## 640mA & 1280mA Bus Power Supply

SELV ENEC UKCA CE KNX



**KNX-20E-640**  
W52.5x H90x D54.5mm

- EIB / KNX power supply with Integrated choke
- Compact size with 3SU/4SU width
- Safety extra low voltage(SELV)
- 180~264VAC input
- No load power consumption <0.5W
- Protections: Short circuit / Overload(short-circuit-proof) / Over voltage
- Cooling by free air convection
- Isolation class I
- LED indicator for normal operation, bus reset and bus overload
- Installed on DIN rail TS-35/7.5 or 15
- Over voltage category III
- Wide operating temperature: -30~+70°C
- 3 years warranty

| Model No.                               | V <sub>out1</sub><br>(with choke) | V <sub>out2</sub><br>(without choke) | I <sub>out</sub><br>(I <sub>1</sub> +I <sub>2</sub> ) |
|-----------------------------------------|-----------------------------------|--------------------------------------|-------------------------------------------------------|
| KNX-20E-640                             | Bus, 30VDC                        | 30VDC                                | 640mA                                                 |
| KNX-40E-1280 <input type="checkbox"/> D | Bus, 30VDC                        | 30VDC                                | 1280mA                                                |

☐ : Blank, D ; Blank= Basic function, D=Diagnostic function

SELV ENEC UKCA CE KNX DEKRA



**KNX-40E-1280**  
W72x H90x D57mm

## KSI-01U

## USB Interface

KNX UKCA CE



W36x H90x D71mm

- No additional power supply required
- KNX commissioning addressing and parameters settings
- Long messages support up to 220 byte APDU
- 3 years warranty

## KSR-01IP

## IP Router

KNX UKCA CE



W36x H90x D71mm

- KNX IP/TP routing
- Built-in web server
- KNX IP secure (optional)
- 3 years warranty

## KSC-01L

## Line Coupler

KNX UKCA CE



W36x H90x D71mm

- KNX TP Line coupler/Repeater
- Telegram filtering function
- Long messages support up to 240 byte APDU
- 3 years warranty

# Comparison Chart

▶ PFC

| Family                                                                      |                         | AC Input Range (VAC) | Potted    | C.C./C.P./C.V.<br>(Note 1) | IP    | Dimming<br>(Note 2) | Vo / Io<br>Adj | Warranty<br>(years) | Remark                                                       |                |  |
|-----------------------------------------------------------------------------|-------------------------|----------------------|-----------|----------------------------|-------|---------------------|----------------|---------------------|--------------------------------------------------------------|----------------|--|
| Series Name                                                                 | Type                    |                      |           |                            |       |                     |                |                     |                                                              |                |  |
| XLG-25/50/75/100/150 / 200/240                                              | Blank/A                 | 100-305              | ✓         | C.P.                       | 67    |                     | Io             | 5                   |                                                              |                |  |
|                                                                             | AB                      |                      |           |                            |       | 3 in 1              |                |                     |                                                              |                |  |
| HLG-40H / 60H / 80H / 100H / 120H / 150H / 185H / 240H / 320H / 480H / 600H | A                       | 90~305               | ✓         | C.V.+C.C.                  | 65    |                     | ✓              | 7                   |                                                              |                |  |
|                                                                             | B/AB                    |                      |           |                            | 67/65 | 3 in 1              |                |                     |                                                              |                |  |
|                                                                             | C (240W/320W only)      |                      |           |                            |       |                     | ✓              |                     |                                                              |                |  |
|                                                                             | Blank (40~320W)         |                      |           |                            | 67    |                     |                |                     |                                                              |                |  |
|                                                                             | D (option, 40~480W)     |                      |           |                            |       | Timer               |                |                     |                                                              |                |  |
|                                                                             | D2 (option, 480W only)  |                      |           |                            |       | Smart Timer         |                |                     |                                                              |                |  |
|                                                                             |                         |                      |           |                            |       |                     |                |                     |                                                              |                |  |
| HLG-60H-C / 80H-C / 120H-C / 185H-C / 240H-C / 320H-C / 480H-C              | A                       | 90~305               | ✓         | C.C.                       | 65    |                     | Io             | 7                   |                                                              |                |  |
|                                                                             | B/AB                    |                      |           |                            | 67/65 | 3 in 1              |                |                     |                                                              |                |  |
|                                                                             | D (70~200W)             |                      |           |                            | 67    | Timer               |                |                     |                                                              |                |  |
|                                                                             | D2 (option, 250~480W)   |                      |           |                            |       | Smart Timer         |                |                     |                                                              |                |  |
|                                                                             | DA (option, 320W only)  |                      |           |                            |       | DALI/DALI-2         |                |                     |                                                              |                |  |
| ELG-75 / 100 / 150 / 200 / 240                                              | A                       | 100~305              | ✓         | C.V.+C.C.                  | 65    |                     | ✓              | 5                   |                                                              |                |  |
|                                                                             | B/AB                    |                      |           |                            | 67/65 | 3 in 1              |                |                     |                                                              |                |  |
|                                                                             | Blank                   |                      |           |                            | 67    |                     |                |                     |                                                              |                |  |
|                                                                             | D2                      |                      |           |                            |       | Smart Timer         |                |                     |                                                              |                |  |
|                                                                             | DA                      |                      |           |                            |       | DALI                |                |                     |                                                              |                |  |
|                                                                             | BE (150W only)          |                      |           |                            |       | 3 in 1              |                |                     |                                                              |                |  |
| ELG-300                                                                     |                         | 100~305              | ✓         | C.V.+C.C.                  | 67    |                     | Io             | 5                   |                                                              |                |  |
| ELG-50-C / 75-C / 100-C / 150-C / 200-C / 240-C<br>ELGT-150 / ELGC-300      | A                       | 100~305              | ✓         | C.C.                       | 65    |                     | Io             | 5                   | ELGC-300-ADA with DALI-2                                     |                |  |
|                                                                             | B/AB                    |                      |           |                            | 67/65 | 3 in 1              |                |                     |                                                              |                |  |
|                                                                             | Blank (ELGC-300 except) |                      |           |                            | 67    |                     |                |                     |                                                              |                |  |
|                                                                             | D2                      |                      |           |                            |       | Smart Timer         |                |                     |                                                              |                |  |
|                                                                             | DA /ADA(DALI-2)         |                      |           |                            |       | DALI/DALI-2         |                |                     |                                                              |                |  |
|                                                                             | BE (ELG-150-C only)     |                      |           | C.P.<br>(ELGC-300 only)    |       | 3 in 1              | Io             | 5                   |                                                              |                |  |
|                                                                             | AB (ELGC-300 only)      |                      |           |                            |       |                     |                |                     |                                                              |                |  |
| XBG-100/160/240                                                             | A                       | 90~305               | ✓         | C.P.                       | 67    |                     | Io             | 5                   |                                                              |                |  |
|                                                                             | AB                      |                      |           |                            |       | 3 in 1              |                |                     |                                                              |                |  |
| HBG                                                                         | 60                      |                      | 90~295    | ✓(half)                    | C.C.  |                     |                | 5                   | 1. Circular shape<br>2. Metal case (Plastic case for HBG-60) |                |  |
|                                                                             | 100                     | A/AB                 | ✓         | C.C.                       | 65    |                     | Io             |                     |                                                              |                |  |
|                                                                             |                         | B                    |           |                            | 67    | 3 in 1              |                |                     |                                                              |                |  |
|                                                                             |                         | Blank                |           |                            |       |                     |                |                     |                                                              |                |  |
|                                                                             |                         | DA                   |           |                            |       | DALI                |                |                     |                                                              |                |  |
|                                                                             | 160 / 200 / 240         | A/AB                 |           | C.V.+C.C.                  | 65    |                     | Io             |                     |                                                              |                |  |
|                                                                             |                         | B                    |           |                            | 67    | 3 in 1              |                |                     |                                                              |                |  |
|                                                                             |                         | AB (200W only)       |           |                            | 65    | 3 in 1              | Io             |                     |                                                              |                |  |
|                                                                             |                         | Blank                |           |                            | 67    |                     |                |                     |                                                              |                |  |
|                                                                             | DA                      | 3 in 1               |           |                            |       | Io                  |                |                     |                                                              |                |  |
|                                                                             | 60P                     |                      | 90~295    |                            |       | C.C.                |                |                     |                                                              |                |  |
|                                                                             | 100P                    | A                    | C.C.      |                            |       | Io                  |                |                     |                                                              |                |  |
|                                                                             |                         | B                    |           | 3 in 1                     |       |                     |                |                     |                                                              |                |  |
|                                                                             |                         | DA                   |           | DALI                       |       |                     |                |                     |                                                              |                |  |
|                                                                             | 160P / 240P             | A                    | C.V.+C.C. |                            | Io    |                     |                |                     |                                                              |                |  |
|                                                                             |                         | B                    |           | 3 in 1                     |       |                     |                |                     |                                                              |                |  |
|                                                                             |                         | DA (160W only)       |           | DALI                       |       |                     |                |                     |                                                              |                |  |
| HBGC-300                                                                    |                         | A                    | 90~305    | ✓                          | C.P.  | 67                  |                | Io                  | 5                                                            | Circular shape |  |
|                                                                             |                         | AB                   |           |                            |       |                     | 3 in 1         | Io                  |                                                              |                |  |
|                                                                             |                         | ADA                  |           |                            |       |                     | DALI-2         |                     |                                                              |                |  |

