



# Your Reliable Power Partner

Standard LED Driver Manufacturer



May  
2016

# About MEAN WELL

Established in 1982, MEAN WELL is a leading standard switching power supply provider with advanced manufacturing facilities in Taiwan, GuangZhou, and SuZhou as well as sales offices in China, USA, and Europe. We have more than 8,000 standard models selling through 200 authorized distributors all over the world.

Since 2006, we started to endeavor the development for waterproof LED power supplies. Thus far, more than 1000 models complying with specific lighting norms per UL8750, EN61347-2-13, IEC61347-2-13(CB), and EN61000-3-2 Class C (harmonic current) have been launched in the market with utmost success. In this catalog, we are glad to introduce you different types of LED power supplies, which are very suitable for all kinds of outdoor or indoor LED lighting related applications, such as LED street lighting, LED tunnel lighting, outdoor electronic display, office lighting, LED decorative lighting, LED architectural lighting, etc.

If these LED power supplies cannot directly fulfill your requirement, please look into MEAN WELL standard industrial switching power supplies, ranging from 0.5W to 10,000W, for more selection. Please visit our website for more details — [www.meanwell.com](http://www.meanwell.com)

## New Products Overview

### IDLV/C-45(A)/65(A)

45W/65W Plastic Case with PFC

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- Flicker free design
- C.V. mode PWM style output for IDLV series  
C.C. mode for IDLC series
- 90~295VAC input for 45W, 180~295VAC input for 65W
- Class II (no F.G.)
- Built-in 2 in 1 dimming function
- 3 years warranty



### HBG-60P/100P/160P/240P

100~240W Circular PCB Type with PFC

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- C.C. mode for HBG-60P/100P  
C.V. + C.C. modes for HBG-160P/240P
- 90~305VAC input
- High efficiency up to 93.5%
- Built-in 3 in 1 dimming function
- 5 years warranty



### HVG(C)-240/320

240W/320W Wide Input Range with PFC

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- 180~528VAC wide input range
- C.V. + C.C. modes for HVG series  
C.C. mode for HVGC series
- High efficiency up to 94%
- Fanless design with IP67/IP65,  
suitable for outdoor applications
- Built-in 3 in 1 dimming function
- 5 years warranty



### IDPV/C-45(A)/65(A)

45W/65W PCB Type with PFC

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- Flicker free design
- C.V. mode PWM style output for IDPV series  
C.C. mode for IDPC series
- 90~295VAC input for 45W, 180~295VAC input for 65W
- Class II (no F.G.)
- Built-in 2 in 1 dimming function
- 3 years warranty



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# Plastic Case

(non PFC)

- AP Series (8~35W)
- AP-E Series (8~16W)
- LP Series (18~150W)
- ELN Series (30~60W)



# AP series

8~35W Rectangular Plastic Case

## 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)
- Low cost, high reliability
- Suitable for LED lighting and moving sign applications
- Protections: Short circuit / Overload / Over voltage
- 2 years warranty



AC input voltage range	90~264VAC ; 127~370VDC		
AC inrush current (max.)	Cold start, 70A at 230VAC	APV-12: Cold start, 70A at 230VAC 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, EN61347-1, EN61347-2-13 (LVD) approved; Design refer to EN60950-1	UL8750, ENEC EN61347-1/2-13, EN62384, IEC61347-1/2-13, IEC60950-1 approved	UL8750, EN60950-1(LVD) approved
EMC standards	EN55015, EN61000-3-2 class A, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547		EN55022 class B, EN61000-3-2 class A, EN61000-3-3, 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%

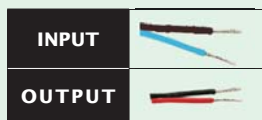
Note: The models on this page might not be suitable for lighting applications in EU countries. Please check with your local authorities for the possible use of the model of interest.

# AP series

8~35W Rectangular Plastic Case

## 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)
- Low cost, high reliability
- Small and compact size
- Suitable for LED lighting and moving sign applications
- Protections: Short circuit / Over voltage (except for APC-8)
- 2 years warranty



AC input voltage range	90~264VAC ; 127~370VDC		
AC inrush current (max.)	Cold start, 70A at 230VAC	APC-12: Cold start, 70A at 230VAC 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, EN61347-1, EN61347-2-13 (LVD) approved; Design refer to EN60950-1	UL8750 approved, Design refer to TUV EN61347-1	UL8750 (except for APC-25-350 & APC-35-350/500), EN60950-1(LVD) approved
EMC standards	EN55015, EN61000-3-2 class A, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547		EN55022 class B, EN61000-3-2 class A, EN61000-3-3, 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%

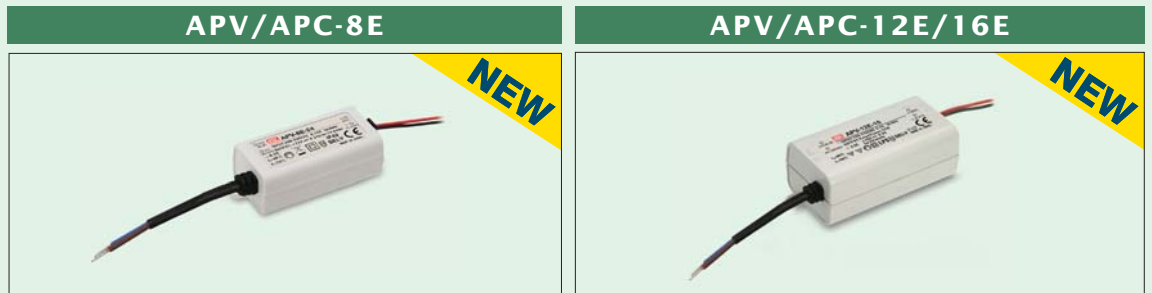
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# AP-E series

8~16W Rectangular Plastic Case

## 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.
- Pass LPS (except for APV/APC-8E)
- Low cost, high reliability
- Suitable for LED lighting and moving sign applications
- Protections:  
Short circuit / Overload (APV-E series only) / Over voltage (except for APC-8E)
- 2 years warranty



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 EN61347-1, EN61347-2-13, EN62384 approved	
EMC standards	EN55015, EN61000-3-2 class A, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547	
Connection	Input	H03VVH2-F 0.75mm <sup>2</sup> x2C (15cm)
	Output	UL rated, 20AWGx2C (15cm)
Dimension (LxWxH)(mm)	60x 30x 23.5	77x 40x 29

### 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



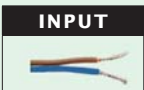




Model No.	Output	Tol.	R&N	Effi.
APC-16E-350	12~48V, 350mA	±8%	300mV	83.0%
APC-16E-700	9~24V, 700mA	±8%	250mV	82.0%

# LP series

18~35W Slim Type Plastic Case

## ► 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
- Low cost, 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		
INPUT							
	OUTPUT						
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	Cold start, 55A 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°C			-30~+65°C		
Vibration		10~500Hz, 2G 10 minutes /1 cycle, period for 60 minutes each along X, Y, Z axes					
Safety standards		TUV EN60950-1 approved for LPH-18		LPV-20: TUV EN60950-1, UL879, UL1310 approved LPV-35: UL1310, IEC60950-1 approved			
EMC standards		EN55022 class B, EN61000-3-2 class A, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, 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)	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%

## 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%

## 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-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: The models on this page might not be suitable for lighting applications in EU countries. Please check with your local authorities for the possible use of the model of interest.



# LP series

60~150W Slim Type Plastic Case

## 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)
- Low cost, 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/LPVL-150
<b>INPUT</b>			
LPV-60/100	LPV/LPVL-150		
<b>OUTPUT</b>			
LPV-60/100	LPV/LPVL-150		
AC input voltage range	90~264VAC; 127~370VDC		LPV-150: 180~305VAC; 254~431VDC LPVL-150: 90~132VAC; 127~370VDC
AC inrush current (max.)	Cold start, 60A at 230VAC	Cold start, 75A at 230VAC	LPV-150: Cold start, 60A at 230VAC 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°C	-25~+70°C	-25~+65°C
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) approved	UL8750, UL879 approved; Design refer to EN60950-1	
EMC standards	EN55022 class B, EN61000-3-2 class A, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11; FCC part 15 for LPVL-150 only		
Connection	Input	UL rated, 18AWGx2C (60cm)	UL rated, 18AWGx2C (30cm)
	Output	UL rated, 16AWGx2C (60cm)	UL rated, 14AWGx2C (30cm)
Dimension (LxWxH)(mm)	162.5x 42.5x 32	190x 52x 37	191x 63x 37.5

## LPV-60 Series

UL (for 48V only) UL US (for 12~36V) CB CE

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

UL US CE

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

UL (LPV-150 only) UL US (LPV-150) (LPVL-150) CE FC

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

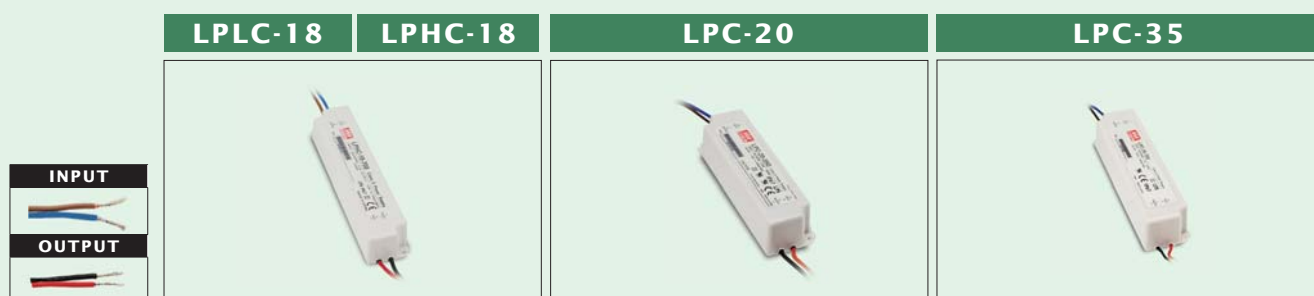
Note: The models on this page might not be suitable for lighting applications in EU countries. Please check with your local authorities for the possible use of the model of interest.