# Comparison Chart

| Family                                             |                        | AC Input Range (VAC)            | Potted                  | C.C./C.P./C.V. (Note 1)                                           | IP                 | Dimming (Note 2)      | V <sub>o</sub> / I <sub>o</sub> Adj | Warranty (years) | Remark                                             |
|----------------------------------------------------|------------------------|---------------------------------|-------------------------|-------------------------------------------------------------------|--------------------|-----------------------|-------------------------------------|------------------|----------------------------------------------------|
| Series Name                                        | Type                   |                                 |                         |                                                                   |                    |                       |                                     |                  |                                                    |
| HVG(C)-65 / 100 / 150 / 240 / 320 / 480 / 650/1000 | A                      | 180~528                         | ✓                       | HVG : C.V.+C.C.<br><br>HVGC : C.C.<br><br>HVGC-480/650 /1000:C.P. | 65                 |                       | HVG: ✓<br>HVGC:I <sub>o</sub>       | 5                | HVG-650/1000 AB-Type IP:67                         |
|                                                    | B                      |                                 |                         |                                                                   | 67                 | 3 in 1                |                                     |                  |                                                    |
|                                                    | AB                     |                                 |                         |                                                                   | 65                 |                       | HVG: ✓<br>HVGC:I <sub>o</sub>       |                  |                                                    |
|                                                    | D (option, 65~150W)    |                                 |                         |                                                                   | 67                 | Timer                 |                                     |                  |                                                    |
|                                                    | D2 (option, 240~1000W) |                                 |                         |                                                                   | 67                 | Smart Timer           |                                     |                  |                                                    |
|                                                    | DA (480W, 650W)        |                                 |                         |                                                                   |                    | DALI                  |                                     |                  |                                                    |
|                                                    | DA(1000W only)         |                                 |                         |                                                                   |                    | DALI-2                |                                     |                  |                                                    |
| FDL-65                                             |                        | 180~295                         | ✓                       | C.C.                                                              | 65                 |                       | I <sub>o</sub>                      | 3                |                                                    |
| SLD-50/80                                          |                        | 110~305                         |                         | C.V.+C.C.                                                         |                    |                       | I <sub>o</sub> (56V)                | 3                |                                                    |
| LDC-35 / 55 / 80                                   | B                      | 180~264                         |                         | C.P.                                                              |                    | 3 in 1                | I <sub>o</sub> Adj                  | 5                | 1. CP mode<br>2. Flicker free<br>3.55W with DALI-2 |
|                                                    | Blank                  |                                 |                         |                                                                   |                    |                       |                                     |                  |                                                    |
|                                                    | DA/DA2                 |                                 |                         |                                                                   |                    | DALI /DALI-2 Push Dim |                                     |                  |                                                    |
| HLN-40H / 60H / 80H                                | A                      | 90~305                          | ✓<br>(60W/80W half)     | C.V.+C.C.                                                         | 64                 |                       | ✓                                   | 3                |                                                    |
|                                                    | B                      |                                 |                         |                                                                   |                    | 3 in 1                |                                     |                  |                                                    |
| LPF-16 □ / 25 □ / 40 □ / 60 □ / 90 □               | D                      | 90~305                          | ✓                       | Blank Type : C.V.+C.C.<br>D-Type : C.C.                           | 67<br>(16W option) | 3 in 1                |                                     | 5                |                                                    |
|                                                    | Blank                  |                                 |                         |                                                                   |                    |                       |                                     |                  |                                                    |
| NPF-40□ / 60□ / 90□ / 120□ / 200□                  | D/V                    | 90~305                          | ✓                       | Blank Type : C.V.+C.C.<br>D-Type : C.C.<br>V-Type:C.V             | 67                 | 3 in 1                |                                     | 5                | 1. NPF-200V with C.V Dimming                       |
|                                                    | Blank                  |                                 |                         |                                                                   |                    |                       |                                     |                  |                                                    |
| PWM-40 / 60 / 90 / 120 /200                        | 60~200DA/DA2           | 90~305                          | ✓                       | C.V.                                                              | 67                 | DALI/DALI-2           |                                     | 5                | PWM output                                         |
|                                                    | 60/120/200             |                                 |                         |                                                                   |                    | KNX/IoT               |                                     |                  |                                                    |
|                                                    | Blank                  |                                 |                         |                                                                   |                    | 3 in 1                |                                     |                  |                                                    |
| IDLV-25 / 45 / 65                                  | A                      | 25W/45W: 90~295<br>65W: 180~295 |                         | C.V.                                                              |                    | 2 in 1                |                                     | 3                | 1. PWM output<br>2. Terminal block                 |
|                                                    | Blank                  |                                 |                         |                                                                   |                    |                       |                                     |                  |                                                    |
| IDLC-25 / 45 / 65                                  | A/Blank                | 25W/45W: 90~295<br>65W: 180~295 |                         | C.C.                                                              |                    | 2 in 1                |                                     |                  | 1. Flicker free<br>2. Terminal block               |
|                                                    | DA (45~65W)            |                                 |                         |                                                                   |                    | DALI                  |                                     |                  |                                                    |
| ODLV-45 / 65                                       | A                      | 180~295                         |                         | C.V.                                                              | 67                 | 2 in 1                |                                     |                  | PWM output                                         |
|                                                    | Blank                  |                                 |                         |                                                                   |                    | 2 in 1 & Auxiliary DC |                                     |                  |                                                    |
| ODLC-45 / 65                                       | A/Blank                | 90~295                          |                         | C.C.                                                              | 67                 | 2 in 1                |                                     | 3                | Flicker free                                       |
|                                                    | DA                     |                                 |                         |                                                                   |                    | DALI                  |                                     |                  |                                                    |
| OWA- 90 / 120 / 200                                |                        | 90~264<br>(OWA-120E: 180~264)   | ✓                       | C.C.+C.V.                                                         | 67*                |                       |                                     | 5                | External type                                      |
| PLN-100                                            |                        | 90~295                          |                         | C.C.+C.V.                                                         | 64                 |                       | ✓                                   | 2                |                                                    |
| PLN-30 / 45 / 60                                   |                        | 90~295                          |                         | C.C.                                                              | 64                 |                       | ✓                                   | 2                |                                                    |
| PLN-20                                             |                        | 90~277                          |                         | C.C.                                                              | 64                 |                       | I <sub>o</sub>                      | 2                |                                                    |
| PLC-100                                            |                        | 90~264                          |                         | C.V.+C.C.                                                         |                    |                       | ✓                                   | 2                | Terminal block I/O                                 |
| PLC-30 / 45 / 60                                   |                        | 90~264                          |                         | C.C.                                                              |                    |                       | ✓                                   | 2                | Terminal block I/O                                 |
| PCD-16 / 25 / 40 / 60                              |                        | A: 90~135<br>B: 180~295         | ✓<br>(16W/25W/60W half) | C.C.                                                              | 42                 | AC Phase-Cut          |                                     | 3                |                                                    |

# Comparison Chart

| Family                   |         | AC Input Range<br>(VAC)                 | Potted                      | C.C./C.P./C.V.<br>(Note 1) | IP | Dimming<br>(Note 2)  | Vo / Io<br>Adj | Warranty<br>(years) | Remark                                                 |
|--------------------------|---------|-----------------------------------------|-----------------------------|----------------------------|----|----------------------|----------------|---------------------|--------------------------------------------------------|
| Series Name              | Type    |                                         |                             |                            |    |                      |                |                     |                                                        |
| PLD-16 / 25 / 40 / 60    |         | 16W/40W/60W:<br>A: 90~135<br>B: 180~295 | ✓<br>(16W/25W/<br>60W half) | C.C.                       | 42 |                      |                | 3                   |                                                        |
|                          |         | 25W: 90~295                             |                             |                            |    |                      |                |                     |                                                        |
| GSV30 / 60               |         | 30W: 180~264<br>60W: 180~264            |                             | C.V.                       |    |                      |                | 3                   | 1.External type<br>2.with PFC                          |
| PLM-12 / 25              |         | 110~295                                 |                             | C.C.                       | 30 |                      |                | 2                   | Terminal block                                         |
| PLM- 25E                 |         | 180~295                                 |                             |                            |    |                      |                |                     |                                                        |
| LCM-25 / 40 / 60 (EO)    |         | 25W: 180~277<br>40W/60W: 180~295        |                             | C.C.                       |    | EnOcean              |                | 3                   | 1. Io level<br>selectable<br>2. Terminal<br>block      |
| LCM-25/40/60(DA/DA2/IoT) |         |                                         |                             |                            |    | DALI & IoT<br>DALI-2 |                |                     |                                                        |
| LCM-25/40/ 60-KN         |         |                                         |                             |                            |    | KNX/EIB              |                |                     |                                                        |
| LCM-40U / 60U (EO)       |         |                                         |                             |                            |    | EnOcean              |                |                     |                                                        |
| LCM-40UDA / 60UDA        |         | DALI &<br>Push DIM                      |                             |                            |    |                      |                |                     |                                                        |
| 90~132                   |         |                                         |                             |                            |    |                      |                |                     |                                                        |
| IDPV-25 / 45 / 65        | A/Blank | 25W/45W: 90~295<br>65W: 180~295         |                             | C.V.                       |    |                      | 2 in 1         | 3                   | 1. PCB type<br>2. Terminal<br>block                    |
| IDPC-25 / 45 / 65        | A/Blank | 25W/45W: 90~295<br>65W: 180~295         |                             | C.C.                       |    |                      | 2 in 1         |                     | 1. PCB type<br>2. Flicker free<br>3. Terminal<br>block |
|                          | DALI    |                                         |                             |                            |    |                      | DALI           |                     |                                                        |
| PLP-30 / 45 / 60         |         | 90~264                                  |                             | C.C.                       |    |                      | Io             | 2                   | PCB type                                               |
| HLP-40H / 60H / 80H      |         | 90~305                                  |                             | C.C.                       |    | 3 in 1               | ✓              | 3                   | PCB type                                               |
| ERPF-400                 |         | 90~264                                  | half                        | C.V.                       |    |                      | Vo             | 3                   |                                                        |

## ► Non-PFC

| Family                                                      |      | AC Input Range (VAC)                                                                      | Potted              | C.C. or C.V.<br>(Note 1) | IP  | Max.<br>Eff. | Warranty<br>(years) | Remark        |
|-------------------------------------------------------------|------|-------------------------------------------------------------------------------------------|---------------------|--------------------------|-----|--------------|---------------------|---------------|
| Series Name                                                 | Type |                                                                                           |                     |                          |     |              |                     |               |
| APV-8 / 12 / 16 / 25 / 35                                   |      | 90~264                                                                                    | ✓<br>(16W/35W half) | C.V.                     | 42  | 85%          | 2                   |               |
| APC-8 / 12 / 16 / 25 / 35                                   |      | 90~264                                                                                    | ✓<br>(16W/35W half) | C.C.                     | 42  | 84%          | 2                   |               |
| APV-8E / 12E / 16E                                          |      | 180~264                                                                                   | ✓<br>(16W half)     | C.V.                     | 42  | 83%          | 2                   |               |
| APC-8E / 12E / 16E                                          |      | 180~264                                                                                   | ✓<br>(16W half)     | C.C.                     | 42  | 83%          | 2                   |               |
| LPL-18 / LPH-18<br>LPV-20 / 35 / 60 / 100 / 150<br>LPVL-150 |      | LPL: 90~132<br>LPH: 180~264<br>LPV-20~100: 90~264<br>LPV-150: 180~305<br>LPVL-150: 90~132 | ✓                   | C.V.                     | 67  | 90%          | 2                   |               |
| LPLC-18 / LPHC-18<br>LPC-20 / 35 / 60 / 100 / 150           |      | LPLC: 90~132<br>LPHC: 180~264<br>LPC-20~100: 90~264<br>LPC-150: 180~305                   | ✓                   | C.C.                     | 67  | 90%          | 2                   |               |
| OWA-60                                                      |      | 90~264                                                                                    | ✓                   | C.V.+C.C.                | 67* | 91%          | 5                   | External type |
| ERP -200/350                                                |      | 180~264                                                                                   | half                | C.V.                     |     | 90%          | 3                   |               |

**Note 1** C.V. represents Constant Voltage Mode Output, whereas C.C. represents Constant Current Mode Output; C.P. represents constant power mode output. For C.V.+C.C., C.C., and C.V. operations, please refer to Application Q&A section on MEAN WELL LED website. (The C.C. only LED power supplies are suitable for directly driving LED modules, but not suitable for connecting with additional DC-DC LED drivers.)