# LP series

18~35W Slim Type Plastic Case

## ► Features

- **Constant current mode**
- LPLC-18: 90~132VAC input only  
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
- Low cost, 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



	LPLC-18	LPHC-18	LPC-20	LPC-35
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	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	Design refer to UL1310, TUV EN60950-1		LPC-20: UL1310, UL879, TUV EN60950-1 approved LPC-35: UL1310 approved	
EMC standards	FCC part 15 class A (LPLC-18), EN55022 class A, EN61000-3-2 class A, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11		EN55022 class B, EN61000-3-2 class A, EN61000-3-3, 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

### LPLC-18 Series



Model No.	Output	Io Tol.	R&N	Effi.
LPLC-18-350	6~48V, 350mA	±8%	300mV	82%
LPLC-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%

### 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-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: The models on this page might not be suitable for lighting applications in EU countries. Please check with your local authorities for the possible use of the model of interest.

# LP series

60~150W Slim Type Plastic Case

## ► 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)
- Low cost, 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	
<b>INPUT</b>				
60W / 100W				
150W				
<b>OUTPUT</b>				
60W / 100W				
150W				
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°C	-25~+50°C	-25~+50°C	
Vibration	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes			
Safety standards	UL1310 approved	EN60950-1(LVD) approved		
EMC standards	EN55022 class B, EN61000-3-2 class A, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11			
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	74~148V, 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: The models on this page might not be suitable for lighting applications in EU countries. Please check with your local authorities for the possible use of the model of interest.

# ELN series

30~60W Plastic Case

## Features

- Constant voltage + constant current modes
- Universal AC input / Full range
- Built-in constant current limiting circuit with adjustable OCP level
- Fully isolated plastic case with IP64 level
- Optional dimming function: 1~10VDC(D-Type) or PWM (P-Type) controlled
- Isolation class II, no F.G.
- Class 2 power unit / Pass LPS
- Suitable for economical LED indoor lighting and LED electronic displays
- Protections: Short circuit / Over current / Over voltage
- 2 years warranty

		ELN-30	ELN-60
INPUT			
	OUTPUT (standard)		
	OUTPUT (Dimming Function)		
AC input voltage range	90~264VAC ; 127~370VDC		
AC inrush current (max.)	Cold start, 55A at 230VAC	Cold start, 60A at 230VAC	
DC adjustment range	±10% rated output voltage		
Current adjustment range	75%~103%		
Over current protection	95%~110% constant current limiting, auto-recovery		
Over voltage protection	Range	110%~150% rated output voltage	
	Type	Shut down o/p voltage, re-power on to recover	
Withstand voltage	I/P-O/P: 3kVAC		
Working temperature	-20~+60°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	UL1310 approved; Design refer to TUV EN60950-1		
EMC standards	EN55022 class B, EN61000-3-2 class A, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11		
Connection	Input	UL rated, SVT 18AWGx2C (32cm)	UL rated, SVT 18AWGx2C (30cm)
	Output	Without dimming: UL rated, SVT 18AWGx2C (32cm) With dimming(optional): UL2464 18AWGx4C (32cm)	Without dimming: UL rated, SVT 18AWGx2C (30cm) With dimming(optional): UL2464 18AWGx4C (30cm)
Dimension (LxWxH)(mm)	145x 47x 30		181x 61.5x 35
Packing	0.26kg ; 60pcs / 16.6kg		0.4kg ; 24pcs / 11.0kg

### ELN-30 Series

Model No.	Output	Tol.	R&N	Effi.
ELN-30-5	5V, 0~5.0A	±5%	80mV	75%
ELN-30-9	9V, 0~3.4A	±5%	100mV	80%
ELN-30-12	12V, 0~2.5A	±5%	120mV	82%
ELN-30-15	15V, 0~2.0A	±5%	120mV	82%
ELN-30-24	24V, 0~1.25A	±5%	150mV	85%
ELN-30-27	27V, 0~1.12A	±5%	150mV	85%
ELN-30-48	48V, 0~0.63A	±5%	250mV	87%

### ELN-60 Series

Model No.	Output	Tol.	R&N	Effi.
ELN-60-9	9V, 0~5.0A	±5%	120mV	82%
ELN-60-12	12V, 0~5.0A	±5%	120mV	85%
ELN-60-15	15V, 0~4.0A	±5%	150mV	86%
ELN-60-24	24V, 0~2.5A	±5%	150mV	87%
ELN-60-27	27V, 0~2.3A	±5%	200mV	87%
ELN-60-48	48V, 0~1.3A	±5%	250mV	88%

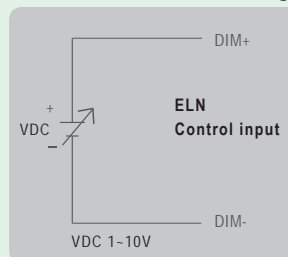
## Dimming Control (optional)

Through the dimming function, output current of ELN series can be adjusted to reduce the energy consumption or adjust the brightness of LEDs connecting to it. Two kinds of control signal are accepted: 1~10VDC (D-Type option) or PWM signal (P-Type option).

When there is no signal sending to the control wires (open circuit between the two control wires), the power supply will operate as 0V (D-Type) or 0% duty (P-Type) of input signal and the output current will be zero.

### D Type :

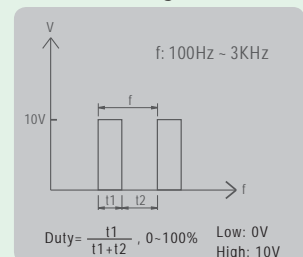
1~10VDC external control signal



Order No.: ELN-30-5D

### P Type :

PWM control signal



Order No.: ELN-30-5P

# Plastic Case

(with PFC)

- IDLV Series (45~65W)
- IDLC Series (45~65W)
- PLD Series (16~60W)
- PCD Series (16~60W)
- PWM Series (40~120W)
- NPF Series (40~120W)
- LPF Series (16~60W)
- LCM Series (25~60W)
- PLN Series (20~96W)
- HLN Series (40~80W)
- PLM Series (12~40W)
- PLM-E Series (12~40W)
- PLC Series (30~96W)
- GSC Series (18~40W)
- OWA Series (60~120W)

# IDLV series

45~65W Plastic Case with PFC

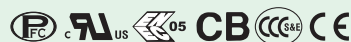
## ► Features

- Constant voltage PWM style output mode
- Flicker free design
- IDLV-45: 90~295VAC input  
IDLV-65: 180~295VAC input only
- High efficiency up to 90%
- No load power consumption <0.5W for 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 for A-Type
- Suitable for indoor LED strip lighting
- Protection: Short circuit
- 3 years warranty



AC input voltage range	90 ~ 295VAC ; 127 ~ 417VDC	180 ~ 295VAC; 254~417VDC
AC inrush current (max.)	Cold start, 15A at 230VAC	
Setup, rise, hold up time	500ms, 1200ms, 5ms	
Short circuit protection	Hiccup mode, auto-recovery	
Withstand voltage	I/P-O/P: 3.75KVAC	
Working temperature	Tcase= -20~+80°C	Tcase= -20~+85°C
Safety standards	UL8750, ENEC EN61347-1, EN61347-2-13, EN62384, GB19510.14, GB19510.1 approved	
EMC standards	EN55015, EN61000-3-2 Class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547, GB17743, GB17625.1	
Connection (Input/Output)	4+4P push-in terminal block for Blank-Type, 4+6P for A-Type	
Dimension (LxWxH) mm	120 x 75 x 25	130 x 75 x 25

## IDLV-45 Series



Model No.	Output	Tol.	Effi.
IDLV-45□-12	12V, 0~3.75A	±4%	86%
IDLV-45□-24	24V, 0~1.88A	±3%	89%
IDLV-45□-36	36V, 0~1.25A	±2%	90%
IDLV-45□-48	48V, 0~0.94A	±1%	90%
IDLV-45□-60	60V, 0~0.75A	±1%	90%

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

## IDLV-65 Series



Model No.	Output	Tol.	Effi.
IDLV-65□-12	12V, 0~5A	±4%	86%
IDLV-65□-24	24V, 0~2.7A	±3%	89%
IDLV-65□-36	36V, 0~1.8A	±2%	90%
IDLV-65□-48	48V, 0~1.35A	±1%	90%
IDLV-65□-60	60V, 0~1.08A	±1%	90%