**Note 2** 3 in 1 dimming: 1~10Vdc (or 0~10Vdc), PWM signal, or resistance.

2 in 1 dimming: 1~10Vdc (or 0~10Vdc), PWM signal.

DALI: DALI control technology

BLE: Bluetooth mesh dimming

For Timer Dimming and Smart Timer Dimming function, please contact MEAN WELL for details.

**Note 3** \* IP67 design for power body

# Certification Chart

## ► Metal Case

● : Certified for whole series ; ▲ : Certified for assigned models

| Standard<br>Series | Class 2 power unit | UL8750 (type "HL") | UL62368-1<br>EN62368-1 | UL879         | EN61347-1,<br>EN61347-2-13 | PSE J61347-1,<br>J61347-2-13 | EN55015 | EN61000-3-2<br>Class □ | EN55032 Class □ | CE | CB | CCC (Note 1) |
|--------------------|--------------------|--------------------|------------------------|---------------|----------------------------|------------------------------|---------|------------------------|-----------------|----|----|--------------|
| XLG-25/50          | ●                  | ●HL                |                        |               | ●                          | ●                            | ●       | C                      |                 | ●  | ●  | ●            |
| XLG-75/100         | ●                  | ●HL                |                        | 12V/24V       | ●                          | ●                            | ●       | C                      |                 | ●  | ●  | ●            |
| XLG-150/200/240    |                    | ●HL                |                        | 12V/24V(150W) | ●                          | ●                            | ●       | C                      |                 | ●  | ●  | ●            |
| ELG-75/100         | ●                  | ●HL                |                        |               | ●                          |                              | ●       | C                      |                 | ●  | ●  | ●            |
| ELG-150/200/240    |                    | ●HL                |                        |               | ●                          |                              | ●       | C                      |                 | ●  | ●  | ●            |
| ELG- 300           |                    | ●HL                |                        |               | ●                          |                              | ●       | C                      |                 | ●  | ●  | ●            |
| ELG-75-C           |                    | ●HL                |                        |               | ●                          |                              | ●       | C                      |                 | ●  | ●  | ●            |
| ELG-100-C          |                    | ●HL                |                        |               | ●                          |                              | ●       | C                      |                 | ●  | ●  | ●            |
| ELG-150-C          |                    | ●HL                |                        |               | ●                          |                              | ●       | C                      |                 | ●  | ●  | ●            |
| ELG-200-C          |                    | ●HL                |                        |               | ●                          |                              | ●       | C                      |                 | ●  | ●  | ●            |
| ELG-240-C          |                    | ●HL                |                        |               | ●                          |                              | ●       | C                      |                 | ●  | ●  | ●            |
| ELGC-300           |                    | ●HL                |                        |               | ●                          |                              | ●       | C                      |                 | ●  | ●  | ●            |
| HLG-40H/60H        | ●                  | ●HL                |                        |               | ●                          | ▲                            | ●       | C                      |                 | ●  | ●  | ●            |
| HLG-80H            | ●                  | ▲HL                |                        |               | ●                          | ▲                            | ●       | C                      |                 | ●  | ●  | ●            |
| HLG-100H           | ●                  | ●HL                |                        |               | ●                          | ▲                            | ●       | C                      | B               | ●  | ●  | ●            |
| HLG-120H/150H      |                    | ●HL                |                        |               | ●                          | ▲                            | ●       | C                      | B               | ●  | ●  | ●            |
| HLG-185H           |                    | ●HL                |                        |               | ●                          | ▲                            | ●       | C                      | B               | ●  | ●  | ●            |
| HLG-240H/320H      |                    | ●HL                | ● 240W                 | ● 240W        | ●                          | ▲                            | ●       | C                      | B               | ●  | ●  | ●            |
| HLG-480H           |                    | ●HL                |                        |               | ●                          | ▲                            | ●       | C                      |                 | ●  | ●  | ●            |
| HLG-600H           |                    | ●HL                |                        |               | ●                          | ●                            | ●       | C                      |                 | ●  | ●  | ●            |
| HLG-60H-C          |                    | ●                  |                        |               | ●                          |                              | ●       | C                      |                 | ●  | ●  | ●            |
| HLG-80H-C          |                    | ●                  |                        |               | ●                          |                              | ●       | C                      |                 | ●  | ●  | ●            |
| HLG-120H-C         |                    | ●                  |                        |               | ●                          | ▲ A type                     | ●       | C                      |                 | ●  | ●  | ●            |
| HLG-185H-C         |                    | ●                  |                        |               | ●                          | ▲ A type                     | ●       | C                      |                 | ●  | ●  | ●            |
| HLG-240H-C         |                    | ●HL                |                        |               | ●                          |                              | ●       | C                      |                 | ●  | ●  | ●            |
| HLG-320H-C         |                    | ●HL                |                        |               | ●                          |                              | ●       | C                      |                 | ●  | ●  | ●            |
| HLG-480H-C         |                    | ●HL                |                        |               | ●                          |                              | ●       | C                      |                 | ●  | ●  | ●            |
| HVG-65             | ●                  | ●                  |                        |               |                            |                              | ●       | C                      |                 |    |    |              |
| HVG-100            | ●                  | ●HL                |                        |               |                            |                              | ●       | C                      |                 |    |    |              |
| HVG-150            |                    | ●HL                |                        |               |                            |                              | ●       | C                      |                 |    |    |              |
| HVG-240            |                    | ●HL                |                        |               |                            |                              |         |                        |                 |    |    |              |
| HVG-320            |                    | ●HL                |                        |               |                            |                              |         |                        |                 |    |    |              |
| HVG-480            |                    | ●HL                |                        |               |                            |                              |         |                        |                 |    |    |              |
| HVGC-65            |                    | ●                  |                        |               | ●                          |                              | ●       | C                      |                 | ●  | ●  |              |
| HVGC-100           |                    | ●                  |                        |               | ●                          |                              | ●       | C                      |                 | ●  | ●  |              |
| HVGC-150           |                    | ●HL                |                        |               | ●                          |                              | ●       | C                      |                 | ●  | ●  |              |
| HVGC-240           |                    | ●HL                |                        |               | ●                          |                              | ●       | C                      |                 | ●  | ●  |              |
| HVGC-320           |                    | ●HL                |                        |               | ●                          |                              | ●       | C                      |                 | ●  | ●  | ●            |
| HVGC-480           |                    | ●HL                |                        |               | ●                          |                              | ●       | C                      |                 | ●  | ●  |              |
| HVGC-650           |                    | ●HL                |                        |               | ●                          |                              | ●       | C                      |                 | ●  | ●  | ●            |
| HVGC-1000          |                    | ●HL                |                        |               | ●                          |                              | ●       | C                      |                 | ●  | ●  | ●            |
| XBG-100/160/240    |                    | ●HL                |                        |               | ●                          |                              | ●       | C                      |                 | ●  | ●  | ●            |

Note1: CCC models are offered as optional models.

# Certification Chart

## ► Metal Case

● : Certified for whole series ; ▲ : Certified for assigned models

| Standard<br>Series | Class 2 power unit | UL8750 (type"HL") | EN62368-1/LVD | UL879 | EN61347-1,<br>EN61347-2-13 | PSE J61347-1,<br>J61347-2-13 | EN55015 | EN61000-3-2<br>Class | EN55032 Class | CE | CB | CCC (Note 2) |
|--------------------|--------------------|-------------------|---------------|-------|----------------------------|------------------------------|---------|----------------------|---------------|----|----|--------------|
| HBG-100/160(DA)    |                    | ●HL               |               |       | ●                          |                              | ●       | C                    |               | ●  | ●  | ●            |
| HBG-200(DA)        |                    | ●HL               |               |       | ●                          |                              | ●       | C                    |               | ●  | ●  | ●            |
| HBG-240(DA)        |                    | ●                 |               |       | ●                          |                              | ●       | C                    |               | ●  | ●  | ●            |
| HBGC-300           |                    | ●HL               |               |       | ●                          |                              | ●       | C                    |               | ●  | ●  | ●            |
| FDL-65             |                    |                   |               |       |                            |                              | ●       | C                    |               | ●  |    | ●            |
| FDLC-80/100        |                    |                   |               |       | ●                          |                              | ●       | C                    |               |    |    | ●            |
| FDHC-100           |                    |                   |               |       | ●                          |                              | ●       | C                    |               | ●  | ●  | ●            |
| LDC-35/55/80(DA)   |                    | ●                 |               |       | ●                          |                              | ●       | C                    |               | ●  | ●  | ●            |
| ERP-200/350        |                    |                   | ●             |       |                            |                              |         |                      |               |    | ●  | ●            |
| ERPF-400           |                    |                   | ●             |       |                            |                              |         |                      | A             | ●  | ●  | ●            |

**Note 2** : CCC models for HBG-100/160/240 are offered as optional models; CCC models for LDC-35/55/80(DA), except for LDC-55-DA2

**Note** : CQC models for ERP-200/350

**HL** : Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires.

## ► Plastic Case & PCB Type

■ : GS Mark ; ● : Certified for whole series ; ▲ : Certified for assigned models

| Standard<br>Series     | Class 2 power unit | UL8750 (type"HL") | EN62368-1/LVD | UL879 | EN61347-1,<br>EN61347-2-13 | PSE J61347-1,<br>J61347-2-13 | EN55015 | EN61000-3-2<br>Class | EN55032 Class | CE | CB | CCC (Note 3) |
|------------------------|--------------------|-------------------|---------------|-------|----------------------------|------------------------------|---------|----------------------|---------------|----|----|--------------|
| APV-8                  |                    | ●                 |               |       |                            |                              | ●       | A                    |               | ●  |    | ●            |
| APV-12/16              | ●                  | ●                 |               |       | ●                          |                              | ●       | A                    |               | ●  | ●  | ●            |
| APV-25/35              | ●                  | ●                 |               |       |                            |                              |         | A                    | B             | ●  |    |              |
| APC-8                  |                    | ●                 |               |       |                            |                              | ●       | A                    |               | ●  |    | ●            |
| APC-12/16              | ●                  | ●                 |               |       |                            |                              | ●       | A                    |               | ●  |    | ●            |
| APC-25/35              | ▲                  | ▲                 |               |       |                            |                              |         | A                    | B             | ●  |    |              |
| APV-8E/12E/16E         |                    |                   |               |       | ●                          |                              | ●       | A                    |               | ●  | ●  |              |
| APC-8E/12E/16E         |                    |                   |               |       | ●                          |                              | ●       | A                    |               | ●  | ●  |              |
| GSV30/60               |                    |                   |               |       | ●                          |                              | ●       | C                    |               | ●  |    |              |
| HBG-60 (P)             | ●                  | ●                 |               |       | ●                          |                              | ●       | C                    |               | ●  | ●  | ●            |
| HBG-100P/160P/240P     |                    | ●                 |               |       | ●                          |                              | ●       | C                    |               | ●  | ●  | ●            |
| HLN-40/60/80H          | ●                  | ●                 |               |       | ●                          | ●                            | ●       | C                    |               | ●  | ●  | ●            |
| HLP-40H/60H/80H        | ●                  | ●                 |               |       | ●                          |                              | ●       | C                    |               | ●  | ●  | ●            |
| SLD-50/80              | ●                  | ●HL               |               |       | ●                          |                              | ●       | C                    |               | ●  | ●  | ●            |
| LCM-25/40/60(DA)(EO)   |                    | ●                 |               |       | ●                          |                              | ●       | C                    |               | ●  | ●  | ●            |
| LCM-40U/60U(DA)(EO)    |                    | ●                 |               |       |                            |                              |         |                      |               |    |    |              |
| LCM-25/40/60-KN        |                    |                   |               |       | ●                          |                              | ●       | C                    |               | ●  | ●  |              |
| IDLV-25(A)/45(A)/65(A) | ●                  | ●                 |               |       | ●                          |                              | ●       | C                    |               | ●  | ●  | ●            |
| IDLC-25(A)/45(A)/65(A) |                    | ●                 |               |       | ●                          |                              | ●       | C                    |               | ●  | ●  | ●            |
| IDPV-25(A)/45(A)/65(A) | ●                  | ●                 |               |       | ●                          |                              | ●       | C                    |               | ●  | ●  | ●            |
| IDPC-25(A)/45(A)/65(A) |                    | ●                 |               |       | ●                          |                              | ●       | C                    |               | ●  | ●  | ●            |
| ODLV-45(A)/65(A)       |                    | ●                 |               |       | ●                          |                              | ●       | C                    |               | ●  | ●  | ●            |
| ODLC-45(A)/65(A)       |                    | ●                 |               |       | ●                          |                              | ●       | C                    |               | ●  | ●  | ●            |
| ODLC-45-DA/65-DA       |                    | ●                 |               |       | ●                          |                              | ●       | C                    |               | ●  | ●  | ●            |