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

## HLG-480H(-C) Series

480W Metal Case with PFC

Under Development



- Wide input range 90~305VAC
- C.V. + C.C. modes for HLG-480H  
C.C. mode for HLG-480H-C
- Built-in active PFC function
- -40°C~+85°C (case temp.) wide operating range
- Fanless design, cooling by free air convection
- IP67 / IP65 design for indoor or outdoor applications
- 3 in 1 dimming and smart timer dimming function models
- Type "HL" for use in Class I, Division 2 hazardous (Classified) location luminaires
- Dimension: 262 x 125 x 43.5 mm
- 7 years warranty

# IDLC series

45~65W Plastic Case with PFC

## ► Features

- Constant current mode
- Flicker free design
- IDLC-45: 90~295VAC input  
IDLC-65: 180~295VAC input only
- No load power consumption <0.5W for 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 for A-Type
- Suitable for indoor LED lighting applications
- Protection: Short circuit
- 3 years warranty



AC input voltage range	90 ~ 295VAC ; 127 ~ 417VDC	180 ~ 295VAC ; 254~417VDC
AC inrush current (max.)	Cold start, 30A at 230VAC	
Setup time	500ms	
Short circuit protection	Hiccup mode, auto-recovery	
Withstand voltage	I/P-O/P: 3.75KVAC	
Working temperature	Tcase= -20~+80°C	Tcase= -20~+85°C
Safety standards	UL8750, ENEC EN61347-1, EN61347-2-13, EN62384, GB19510.14, GB19510.1 approved	
EMC standards	EN55015, EN61000-3-2 Class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547, GB17743, GB17625.1	
Connection (Input/Output)	4+4P push-in terminal block for Blank-Type, 4+6P for A-Type	
Dimension (LxWxH) mm	120 x 75 x 25	130 x 75 x 25

## IDLC-45 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

## IDLC-65 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

## HVG(C)-480 Series

480W Wide Input Range with PFC

Under Development

- Wide input range 180~528VAC
- C.V. + C.C. modes for HVG-480  
C.C. mode for HVGC-480
- Built-in active PFC function
- 40~+85°C (case temp.) wide operating range
- Fanless design, cooling by free air convection
- IP67 / IP65 design for indoor or outdoor applications
- 3 in 1 dimming and smart timer dimming function models
- Type "HL" for use in Class I, Division 2 hazardous (Classified) location luminaires
- Dimension: 262 x 125 x 43.5 mm
- 5 years warranty

# PLD series

16~60W Plastic Case with PFC

## ► 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						
<b>INPUT</b>	<table border="1"> <tr> <th>A-Type</th> <th>B-Type</th> <th>PLD-25</th> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>				A-Type	B-Type	PLD-25			
A-Type	B-Type	PLD-25								
<b>OUTPUT</b>										
AC input voltage range	115VAC (90~135VAC) or 230VAC (180~295VAC)	90~295VAC	230VAC (180~295VAC)							
AC inrush current (max.)	Cold start, 20A at 230VAC	Cold start, 25A at 230VAC								
Setup time	500ms at full load and 230VAC									
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	-30~+50°C	-30~+45°C						
Safety standards	UL8750 (PLD-16/25 only), ENEC EN61347-1, EN61347-2-13, EN62384 (except for PLD-16 A-Type) approved									
EMC standards	EN55015 (except for PLD-16 A-Type), EN61000-3-2 Class C, EN61000-3-3, EN61000-4,2,3,4,5,6,8,11, EN61547, FCC part 18 non-consumer equipment (PLD-16 A-Type, PLD-25)									
Connection	Input	PLD-16 A-Type: UL1430 18AWGx2C (7.5cm) PLD-16 B-Type & PLD-25: NISPT-1 18AWGx2C (7.5cm) PLD-40/60: 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							

## 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-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-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-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 Plastic Case with PFC

## 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
INPUT (A type)			
	INPUT (B type)		
OUTPUT			
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 PCD-60: Cold start, 13A at 230VAC
Setup time		500ms at full load and 230VAC	
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 EN61347-1, EN61347-2-13, EN62384 (except for PCD-16/25 A-Type) approved	
EMC standards		EN55015(except for PCD-16/25 A-Type), EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547; FCC part 18 non-consumer equipment (for PCD-16/25 A-Type)	
Connection	Input	PCD-16/25 A-Type: UL1430 18AWGx2C (7.5cm); PCD-16/25 B-Type: NISPT-1 18AWGx2C (7.5cm); PCD-40/60: 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

# PWM series

40~120W Plastic Case with PFC

## Features

- Constant voltage PWM style output mode
- Universal AC input (up 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)
- Suitable for dry, damp, and wet location
- Suitable for LED strip lighting
- Protections: Short circuit / Overload / Over voltage / Over temp.
- Optional DALI solution models available (DA-Type)
- 5 years warranty

	PWM-40/60	PWM-90	PWM-120
<b>INPUT</b>			
<b>OUTPUT (PWM-40/60)</b>			
<b>OUTPUT (PWM-90/120)</b>			
<b>AC input voltage range</b>	90~305VAC; 127~431VDC		
<b>AC inrush current (max.)</b>	Cold start, 50A at 230VAC	Cold start, 60A at 230VAC	
<b>Overload protection</b>	108%~120% hiccup mode, auto-recovery		
<b>Over voltage protection</b>	113%~142% rated output voltage		
<b>Over temp. protection</b>	Shut down o/p voltage, re-power on to recover		
<b>Setup, rise, hold up time</b>	500ms, 80ms, 16ms at full load and 230VAC		
<b>Withstand voltage</b>	I/P-O/P: 3.75kVAC		
<b>Working temperature</b>	-40~+70°C (refer to output dearting curve)		
<b>Safety standards</b>	UL8750, ENEC EN61347-1, EN61347-2-13, EN62384 approved; Design refer to EN60335-1		
<b>EMC standards</b>	EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547		
<b>Connection</b>	<b>Input</b>	UL rated, SJTW 18AWGx2C (30cm)	
	<b>Output</b>	UL2464 18AWG x2C (30cm)+ 22AWG x2C (30cm)	SJTW 16AWGx2C (30cm)+ UL2464 18AWGx2C (30cm)
<b>Dimension (LxWxH) (mm)</b>	150x 53x 35	171x 63x 37.5	191x 63x 37.5

## PWM-40 Series (DA-Type)

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%

○ = Blank, DA ; Blank: with 3 in 1 dimming function , DA: with DALI function

## PWM-60 Series (DA-Type)

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%

○ = Blank, DA ; Blank: with 3 in 1 dimming function , DA: with DALI function

## PWM-90 Series (DA-Type)

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 ; Blank: with 3 in 1 dimming function , DA: with DALI function

## PWM-120 Series (DA-Type)

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%

○ = Blank, DA ; Blank: with 3 in 1 dimming function , DA: with DALI function

# NPF series

40~120W Plastic Case with PFC

## Features

- Constant voltage+constant current modes (D-Type: Constant current mode only)
- Universal AC input (up 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)
- BE-Type: Built-in 3 in 1 dimming function (0~10VDC, PWM signal or resistance) and 12V/200mA auxiliary output
- Suitable for dry, damp, and wet location
- Protections: Short circuit / Over current / Over voltage / Over temperature
- 5 years warranty

INPUT	OUTPUT (NPF-40D/60D)	NPF-40(D)/60(D)	NPF-90(D)	NPF-120(D)
OUTPUT (NPF-40/60/90/120)	OUTPUT (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			
Withstand voltage	I/P-O/P: 3.75kVAC			
Working temperature	-40~+70°C (refer to output dearting curve)			
Safety standards	UL8750, ENEC EN61347-1, EN61347-2-13, EN62384 approved; Design refer to EN60335-1			
EMC standards	EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547; EN55022 class B [NPF-90(D) only]			
Connection	Input	UL rated, SJTW 18AWGx2C (30cm)		
	Output	NPF-40/60: SVT 18AWGx 2C (30cm) NPF-40D/60D: UL2464 18AWG x2C (30cm)+ 22AWG x2C (30cm)	NPF-90: SJTW 16AWGx2C (30cm) NPF-90D: SJTW 16AWGx2C (30cm)+ UL2464 18AWGx2C (30cm)	NPF-120: SJTW 14AWGx2C (30cm) NPF-120D: SJTW 14AWGx2C (30cm)+ UL2464 18AWGx2C (30cm)
Dimension (LxWxH) (mm)	150x 53x 35	171x 63x 37.5	191x 63x 37.5	

## NPF-40 Series



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

## NPF-90 Series



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

## NPF-60 Series



Model No.	Output	Tol.	R&N	Effi.
NPF-60□-12○	12V, 0~5A	±4%	150mV	86%
NPF-60□-15○	15V, 0~4A	±4%	150mV	87%
NPF-60□-20○	20V, 0~3A	±4%	150mV	88%
NPF-60□-24○	24V, 0~2.5A	±3%	150mV	89%
NPF-60□-30○	30V, 0~2A	±3%	200mV	90%
NPF-60□-36○	36V, 0~1.67A	±2%	200mV	90%
NPF-60□-42○	42V, 0~1.43A	±1%	200mV	90%
NPF-60□-48○	48V, 0~1.25A	±1%	200mV	90%
NPF-60□-54○	54V, 0~1.12A	±1%	350mV	90%

## NPF-120 Series



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

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

# LPF series

16~40W Plastic Case with PFC

## Features

- Constant voltage+constant current modes (D-Type: Constant current mode only)
- Universal AC input (up 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 and moving sign applications
- 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> (Non-Dimming Models) <b>OUTPUT</b> (Dimming Models)			
AC input voltage range	90~305VAC ; 127~431VDC		
AC inrush current (max.)	LPF-16(D): Cold start, 45A at 230VAC 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	-35~+70°C		-40~+70°C (refer to output derating curve)
Safety standards	UL8750, ENEC EN61347-1, EN61347-2-13, EN62384, PSE J61347-1, J61347-2-13 approved; TUV EN61347-1, EN61347-2-13 approved for LPF-40(D)		
EMC standards	EN55015, EN61547, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11		
Connection	Input	UL rated, SJTW 18AWGx2C (30cm)	
	Output	LPF-16/25: UL rated, SVT 18AWGx2C (30cm) LPF-16D/25D: UL rated, SJTW 18AWGx4C (30cm)	LPF-40: UL rated, SVT 18AWGx2C (30cm) 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	±4%	150mV	83.0%
LPF-16-15	15V, 0~1.07A	±4%	150mV	83.0%
LPF-16-20	20V, 0~0.80A	±4%	150mV	84.5%
LPF-16-24	24V, 0~0.67A	±4%	150mV	84.5%
LPF-16-30	30V, 0~0.54A	±4%	200mV	84.5%
LPF-16-36	36V, 0~0.45A	±4%	250mV	85.0%
LPF-16-42	42V, 0~0.39A	±4%	250mV	85.0%
LPF-16-48	48V, 0~0.34A	±4%	250mV	85.0%
LPF-16-54	54V, 0~0.30A	±4%	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

# LPF series

60~90W Plastic Case with PFC

## Features

- Constant voltage+constant current modes (D-Type: Constant current mode only)
- LPF: 90~305VAC input  
LPFH: 200~420VAC 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 and moving sign applications
- Suitable for dry, damp, and wet location
- Protections: Short circuit / Over current / Over voltage / Over temperature
- 5 years warranty [3 years warranty for LPFH-60(D)]

		LPF-60(D)	LPF-90(D)	LPFH-60(D)
INPUT				
	OUTPUT (Non-Dimming Models)			
	OUTPUT (Dimming Models)			
AC input voltage range	90~305VAC ; 127~431VDC		200~400VAC; 282~566VDC	
AC inrush current (max.)	Cold start, 55A at 230VAC		Cold start, 55A at 374VAC	
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	500ms, 80ms, 16ms at full load and 347VAC	
Withstand voltage	I/P - O/P: 3.75kVAC		I/P - O/P: 3kVAC	
Working temperature	-40~+70°C (refer to output derating curve)		-40~+60°C	
Safety standards	UL8750, ENEC and TUV EN61347-1, EN61347-2-13, EN62384, PSE J61347-1, J61347-2-13 approved		UL8750 pending	
EMC standards	EN55015, EN61547, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11		FCC part 15 class B	
Connection	Input	UL rated, SJTW 18AWGx2C (30cm)		UL rated, UL1015 18AWGx2C (30cm)
	Output	LPF-60: UL rated, SVT 18AWGx2C (30cm) LPF-60D: UL2464 18AWGx2C(30cm)+22AWGx2C (30cm)	LPF-90: UL rated, SVT 18AWGx2C (30cm) LPF-90D: UL2464 18AWGx4C (30cm)	LPFH-60: UL rated, UL1015 18AWGx2C (30cm) LPFH-60D: UL rated, UL1015 18AWGx2C (30cm) +22AWGx2C (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%

Model No.	Output	Tol.	R&N	Effi.
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

## LPFH-60 Series

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

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

# LCM series

25~60W Plastic Case with PFC

## Features

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

	INPUT		OUTPUT		LCM-25(DA)	LCM-40(DA) / 60(DA)
	25W/40W/60W	25W	40W/60W	40W/60W		
Non-DA Type						
DA-Type						

AC input voltage range	180~277VAC; 254~392VDC	180~295VAC; 254~417VDC
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	
Over temperature protection	LCM-25(DA): Shut down o/p voltage, recovers automatically after fault condition is removed LCM-40/60(DA): Shut down o/p voltage, re-power on to recover	
Setup, rise, hold up time	500ms, 50ms, 30ms	500ms, 80ms, 16ms at full load and 230VAC
Withstand voltage	I/P-O/P: 3.75kVAC	
Working temperature	-30~+60°C (refer to output derating curve)	
Safety standards	UL8750, ENEC EN61347-1, EN61347-2-13, EN62384, GB19510.14, GB19510.1 approved	
DALI standards	Comply with IEC62386-101, 102, 207 (DA-Type only)	
EMC standards	EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547, GB17625.1, GB17743	
Dimension (LxWxH)(mm)	105x 68x 23	123.5x 81.5x 23

## LCM-25(DA) Series

Output	Io Tol.	R&N	Effi.	DIP Switch					
				1	2	3	4	5	6
350mA, 6~54V	±5%	400mV	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-40(DA) Series

Output	Io Tol.	R&N	Effi.	DIP Switch					
				1	2	3	4	5	6
350mA, 2~100V	±5%	700mV	91%	----	----	----	----	----	----
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-60(DA) Series

Output	Io Tol.	R&N	Effi.	DIP Switch					
				1	2	3	4	5	6
500mA, 2~90V	±5%	700mV	92%	----	----	----	----	----	----
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




- ▶ LCM-25/40/60 are primary models with 0~10VDC, PWM or resistance signal dimming function.
- ▶ LCM-25DA/40DA/60DA have DALI interface and push dimming function.

# LCM-U series

40~60W Plastic Case with PFC

## 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)
- Built-in DALI interface and push dimming function (DA-Type)
- 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

		LCM-40U(DA)	LCM-60U(DA)
	<b>INPUT</b>		
	<b>OUTPUT</b>		
Non-DA Type			
DA-Type			
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, rise, hold up time	1000ms, 80ms, 16ms		
Withstand voltage	I/P-O/P: 3.75kVAC		
Working temperature	-30~+60°C (refer to output derating curve)		-30~+55°C (refer to output derating curve)
Safety standards	UL8750 approved		
DALI standards	Comply with IEC62386-101, 102, 207 (DA-Type only)		
EMC standards	FCC part 15, EN61000-4-2,3,4,5,6,8,11, EN61547		
Dimension (LxWxH)(mm)	123.5x 81.5x 23		

## LCM-40U(DA) Series



Output	Io Tol.	R&N	Effi.	DIP Switch					
				1	2	3	4	5	6
350mA, 2~100V	±5%	700mV	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(DA) Series



Output	Io Tol.	R&N	Effi.	DIP Switch					
				1	2	3	4	5	6
500mA, 2~90V	±5%	700mV	90%	----	----	----	----	----	----
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.
- ▶ LCM-40UDA/60UDA have DALI interface and push dimming function.

# PLN series

20~96W Plastic Case with PFC

## Features

- Constant current mode
- Universal AC input (up 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 and moving sign applications
- Protections: Short circuit / Over current / Over voltage / Over temperature
- 2 years warranty

INPUT			PLN-20	PLN-30	PLN-45/60	PLN-100
PLN-20	PLN-30	PLN-45/60/100				
OUTPUT						
PLN-20	PLN-30/45/60/100					

AC input voltage range	90~277VAC; 127~392VDC		90~295VAC ; 127~417VDC		
AC inrush current (max.)	Cold start, 35A at 230VAC				
DC adjustment range	None	95%~108% rated output voltage		85%~100% rated output voltage	
Current adjustment range	75%~100%	75%~103%			
Over current protection	95%~110% constant current limiting, auto-recovery	100%~110% constant current limiting, auto-recovery	95%~110% constant current limiting, auto-recovery	95%~102% constant current limiting, auto-recovery	
Over voltage protection	105%~142% rated output voltage	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~+60°C		-30~+50°C (refer to output derating curve)		
Safety standards	UL8750, TUV EN61347-1, EN61347-2-13, PSE J61347-1, J61347-2-13 approved for PLN-20 UL879, UL1310, UL8750(PLN-45/60), TUV EN61347-1, EN61347-2-13, PSE J61347-1, J61347-2-13 approved for PLN-30/45/60 UL879, UL1310, UL8750, TUV EN61347-1, EN61347-2-13, EN60950-1, PSE J61347-1, J61347-2-13 approved for PLN-100				
EMC standards	EN55015, EN55022 class B (PLN-60/100 only), EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547				
Connection	Input	UL rated, UL1015 18AWGx2C (32cm)	UL rated, SVT 18AWGx2C (32cm)	UL rated, SVT 18AWGx3C (30cm)	UL rated, SVT 18AWGx3C (31cm)
	Output			UL rated, SVT 18AWGx2C (30cm)	UL rated, SVT 18AWGx2C (31cm)
Dimension (LxWxH) (mm)	148.5x 38.5x 28		145x 47x 30	181x 61.5x 35	200x 70.5x 35

## 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 Plastic Case with PFC

## Features

- Constant voltage + constant current modes
- Universal AC input (up 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 and moving sign 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		
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, TUV EN61347-1, EN61347-2-13, PSE J61347-1, J61347-2-13 approved; Design refer to UL/EN60950-1, EN60335-1 for HLN-40H/60H		
EMC standards	EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547		
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, 0~1.34A	±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%
HLN-60H-30(A)	30V, 0~2.0A	±1.0%	200mV	89.5%