**Note 3** : CCC models for AP and HLN series are offered as optional models.

# Certification Chart

## ► Plastic Case & PCB Type

● : Certified for whole series ; ▲ : Certified for assigned models

| Standard<br>Series | Class 2 power unit | UL8750 (type "HL") | EN62368-1 /LVD | UL879 | EN61347-1,<br>EN61347-2-13 | PSE J61347-1,<br>J61347-2-13 | EN55015  | EN61000-3-2<br>Class | EN55032 Class | CE       | CB | CCC (Note 4) |
|--------------------|--------------------|--------------------|----------------|-------|----------------------------|------------------------------|----------|----------------------|---------------|----------|----|--------------|
| LPL-18             | ●                  |                    |                |       |                            |                              |          | A                    | B             | ●        |    |              |
| LPH-18             | ●                  |                    | ●              |       |                            |                              |          | A                    | B             | ●        | ●  |              |
| LPV-20             | ●                  |                    | ●              | ●     |                            |                              |          | A                    | B             | ●        |    |              |
| LPV-35             | ●                  |                    | ●              |       |                            |                              |          | A                    | B             | ●        | ●  |              |
| LPV-60             | ▲                  |                    | ●              | ▲     |                            |                              |          | A                    | B             | ●        | ●  |              |
| LPV-100            |                    | ●                  | ●              | ●     |                            |                              |          | A                    | B             | ●        |    |              |
| LPV-150            |                    | ●                  | ●              | ●     |                            |                              |          | A                    | B             | ●        |    |              |
| LPVL-150           |                    | ●                  |                | ●     |                            |                              |          | A                    | B             |          |    |              |
| LPHC-18            |                    |                    |                |       |                            |                              |          | A                    | A             | ●        |    |              |
| LPC-20             | ●                  |                    | ●              | ●     |                            |                              |          | A                    | B             | ●        |    |              |
| LPC-35             | ●                  |                    | ●              |       |                            |                              |          | A                    | B             | ●        |    |              |
| LPC-60             | ●                  |                    | ●              |       |                            |                              |          | A                    | B             | ●        | ●  |              |
| LPC-100            |                    |                    | ●              |       |                            |                              |          | A                    | B             | ●        |    |              |
| LPC-150            |                    |                    | ●              |       |                            |                              |          | A                    | B             | ●        |    |              |
| LPF-16(D)/25(D)    | ●                  | ●                  |                |       | ●                          | ▲Blank                       | ●        | C                    |               | ●        | ●  | ●            |
| LPF-40(D)/60(D)    | ●                  | ●                  |                |       | ●                          | ▲Blank                       | ●        | C                    |               | ●        | ●  | ●            |
| LPF-90(D)          | ●                  | ●HL                |                |       | ●                          | ▲Blank                       | ●        | C                    |               | ●        | ●  | ●            |
| NPF-40(D)          | ●                  | ●HL                |                |       | ●                          |                              | ●        | C                    |               | ●        | ●  | ●            |
| NPF-60(D)          | ●                  | ●HL                |                |       | ●                          |                              | ●        | C                    |               | ●        | ●  | ●            |
| NPF-90(D)          | ▲                  | ●                  |                |       | ●                          |                              | ●        | C                    | B             | ●        | ●  | ●            |
| NPF-120(D)/200(V)  |                    | ●HL                |                |       | ●                          |                              | ●        | C                    |               | ●        | ●  | ●            |
| OWA-60E            |                    |                    |                |       |                            |                              |          | A                    | B             | ●        | ●  |              |
| OWA-60U            | ●                  | ●                  |                |       |                            |                              |          |                      |               |          |    |              |
| OWA-90E            |                    |                    |                |       |                            |                              |          |                      |               | ●        |    |              |
| OWA-90U            | ▲                  | ●                  |                |       |                            |                              |          |                      |               |          |    |              |
| OWA-120E           |                    |                    |                |       |                            |                              |          |                      |               | ●        | ●  |              |
| OWA-120U           |                    | ●                  |                |       |                            |                              |          |                      |               |          |    |              |
| OWA-200E           |                    | EN61558/60335      |                |       |                            |                              |          |                      | ●             | ●        | ●  |              |
| OWA-200U           |                    |                    | ●              |       |                            |                              |          |                      |               |          |    |              |
| PCD-16 (A/B)       | ●                  | ●                  |                |       | ▲ B type                   |                              | ▲ B type | C                    |               | ▲ B type | ●  | ●            |
| PCD-25 (A/B)       | ●                  | ●                  |                |       | ▲ B type                   |                              | ▲ B type | C                    |               | ▲ B type | ●  | ●            |
| PCD-40             |                    |                    |                |       | ●                          |                              | ●        | C                    |               | ●        | ●  | ●            |
| PCD-60             |                    |                    |                |       | ●                          |                              | ●        | C                    |               | ●        | ●  |              |
| PLC-30             | ●                  |                    |                |       | ●                          | ●                            | ●        | C                    |               | ●        | ●  |              |
| PLC-45/60/100      | ●                  |                    |                |       | ●                          | ●                            | ●        | C                    | B             | ●        | ●  |              |
| PLD-16 (A/B)       | ●                  | ●                  |                |       | ▲ B type                   |                              | ▲ B type | C                    |               | ▲ B type | ●  | ●            |
| PLD-25             | ●                  | ●                  |                |       | ●                          |                              | ●        | C                    |               | ●        | ●  | ●            |
| PLD-40             |                    |                    |                |       | ●                          |                              | ●        | C                    |               | ●        | ●  | ●            |
| PLD-60             |                    |                    |                |       | ●                          |                              | ●        | C                    |               | ●        | ●  |              |
| PLM-12             | ▲Blank             | ▲Blank             |                |       | ●                          |                              | ●        | C                    |               | ●        | ●  | ●            |
| PLM-25(E)          | ▲                  | ▲Blank             |                |       | ●                          | ●                            | ●        | C                    |               | ●        | ●  | ●            |
| PLN-20             | ●                  | ●                  |                |       | ●                          | ●                            | ●        | C                    |               | ●        | ●  | ●            |
| PLN-30             | ●                  |                    |                | ●     | ●                          | ●                            | ●        | C                    |               | ●        | ●  | ●            |
| PLN-45             | ●                  | ●                  |                | ●     | ●                          | ●                            | ●        | C                    |               | ●        | ●  | ●            |
| PLN-60             | ●                  | ●                  |                | ●     | ●                          | ●                            | ●        | C                    | B             | ●        | ●  | ●            |
| PLN-100            | ●                  | ●                  |                | ●     | ●                          |                              | ●        | C                    | B             | ●        | ●  |              |
| PLP-30/45/60       | ●                  | ●                  |                |       | ●                          |                              | ●        | C                    |               | ●        | ●  | ●            |
| PWM-40             | ●                  | ●HL                |                |       | ●                          |                              | ●        | C                    |               | ●        | ●  | ●            |
| PWM-60             | ●                  | ●HL                |                |       | ●                          |                              | ●        | C                    |               | ●        | ●  | ●            |
| PWM-90             | ▲                  | ●                  |                |       | ●                          |                              | ●        | C                    |               | ●        | ●  | ●            |
| PWM-120/200        |                    | ●HL                |                |       | ●                          |                              | ●        | C                    |               | ●        | ●  | ●            |

**Note 4 :** Except for PLC, PLM-E and PLP series that the standard models are certified for CCC, CCC models are offered as optional models.  
**HL:** Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires.

# Solutions

With more than 30 years experience, MEAN WELL, the leading brand of the power supply and LED driver, officially launches five solution websites, including LED lighting, LED display, Medical power, KNX smart building, and System power supply. Through these five websites, we hope to share our years of experience and knowledge of power supplies with you.