Model No.	Output	Tol.	R&N	Effi.
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

# GSC series

18~40W External Type with PFC

## Features

- Constant current mode
- No load power consumption <0.15W
- Universal AC input (up to 277VAC) / Full range
- Isolation class II, no F.G.
- Fully isolated plastic case with IP40 level
- IEC320-C8 or 2 pole EURO plug
- Low cost, high reliability
- Suitable for indoor LED lighting applications
- Protection: Short circuit
- 3 years warranty

### GSC18B/25B/40B

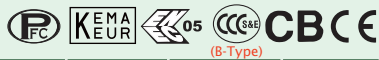
### GSC18E/25E/40E



NEW

AC input voltage range	90~277VAC, 127~392VDC	
AC inrush current (max.)	Cold start, 17A at 230VAC	
Setup time	500ms at full load and 230VAC	
Short circuit protection	Hiccup mode, auto-recovery	
Withstand voltage	I/P-O/P: 3.75kVAC	
Working temperature	-30~+50°C ( refer to output derating curve)	
Safety standards	DEKRA/ENEC EN61347-1, EN61347-2-13, EN62384, GB19510.14, GB19510.1 approved	
EMC standards	EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547, GB17743, GB17625.1	
Connection	Input	B-Type IEC320-C8
		E-Type European 2P
	Output	Plug 2.1φ x 5.5φ x 11mm, C+
		Cable UL rated, UL1185 18AWG (150cm)
Dimension (LxWxH)(mm)	79x54x33	

## GSC18 Series



Model No.	Output	Io Tol.	R&N	Effi.
GSC18□-350	26~52V, 350mA	±8%	4.6V	89.0%
GSC18□-500	18~36V, 500mA	±8%	3.0V	88.5%
GSC18□-700	13~26V, 700mA	±8%	2.5V	88.5%
GSC18□-1050	8~17V, 1050mA	±8%	1.6V	87.0%
GSC18□-1400	6~13V, 1400mA	±8%	1.6V	85.5%

□ = B / E ; B: IEC320-C8, E: European 2P

## GSC25 Series



Model No.	Output	Io Tol.	R&N	Effi.
GSC25□-350	36~72V, 350mA	±8%	7.2V	89.5%
GSC25□-500	26~52V, 500mA	±8%	5.0V	89.5%
GSC25□-700	18~36V, 700mA	±8%	3.6V	88.5%

Model No.	Output	Io Tol.	R&N	Effi.
GSC25□-1050	12~24V, 1050mA	±8%	2.4V	87.5%
GSC25□-1400	9~18V, 1400mA	±8%	1.8V	86.0%

□ = B / E ; B: IEC320-C8, E: European 2P

## GSC40 Series



Model No.	Output	Io Tol.	R&N	Effi.
GSC40□-350	50~100V, 350mA	±8%	11.6V	89.5%
GSC40□-500	40~80V, 500mA	±8%	8.0V	89.5%
GSC40□-700	29~58V, 700mA	±8%	5.8V	88.5%
GSC40□-1050	19~38V, 1050mA	±8%	3.8V	87.5%
GSC40□-1400	14~28V, 1400mA	±8%	2.9V	87.0%

□ = B / E ; B: IEC320-C8, E: European 2P

# OWA series

60~120W External Moistureproof Plastic Case

## Features

- Constant voltage + constant current modes
- Universal AC input / Full range (180~264VAC input only for OWA-120E)
- Built-in active PFC function (OWA-90/120)
- High efficiency up to 91%
- No load power consumption <0.15W
- Energy efficiency Level VI
- 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.
- Suitable for dry and damp location
- 5 years warranty

INPUT	
OWA-60/90/120	
U-Type	E-Type
OUTPUT	
OWA-60	
U-Type	E-Type
OWA-90/120	
U-Type	E-Type



AC input voltage range	90~264VAC ; 127~370VDC (180~264VAC ; 254~370VDC for OWA-120E)			
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/EN60335-1(except for 48~54V), IEC/EN61558-1, EN61558-2-16 approved	TUV EN60335-1(except for 42~54V), EN61558-1, EN61558-2-16 approved	
EMC standards	U-Type: FCC Part 15; E-Type: EN55014, EN55022 class B, EN61000-3-2, -3			
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+	U-Type: Power DIN 4P (with lock) type, or 2.5φ x 5.5φ x 11mm/C+, tuning fork type (20~54V only)
		Cable	U-Type : UL1185 16AWG x 2C (30cm); E-Type : H05RN-F 1.0mm <sup>2</sup> x 2C (30cm)	U-Type: UL2464 18AWGx4C (30cm) for Power DIN 4P type; UL2464 16AWGx2C (30cm) for tuning fork type; E-Type : H05RN-F 1.0mm <sup>2</sup> x2C (30cm)
Dimension (LxWxH)(mm)	130x 53x 35	171x 63x 37.5	191x 63x 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%

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

## 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%

Model No.	Output	Tol.	R&N	Effi.
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  
 △ = Blank/P1M; Blank: Power DIN 4P with lock type,  
 P1M: 2.5φ x 5.5φ x 11mm/C+, tuning fork type

## 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

# PLM series

12~40W Slim Type Plastic Case with PFC

## Features

- Constant current mode
- 110~295VAC input
- No load power consumption <0.5W
- Fully isolated plastic case with push terminal style I/O
- Three-step analog dimming function (PLM-40)
- IP30 design
- Isolation class II, no F.G.
- Class 2 power unit (except for PLM-25-350 & PLM-40)
- Low cost, high reliability
- Suitable for indoor LED lighting applications
- Protections: Short circuit / Over temperature (PLM-40)
- 2 years warranty



AC input voltage range	110~295VAC; 156~417VDC		
AC inrush current (max.)	Cold start, 15A at 230VAC		
Setup time	500ms at full load and 230VAC		
Short circuit protection	Hiccup mode, auto-recovery		
Over temp. protection	Hiccup mode, auto-recovery (PLM-40 only)		
Withstand voltage	I/P-O/P: 3.75kVAC		
Working temperature	-30~+50°C	-30~+45°C (refer to output derating curve)	
Safety standards	UL8750, ENEC EN61347-1, EN61347-2-13, EN62384 approved		
EMC standards	EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547		
Connection (Input / Output)	2+2P push terminal block		
Dimension (LxWxH)(mm)	145x 38x 22	175x 42x 24	

### PLM-12 Series



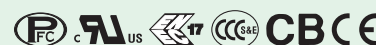
Model No.	Output	Io Tol.	R&N	Effi.
PLM-12-350	22~36V, 350mA	±5%	3.6V	85%
PLM-12-500	15~24V, 500mA	±5%	2.4V	84%
PLM-12-700	11~18V, 700mA	±5%	2.4V	83%
PLM-12-1050	7~12V, 1050mA	±5%	1.8V	81%

### 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-25-700	21~36V, 700mA	±5%	3.6V	86%
PLM-25-1050	14~24V, 1050mA	±5%	2.4V	85%

### PLM-40 Series



Model No.	Output	Io Tol.	R&N	Effi.
PLM-40-350	53~105V, 350mA	±5%	10V	88%
PLM-40-500	40~80V, 500mA	±5%	8.0V	88%
PLM-40-700	29~57V, 700mA	±5%	6.0V	87%
PLM-40-1050	19~38V, 1050mA	±5%	4.0V	87%
PLM-40-1400	15~29V, 1400mA	±5%	3.0V	86%
PLM-40-1750	12~23V, 1750mA	±5%	2.5V	86%

# PLM-E series

12~40W Slim Type Plastic Case with PFC

## ► Features

- Constant current mode
- 180~295VAC input
- No load power consumption <0.5W
- Fully isolated plastic case with push terminal style I/O
- Three-step analog dimming function (PLM-40E)
- IP30 design
- Isolation class II, no F.G.
- Low cost, high reliability
- Suitable for indoor LED lighting applications
- Protections: Short circuit / Over temperature (PLM-40E)
- 2 years warranty

	PLM-12E	PLM-25E	PLM-40E
			
			
AC input voltage range	180~295VAC; 254~417VDC		
AC inrush current (max.)	Cold start, 15A at 230VAC		
Setup time	500ms at full load and 230VAC		
Short circuit protection	Hiccup mode, auto-recovery		
Over temp. protection	Hiccup mode, auto-recovery (PLM-40E only)		
Withstand voltage	I/P-O/P: 3.75kVAC		
Working temperature	-30~+50°C	-30~+45°C	-30~+40°C (refer to output derating curve)
Safety standards	ENEC EN61347-1, EN61347-2-13, EN62384, GB19510.14, GB19510.1 approved		
EMC standards	EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547, GB17743, GB17625.1		
Connection (Input / Output)	2+2P push terminal block		
Dimension (LxWxH)(mm)	145x 38x 22		175x 42x 24

## PLM-12E Series



Model No.	Output	Io Tol.	R&N	Effi.
PLM-12E-350	22~36V, 350mA	±5%	5.5V	84%
PLM-12E-500	15~24V, 500mA	±5%	3.6V	83%
PLM-12E-700	11~18V, 700mA	±5%	3.6V	82%
PLM-12E-1050	7~12V, 1050mA	±5%	2.7V	78%

## 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%

## PLM-40E Series



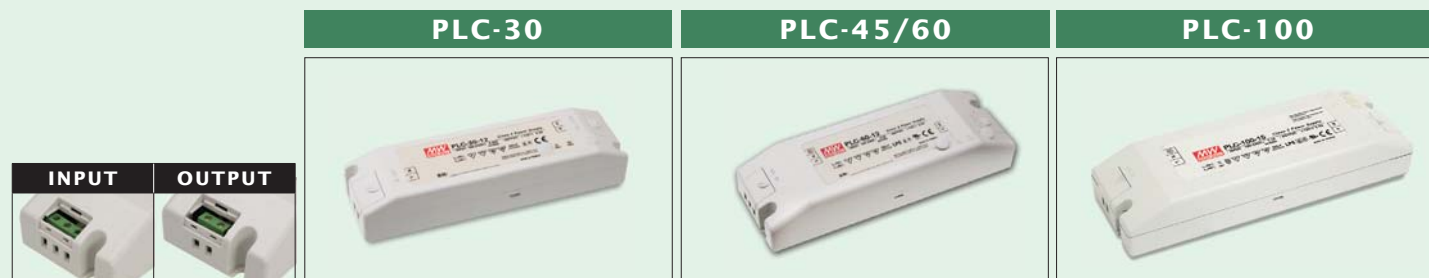
Model No.	Output	Io Tol.	R&N	Effi.
PLM-40E-350	53~105V, 350mA	±5%	10V	88%
PLM-40E-500	40~80V, 500mA	±5%	8.0V	88%
PLM-40E-700	29~57V, 700mA	±5%	6.0V	87%
PLM-40E-1050	19~38V, 1050mA	±5%	4.0V	87%
PLM-40E-1400	15~29V, 1400mA	±5%	3.0V	86%
PLM-40E-1750	12~23V, 1750mA	±5%	2.5V	86%

# PLC series

30~96W Plastic Case with PFC

## 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 moving 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 EN61347-1, EN61347-2-13, PSE J61347-1, J61347-2-13, GB19510.14, GB19510.1 approved; TUV EN60950-1 approved for PLC-100 only		
EMC standards	EN55015, EN55022 class B (PLC-45/60/100), EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547, GB17743, GB17625.1		
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)

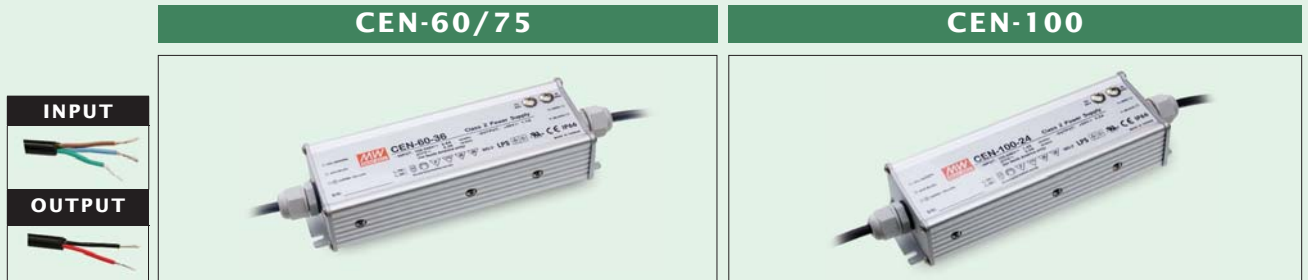
- CEN Series (60~96W)
- CLG Series (60~150W)
- ELG Series (75~240W)
- HLG Series (40~600W)
- HLG-C Series (70~320W)
- HVG Series (65~320W)
- HVGC Series (65~320W)
- HBG Series (60~240W)
- HSG Series (70W)
- ULP Series (150W)
- FDL Series (65W)

# CEN series

60~96W Metal Case with PFC

## ► Features

- Constant current mode
- Universal AC input (up to 295VAC) / Full range
- Meet 4kV surge immunity level (IEC61000-4-5)
- IP66 design
- Class 2 power unit / Pass LPS
- Suitable for dry, damp, and wet location
- Suitable for LED lighting and moving sign applications
- Protections:
  - Short circuit / Over current / Over voltage / Over temperature
- 3 years warranty



AC input voltage range	90~295VAC ; 127~417VDC	
AC inrush current (max.)	Cold start, 45A at 230VAC	
DC adjustment range	±10% rated output voltage	
Current adjustment range	75%~100%	65%~100%
Over current protection	95%~110% constant current limiting, auto-recovery	
Over voltage protection	110%~140% rated output voltage	110%~135% rated output voltage
Over temp. protection	Shut down o/p voltage, re-power on to recover	
Setup time	500ms at full load and 230VAC, no hold up time	500ms at full load and 230VAC, no hold up time
Withstand voltage	I/P-O/P: 3.75kVAC, I/P-FG: 2kVAC, O/P-FG: 1.5kVAC	
Working temperature	-30~+70°C (refer to output derating curve)	
Safety standards	UL8750, UL879 (except for CEN-100), TUV EN61347-1, EN61347-2-13, PSE J61347-1, J61347-2-13 approved	
EMC standards	EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547	
Connection	Input	UL rated, SJTW 18AWGx3C (30cm)
	Output	UL rated, SVT 18AWGx2C (30cm)
Dimension (LxWxH) (mm)	185x 62.5x 40.5	195x 62.5x 40.5

## CEN-60 Series



Model No.	Output	Tol.	R&N	Effi.
CEN-60-12	12V, 0~5.0A	±10%	2.0V	86%
CEN-60-15	15V, 0~4.0A	±10%	2.4V	87%
CEN-60-20	20V, 0~3.0A	±10%	1.8V	88%
CEN-60-24	24V, 0~2.5A	±10%	2.4V	89%
CEN-60-30	30V, 0~2.0A	±10%	3.0V	90%
CEN-60-36	36V, 0~1.7A	±10%	3.6V	90%
CEN-60-42	42V, 0~1.45A	±10%	4.0V	90%
CEN-60-48	48V, 0~1.3A	±10%	4.6V	91%
CEN-60-54	54V, 0~1.15A	±10%	5.0V	91%

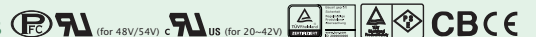
Model No.	Output	Tol.	R&N	Effi.
CEN-75-30	30V, 0~2.50A	±10%	3.0V	90%
CEN-75-36	36V, 0~2.10A	±10%	3.6V	90%
CEN-75-42	42V, 0~1.80A	±10%	4.0V	90%
CEN-75-48	48V, 0~1.57A	±10%	4.6V	91%
CEN-75-54	54V, 0~1.40A	±10%	5.0V	91%

## CEN-75 Series



Model No.	Output	Tol.	R&N	Effi.
CEN-75-15	15V, 0~5.00A	±10%	2.7V	87%
CEN-75-20	20V, 0~3.75A	±10%	2.0V	88%
CEN-75-24	24V, 0~3.15A	±10%	2.7V	89%

## CEN-100 Series



Model No.	Output	Tol.	R&N	Effi.
CEN-100-20	20V, 0~4.80A	±10%	2.0V	88%
CEN-100-24	24V, 0~4.00A	±10%	2.7V	89%
CEN-100-30	30V, 0~3.20A	±10%	3.0V	90%
CEN-100-36	36V, 0~2.65A	±10%	3.6V	90%
CEN-100-42	42V, 0~2.28A	±10%	4.0V	90%
CEN-100-48	48V, 0~2.00A	±10%	4.6V	91%
CEN-100-54	54V, 0~1.77A	±10%	5.0V	91%



# CLG series

60~150W Metal Case with PFC

## ► Features

### • Constant voltage + constant current modes

- Universal AC input (up to 295VAC) / Full range
- Meet 4kV surge immunity level (IEC 61000-4-5)
- Class 2 power unit / Pass LPS (CLG-60/100)
- Suitable for LED lighting, street lighting and moving sign applications
- Protections:  
Short circuit / Over current / Over voltage / Over temperature

### • Multiple models for CLG-150 :

- A-Type:** IP65 rated. Output voltage and constant current level can be adjusted through internal potentiometer
- B-Type:** IP67 rated. Constant current level adjustable through output cable
- C-Type:** Non IP. Terminal block for I/O connection
- Blank-Type:** IP67 rated. Cable for I/O connection
- 3 years warranty



	CLG-60	CLG-100	CLG-150
AC input voltage range	90~295VAC; 127~417VDC		
AC inrush current (max.)	Cold start, 35A at 230VAC	Cold start, 40A at 230VAC	Cold start, 65A at 230VAC
DC adjustment range	Fixed. Can be modified between 90%~110% (CLG-60) or 85%~100% (CLG-100) rated output voltage		Can be adjusted between 85%~110% by internal potentiometer (A and C-Type)
Current adjustment range	Fixed. Can be modified between 75%~103% rated output current		Can be adjusted between 50%~100% by internal potentiometer (A and C-Type) or through output cable (B-Type)
Over current protection	95%~110% constant current, auto-recovery	95%~102% constant current, auto-recovery	95%~108% constant current limiting, auto-recovery
Over voltage protection	110%~140% rated output voltage		110%~145% rated output voltage
Setup, rise, hold up time	500ms(setup time), no hold up time	500ms, 80ms, 60ms at full load and 230VAC	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	-30~+70°C (refer to output derating curve)		
Safety standards	UL1310, UL8750, UL879, TUV EN61347-1, EN61347-2-13, PSE J61347-1, J61347-2-13 approved; TUV EN60950-1 for CLG-100 only		UL60950-1, UL1012, UL8750, UL879, TUV EN60950-1, TUV EN61347-1, EN61347-2-13(except for C-Type), PSE J61347-1, J61347-2-13(except for C-Type) approved
EMC standards	EN55015, EN55022 class B, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547		
Connection	Input	UL rated, SJTW 18AWGx3C (30cm)	
	Output	UL rated, SVT 18AWGx2C (30cm)	UL rated, SJTW 18AWGx3C (30cm); Terminal block for C type A & Blank-Type : SJTW 14AWGx2C (30cm) B-Type: SJTW 14AWGx2C (30cm)+18AWGx2C (30cm) C-Type: Terminal block
Dimension (LxWxH)(mm)	195.6x 61.5x 38.8	222.2x 68x 38.8	A/B/Blank-Type: 222.2x 68x 38.8; C-Type: 229x 68x 38.8
Packing	0.86kg ; 16pcs / 14.8kg	1.0kg ; 12pcs / 13kg	1.0kg ; 12pcs / 13kg