In each solution website, a comprehensive content was offered, covering from basic model recommendations to the thorough solutions offer for each application. If you are looking for those five related solutions, come and visit our website for answers! We hope our website can be another helpful resource for your next design.



Choose the right  
PSU & LED Drivers  
to Create  
A Brand New  
Experience  
for Customers



## LED Lighting Solution

- Outdoor Lighting
- Indoor Lighting
- High Bay Lighting
- Horticulture Lighting
- Specific Lighting



## LED Display Solution

- Indoor Full Color
- Outdoor Full Color
- Fine Pitch
- Rental



## Medical Power Solution

- Diagnostic Imaging System
- Analysis and Laboratory
- Home Healthcare
- Rehabilitation and Assistive Device



## KNX Smart Building Power Solution

- Indoor Lighting Control
- Heating System Control
- Blinder System Control
- Total Power Solution



## Configurable Power Solution

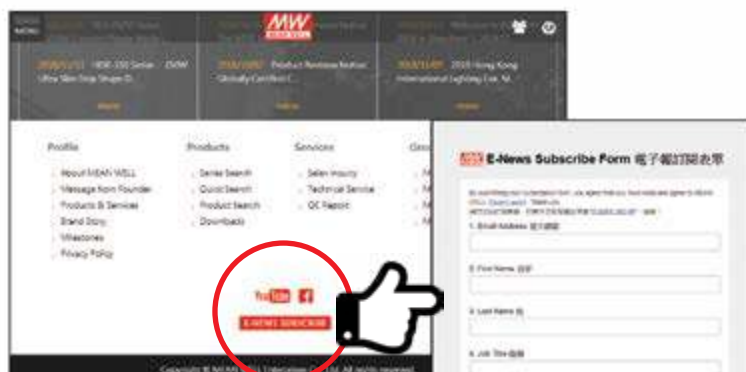
- Industrial Application
- Lighting Application
- Charging Application
- ICT Application
- Medical Application



# Media Kit

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# Powered by MEAN WELL

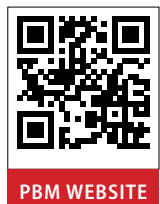


## Concept

MEAN WELL devoted to industrial PSU and LED drivers for years. Now, we ranked the top 5 global PSU manufacturers and the 2nd in LED drivers. Coincidentally, many equipment and lighting manufacturers use our products, which inspires us to come up with the “Powered by MEAN WELL” joint marketing plan.

## Purpose

Taking “Powered by MEAN WELL” as a starting point, we invite premium clients who agree with our brand spirit to become our “Reliable Power Partners”. We use “Powered by MEAN WELL” as our main co-marketing strategy for mutual brand promotion and to further achieve win-win situation.



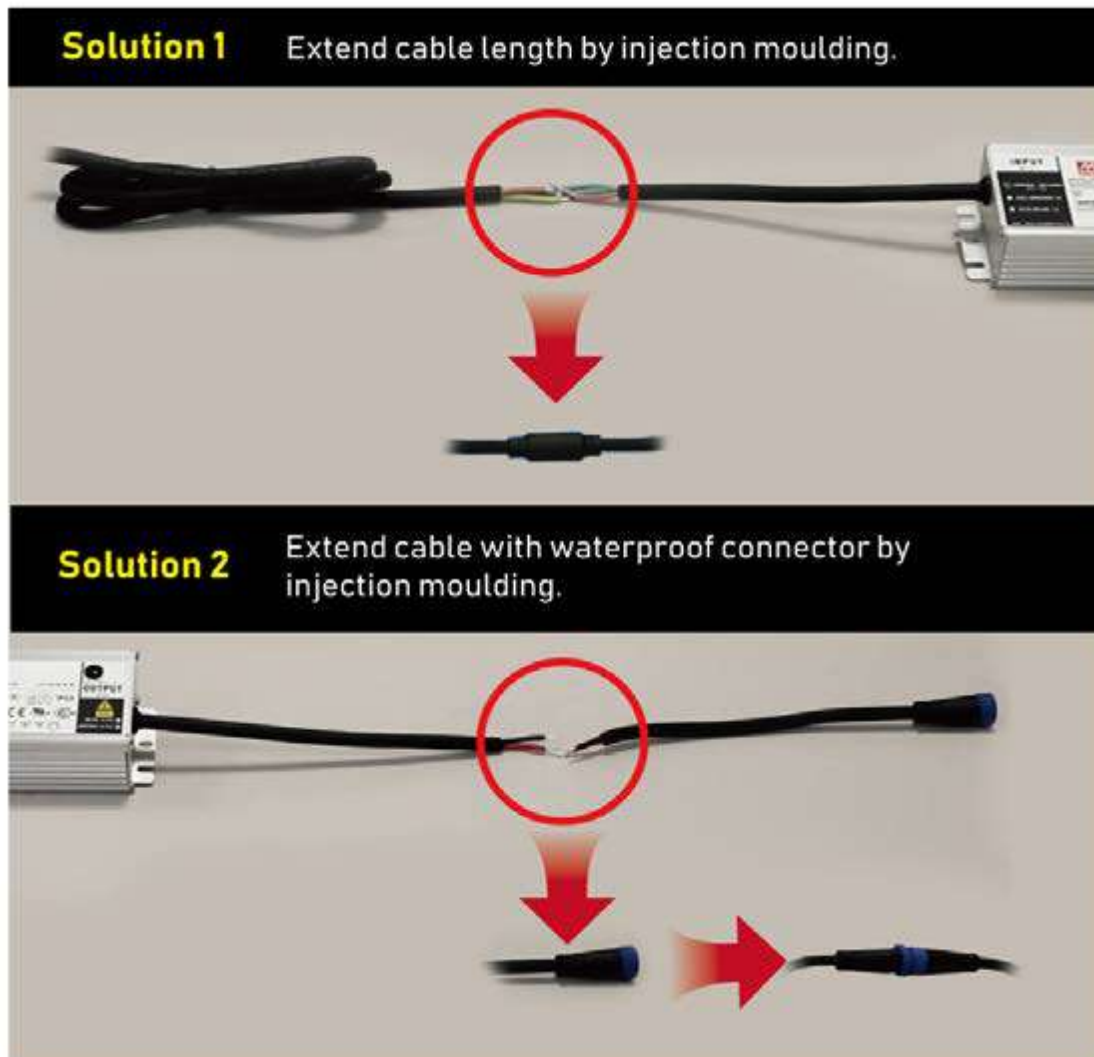
# Modification Service for LED Driver Cables

**Flexible Modification**

**Shorten Lead Time**

**Total Solution**

MEAN WELL offers cable length modification service for input and output cables with waterproof connector or extend cable length to improve longer lead time issue . For detail modification solutions, please consult our sales for details.



For modification processing introduction,  
please check our video:



YouTube



YouKu

Remark:

- 1.MEAN WELL can support to modify the length of cable or reproduction with new cable.
- 2.There are 4 different length 30/60/90 or 120cm as our standard size and different size of waterproof connectors with M12/M15/M16/M19 for selection.If client needs mating connector, please consult MEAN WELL for details.
- 3.This modification service is suitable for XLG/HLG/ELG and XBG series.

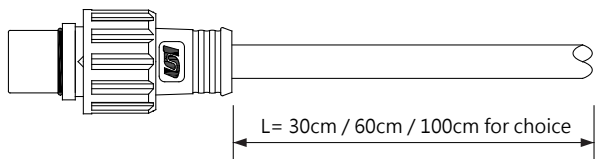
# Waterproof Connector

## Female Waterproof Output Connector (Power supply side)

| Waterproof Connector                                                             | Pin Configuration (Female)                                                        |                            |                                                                                   |                             |                                                                                   |                             |                                                                                     |                             |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------|-----------------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------|-----------------------------|-------------------------------------------------------------------------------------|-----------------------------|
|                                                                                  | M12                                                                               |                            | M15                                                                               |                             | M20.5                                                                             |                             | M20.8                                                                               |                             |
|  |  | Order No. : M12-02         |  | Order No. : M12-04          |  | Order No. : M15-02          |  | Order No. : M20.5-02        |
|                                                                                  |                                                                                   | Suitable Current : 5A max. |                                                                                   | Suitable Current : 10A max. |                                                                                   | Suitable Current : 12A max. |                                                                                     | Order No. : M20.8-02        |
|                                                                                  | 2-pin (5A/PIN)                                                                    |                            | 4-pin (5A/PIN)                                                                    |                             | 2-pin (12A/PIN)                                                                   |                             | 2-pin (20A/PIN)                                                                     | Suitable Current : 20A max. |

- ▶ The output cable can be modified to include different waterproof connectors by MEAN WELL. Minimum order quantity may vary for different models.
- ▶ We would suggest you to order the configurations of "M15 connector with length of 20cm / 30cm / 45cm / 60cm / 80cm / 100cm cables" due to its cost effectiveness and fast delivery. Ordering other connector type or cable lengths will have higher cost and longer lead-time.
- ▶ Suitable for CLG / HLG / HLG-C / HVG(C) / ELG / ELG-C / HBG / CEN / HSG / HLN / LPF / NPF / PWM series.

## Male Waterproof Output Connector with Cable (System side)

| Figure                                                                            | Drawing                                                                                                                   |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
|  | <br>L = 30cm / 60cm / 100cm for choice |

- ▶ MEAN WELL offers male waterproof connectors with cable length of 30cm, 60cm, and 100cm as our standard mating accessories. These mating accessories need to be ordered together with PSU. For other length or cable style, the higher MOQ requirement and long lead-time will be expected. Please consult MEAN WELL for details.

## Order No.

### M12-02M-30-U1-UN

① ② ③ ④ ⑤ ⑥

Connector Type: Male / Female

| ① | M12     | M15     | M20.5   | M20.8   |
|---|---------|---------|---------|---------|
|   | UN & CH | UN & CH | UN only | CH only |

No. of PIN

| ② | 2P   | 4P   | M15, M20.5 and M20.8 only have 2-pin choice |
|---|------|------|---------------------------------------------|
|   | 2pin | 4pin |                                             |

| ③ | M                  | F                 |
|---|--------------------|-------------------|
|   | Male (System Side) | Female (PSU Side) |

Cable Length: Male with Cable

| ④ | 30   | 60   | 100   |
|---|------|------|-------|
|   | 30cm | 60cm | 100cm |

Cable Length: Female with Cable

|  | 20   | 30   | 45   | 60   | 80   | 100   |
|--|------|------|------|------|------|-------|
|  | 20cm | 30cm | 45cm | 60cm | 80cm | 100cm |

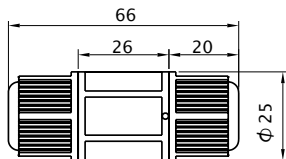
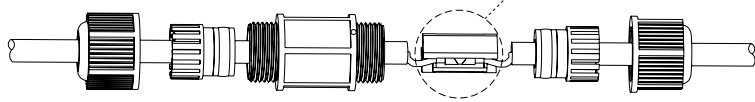
Cable Type

| ⑤ | U1         | E1             |
|---|------------|----------------|
|   | SJTW (USA) | H05RN-F (EURO) |

Brand Name

| ⑥ | UN                        | CH                      |
|---|---------------------------|-------------------------|
|   | UNICABLE (Made in Taiwan) | CHOGORI (Made in China) |

## Waterproof Cable Joiner

|                                                                                    |                                                                                                                                                                                                                                                              |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <br>66<br>26<br>20<br>φ25                                                                                                                                                 |
| Order No. : CJ04-1<br>CJ04-2                                                       | <br>CJ04-1 suitable for 14AWG~16AWG<br>CJ04-2 suitable for 18AWG~22AWG<br>Up to four wires can be connected through this cable joiner by soldering or clamping by tools. |

- ▶ CJ04 cable joiner can be purchased independently for user's own assembly.



### Taiwan

明纬企业股份有限公司 (总部)  
**MEAN WELL ENTERPRISES CO., LTD. (HQ)**

24891 新北市五股区五权三路28号  
No.28, Wuquan 3rd Rd., Wugu Dist.,  
New Taipei City 24891, Taiwan  
统一编号 : 34491075

Tel : +886-2-2299-6100(rep.)  
Fax: +886-2-2299-6200(rep.) +886-2-2298-0818(sales)  
E-mail: info@meanwell.com www.meanwell.com

### China

明纬 (广州) 电子有限公司  
**MEAN WELL (GUANGZHOU) ELECTRONICS CO., LTD.**  
广州市花都区花东镇金谷南路11号

No.11, Jingu South Road, Huadong Town,  
Huadu District, Guangzhou, Guangdong, China  
Tel : +86-20-3773-7100 / 400-800-3608(sales)  
+86-755-2359-1630(Shengzhen Office)  
+86-28-8546-8628(Chengdu Office)

苏州明纬科技有限公司  
**SUZHOU MEAN WELL TECHNOLOGY CO., LTD.**  
江苏省苏州市相城区东桥镇健民路77号  
No.77, Jian-Min Rd. Dong-Qiao Town,  
Xiang-Cheng District, Suzhou, Jiang-Su, China  
Post Code: 215152  
Tel : +86-512-6508-8600  
+86-10-5200-1817(Beijing Office)  
Fax +86-512 6508 8700  
E-mail: info@meanwell cc  
www.meanwell.cc

### U.S.A.

**MEAN WELL USA, INC.**

44030 Fremont Blvd., Fremont,  
CA 94538, U.S.A.  
Tel : +1-510-683-8886  
Fax: +1-510-683-8899  
6655 Troose Ave., Kansas City, Missouri 64131  
Tel : +1-816-601-4033  
E-mail: info@meanwellusa.com  
www.meanwellusa.com

### Europe

**MEAN WELL EUROPE B.V.**

Langs de Werf 8, 1185XT Amstelveen,  
The Netherlands  
Tel : +31-20-758-6000  
Fax: +31-20-758-6001  
E-mail: info@meanwell.eu  
www.meanwell.eu



请与在地经销商联系



Via E. Gianturco, 23  
80146 Napoli



**+39 081 3767103**



info@luxtec.it



**luxtec.it**



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