## CLG-60 Series



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

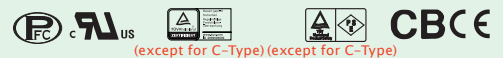
## CLG-100 Series



Model No.	Output	Tol.	R&N	Effi.
CLG-100-12	12V, 0~5.00A	±3%	150mV	83.0%
CLG-100-15	15V, 0~5.00A	±3%	150mV	85.0%
CLG-100-20	20V, 0~4.80A	±3%	150mV	88.5%
CLG-100-24	24V, 0~4.00A	±3%	150mV	88.5%

Model No.	Output	Tol.	R&N	Effi.
CLG-100-27	27V, 0~3.55A	±3%	150mV	88.0%
CLG-100-36	36V, 0~2.65A	±2%	150mV	88.0%
CLG-100-48	48V, 0~2.00A	±2%	200mV	88.5%

## CLG-150 Series



Model No.	Output	Tol.	R&N	Effi.
CLG-150-12 [A]	12V, 0~11.0A	±2%	150mV	88%
CLG-150-15 [A]	15V, 0~9.50A	±2%	150mV	88%
CLG-150-20 [A]	20V, 0~7.50A	±2%	150mV	90%
CLG-150-24 [A]	24V, 0~6.30A	±1%	150mV	90%
CLG-150-30 [A]	30V, 0~5.00A	±1%	150mV	91%
CLG-150-36 [A]	36V, 0~4.20A	±1%	150mV	91%
CLG-150-48 [A]	48V, 0~3.20A	±1%	200mV	91%

□ = A, B, C or blank

# ELG series

75~150W Metal Case with PFC

## Features

- Constant voltage+constant current modes
- Universal AC input (up 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
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires
- Suitable for dry / damp / wet locations
- Suitable for LED lighting and street lighting applications
- Protections:
  - Short circuit / Over current / Over voltage / Over temp.

- Multiple models for choice:
  - A-Type:** IP65 rated. Output voltage and constant current level can be adjusted through internal potentiometer
  - B-Type:** IP67 rated. Constant current level adjustable through output cable with **built-in 3 in 1 dimming function** (0~10VDC, PWM signal, or resistance)
  - Blank-Type:** IP67 rated. Cable for I/O connection
  - 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 **15V/400mA auxiliary output** (ELG-150 only)
- Optional CCC models available
- 5 years warranty



	ELG-75	ELG-100	ELG-150
AC input voltage range	100~305VAC ; 142~431VDC		
AC inrush current (max.)	Cold start, 50A at 230VAC	Cold start, 60A at 230VAC	Cold start, 65A 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, ENEC EN61347-1, EN61347-2-13, EN62384 approved		
EMC standards	EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547		
Connection	Input	UL rated, SJTW 18AWGx2C (30cm)	
	Output	Blank/A-Type: SJTW 18AWGx2C (30cm) B/D2/DA-Type: SJTW 18AWGx2C (30cm)+ UL2517 22AWGx2C (30cm)	Blank/A-Type: SJTW 14AWGx2C (30cm) for ELG-150- 12/24; SJTW 18AWGx2C (30cm) for others; B/D2/DA-Type: SJTW 14AWGx2C (30cm)+UL2517 22AWGx2C (30cm) for ELG-150-12/24; SJTW 18AWGx2C (30cm)+UL2517 22AWGx2C (30cm) for others BE-Type: SJTW 14AWGx2C (30cm)+UL2464 22AWGx2C (30cm) +UL2464 18AWGx2C (30cm) for ELG-150-12/24; SJTW 18AWGx2C (30cm)+UL2464 22AWGx2C (30cm) +UL2464 18AWGx2C (30cm) for others
Dimension (LxWxH) (mm)	180x 63x 35.5	199x 63x 35.5	219x 63x 35.5

## ELG-75 Series



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

○ = Blank, A, B, D2 or DA

## ELG-100 Series



Model No.	Output	Tol.	R&N	Effi.
ELG-100-24(A)	24V, 0~4A	±3%	200mV	88%
ELG-100-36(A)	36V, 0~2.66A	±2.5%	250mV	89%
ELG-100-42(A)	42V, 0~2.28A	±2.5%	250mV	90%

Model No.	Output	Tol.	R&N	Effi.
ELG-100-48(A)	48V, 0~2A	±2%	300mV	90%
ELG-100-54(A)	54V, 0~1.78A	±2%	350mV	91%

○ = Blank, A, B, D2 or DA

## ELG-150 Series



Model No.	Output	Tol.	R&N	Effi.
ELG-150-12(A)	12V, 0~10A	±3.0%	150mV	88%
ELG-150-24(A)	24V, 0~6.25A	±3.0%	200mV	89%
ELG-150-36(A)	36V, 0~4.17A	±2.5%	250mV	90%
ELG-150-42(A)	42V, 0~3.57A	±2.5%	250mV	90%
ELG-150-48(A)	48V, 0~3.13A	±2.0%	250mV	90%
ELG-150-54(A)	54V, 0~2.8A	±2.0%	350mV	91%

○ = Blank, A, B, D2, DA or BE

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

# ELG series

200~240W Metal Case with PFC

## Features

- Constant voltage+constant current modes
- 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
- Suitable for LED lighting and street lighting applications
- Protections:
  - Short circuit / Over current / Over voltage / Over temp.

- Multiple models for choice:
  - A-Type:** IP65 rated. Output voltage and constant current level can be adjusted through internal potentiometer
  - B-Type:** IP67 rated. Constant current level adjustable through output cable with **built-in 3 in 1 dimming function** (0~10VDC, PWM signal, or resistance)
  - Blank-Type:** IP67 rated. Cable for I/O connection
  - D2-Type:** IP67 rated. **Smart timer dimming function\***, contact MEAN WELL for details
  - DA-Type:** IP67 rated. **DALI control technology**
- 5 years warranty



AC input voltage range	100~305VAC ; 142~431VDC	
AC inrush current (max.)	Cold start, 75A 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	
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 (refer to "OUTPUT LOAD vs TEMPERATURE")	
Safety standards	UL8750, ENEC EN61347-1, EN61347-2-13, EN62384, GB19510.14, GB19510.1 approved (ELG-200 pending)	
EMC standards	EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547, GB17743, GB17625.1	
Connection	Input	UL rated, SJOW 17AWGx2C & H05RN-F 1mm <sup>2</sup>
	Output	Blank/A-Type: SJOW 17AWGx2C & H05RN-F 1mm <sup>2</sup> B/D2/DA-Type: SJOW 17AWGx2C & H05RN-F 1mm <sup>2</sup> +UL2517 22AWGx2C
Dimension (LxWxH) (mm)	244x 71x 35.5	

## ELG-200 Series

UL/CUL/ENEC/CB/CCC/CE pending

Model No.	Output	Tol.	R&N	Effi.
ELG-200-12(A)	12V, 0~16A	±3%	150mV	90.0%
ELG-200-24(A)	24V, 0~8.4A	±2%	200mV	92.0%
ELG-200-36(A)	36V, 0~5.55A	±2%	250mV	92.0%
ELG-200-42(A)	42V, 0~4.76A	±2%	250mV	92.5%
ELG-200-48(A)	48V, 0~4.16A	±2%	250mV	93.0%
ELG-200-54(A)	54V, 0~3.72A	±2%	350mV	93.0%

## ELG-240 Series

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%

○ = Blank, A, B, D2 or DA

○ = Blank, A, B, D2 or DA

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

# ELG-C series

75~150W Metal Case with PFC

## Features

- Constant current mode
- Universal AC input (up 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 1, Division 2 hazardous location luminaires
- Suitable for dry / damp / wet locations
- Suitable for LED lighting and street lighting applications
- Protections:
  - Short circuit / Over voltage / Over temperature
- Multiple models for choice:
  - 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 (0~10VDC, PWM signal, or resistance)
  - Blank-Type:** IP67 rated. Cable for I/O connection
  - 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 15V/400mA auxiliary output (ELG-150-C only)
- Optional CCC models available
- 5 years warranty



AC input voltage range	100~305VAC; 142~431VDC		
AC inrush current (max.)	Cold start, 50A at 230VAC	Cold start, 40A at 230VAC	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		
Working temperature	Tcase=-40~+85°C	Tcase=-40~+90°C	Tcase=-40~+85°C (refer to "OUTPUT LOAD vs TEMPERATURE")
Safety standards	UL8750, ENEC EN61347-1, EN61347-2-13, EN62384 approved		
EMC standards	EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547		
Connection	Input	UL rated, SJTW 18AWG x2C (30cm)	
	Output	Blank/A-Type: SJTW 18AWGx2C (30cm) B/D2/DA-Type: SJTW 18AWGx2C (30cm)+UL2517 22AWGx2C (30cm)	Blank/A-Type: STW 18AWGx2C (30cm) for ELG-150-C500; SJTW 18AWGx2C (30cm) for others B/D2/DA-Type: STW 18AWGx2C (30cm)+UL2517 22AWGx2C (30cm) for ELG-150-C500 ; SJTW 18AWGx2C (30cm)+UL2517 22AWGx2C (30cm) for others BE-Type: STW 18AWGx2C (30cm)+UL2464 22AWGx2C (30cm)+UL2464 18AWGx2C (30cm) for ELG-150-C500; SJTW 18AWGx2C (30cm) +UL2464 22AWGx2C (30cm)+UL2464 18AWGx2C (30cm) for others
Dimension (LxWxH) (mm)	180x 63x 35.5	199x 63x 35.5	219x 63x 35.5

## ELG-75-C Series

Model No.	Output	Tol.	R&N	Effi.
ELG-75-C350(A)	107~214V, 350mA	±5%	2Vp-p	91%
ELG-75-C500(A)	75~150V, 500mA	±5%	1.5Vp-p	91%
ELG-75-C700(A)	53~107V, 700mA	±5%	1.0Vp-p	90%
ELG-75-C1050(A)	35~71V, 1050mA	±5%	1.0Vp-p	90%
ELG-75-C1400(A)	27~54V, 1400mA	±5%	0.5Vp-p	90%

○ = Blank, A, B, D2 or DA

## ELG-100-C Series

Model No.	Output	Tol.	R&N	Effi.
ELG-100-C350(A)	143~286V, 350mA	±5%	3Vp-p	92%
ELG-100-C500(A)	100~200V, 500mA	±5%	2.0Vp-p	91%
ELG-100-C700(A)	71~143V, 700mA	±5%	1.5Vp-p	90%

Model No.	Output	Tol.	R&N	Effi.
ELG-100-C700(A)	71~143V, 700mA	±5%	1.5Vp-p	90%
ELG-100-C1050(A)	48~95V, 1050mA	±5%	1.0Vp-p	90%
ELG-100-C1400(A)	35~72V, 1400mA	±5%	1.0Vp-p	90%

○ = Blank, A, B, D2 or DA

## ELG-150-C Series

Model No.	Output	Tol.	R&N	Effi.
ELG-150-C500(A)	150~300V, 500mA	±5%	2Vp-p	92%
ELG-150-C700(A)	107~214V, 700mA	±5%	1.5Vp-p	92%
ELG-150-C1050(A)	72~143V, 1050mA	±5%	1.0Vp-p	92%
ELG-150-C1400(A)	54~107V, 1400mA	±5%	1.0Vp-p	91%
ELG-150-C1750(A)	43~86V, 1750mA	±5%	0.8Vp-p	91%
ELG-150-C2100(A)	36~72V, 2100mA	±5%	0.8Vp-p	91%

○ = Blank, A, B, D2, DA or BE

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

# ELG-C series

200~240W Metal Case with PFC

## Features

- Constant current mode
- 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
- Suitable for LED lighting and street lighting applications
- Protections:
  - Short circuit / Over voltage / Over temperature

- Multiple models for choice:
  - 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 (0~10VDC, PWM signal, or resistance)
  - Blank-Type:** IP67 rated. Cable for I/O connection
  - D2-Type:** IP67 rated. Smart timer dimming function\*, contact MEAN WELL for details
  - DA-Type:** IP67 rated. DALI control technology
- 5 years warranty



ELG-200-C		ELG-240-C	
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		
Working temperature	Tcase=-40~+85°C (refer to "OUTPUT LOAD vs TEMPERATURE")		
Safety standards	UL8750, ENEC EN61347-1, EN61347-2-13, EN62384, GB19510.14, GB19510.1 approved (ELG-200-C pending)		
EMC standards	EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547, GB17743, GB17625.1		
Connection	Input	UL rated, SJOW 17AWGx2C & H05RN-F 1mm <sup>2</sup>	
	Output	Blank/A-Type: STW 18AWGx2C for ELG-200/240-C700U; SJOW 17AWGx2C & H05RN-F 1mm <sup>2</sup> for others; B/D2/DA-Type: STW 18AWGx2C+UL2517 22AWGx2C for ELG-200/240-C700U; SJOW 17AWGx2C & H05RN-F 1mm <sup>2</sup> +UL2517 22AWGx2C for others	
Dimension (LxWxH) (mm)	244x 71x 35.5		

## ELG-200-C Series UL/CUL/ENEC/CB/CCC/CE pending

Model No.	Output	Tol.	R&N	Effi.
ELG-200-C700(A)	142~286V, 700mA	±5%	2.5Vp-p	93%
ELG-200-C1050(A)	95~190V, 1050mA	±5%	2.5Vp-p	93%
ELG-200-C1400(A)	71~142V, 1400mA	±5%	1.5Vp-p	92%
ELG-200-C1750(A)	57~114V, 1750mA	±5%	1.0Vp-p	92%
ELG-200-C2100(A)	48~96V, 2100mA	±5%	1.0Vp-p	92%

## ELG-240-C Series

Model No.	Output	Tol.	R&N	Effi.
ELG-240-C700(A)	172~343V, 700mA	±5.0%	2.5Vp-p	93%
ELG-240-C1050(A)	114~228V, 1050mA	±5.0%	2.5Vp-p	93%
ELG-240-C1400(A)	86~ 71V, 1400mA	±5.0%	1.5Vp-p	93%
ELG-240-C1750(A)	69~137V, 1750mA	±5.0%	1.0Vp-p	93%
ELG-240-C2100(A)	57~115V, 2100mA	±5.0%	1.0Vp-p	93%

○ = Blank, A, B, D2 or DA

○ = Blank, A, B, D2 or DA

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

# HLG series

40~60W Metal Case with PFC

## Features

- Constant voltage + constant current modes
- Universal AC input (up 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
- Suitable for LED lighting and street lighting applications
- Protections: Short circuit / Over current / Over voltage / Over temp.

- Multiple models for choice:
  - A-Type:** IP65 rated. Output voltage and 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)
  - Blank-Type:** IP67 rated. Cable for I/O connection
  - D-Type(option):** IP67 rated. Timer dimming function, contact MEAN WELL for details.
- Optional CCC & RCM models available (HLG-40H/60H-A/B/Blank-Type)
- 7 years warranty



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~+70°C (refer to output derating curve)	
Safety standards	UL8750, TUV EN61347-1, EN61347-2-13, PSE J61347-1, J61347-2-13 approved; Design refer to UL60950-1, TUV EN60950-1, EN60335-1	
EMC standards	EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547	
Connection	Input	UL rated, SJTW 18AWGx3C (30cm)
	Output	A/D/Blank-Type: SVT 18AWGx2C (30cm); B-Type: SVT 18AWGx2C (30cm)+UL2517 18AWGx2C (30cm)
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, 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%
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%

Model No.	Output	Tol.	R&N	Effi.
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, D or Blank

### Junction Box for HLG Series



- Optional junction box available for HLG-80H~320H 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 Metal Case with PFC

## Features

- Constant voltage + constant current modes
- Universal AC input (up 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
- Suitable for LED lighting and street lighting applications
- Protections:  
Short circuit / Over current / Over voltage / Over temp.

- Multiple models for choice:  
**A-Type:** IP65 rated. Output voltage and 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)  
**Blank-Type:** IP67 rated. Cable for I/O connection  
**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
- Optional CCC & RCM models available (HLG-80H/100H/120H-A/B/Blank type)
- 7 years warranty



		HLG-80H	HLG-100H/HLG-120H
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~+70°C (refer to output derating curve)	
Safety standards		UL8750, TUV EN61347-1, EN61347-2-13, PSE J61347-1, J61347-2-13 approved; <b>UL8750 listed for HLG-80H-□BL only</b> ; ENEC EN61347-1, EN61347-2-13 for HLG-120H only	
EMC standards		EN55015, EN55022 class B (except for HLG-80H), EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547	
Connection	Input	UL rated, SJTW 18AWGx3C (30cm)	
	Output	A/D/Blank-Type: SVT 18AWGx2C (30cm) ; B-Type: SVT 18AWGx2C (30cm)+UL2517 18AWGx2C (30cm)	A/D/Blank-Type: SJTW 14AWGx2C (30cm) ; B-Type: SJTW 14AWGx2C (30cm)+SJTW 18AWGx2C (30cm)
Dimension (LxWxH) (mm)		195.6x 61.5x 38.8	220x 68x 38.8

### HLG-80H Series

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, BL, D or Blank

### HLG-100H Series

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%
HLG-100H-36(A)	36V, 0~2.65A	±1%	200mV	93%

Model No.	Output	Tol.	R&N	Effi.
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, D or Blank

### HLG-120H Series

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, D or Blank

★ HLG-120H-12A/24A/48A are our popular models. We will keep sufficient stock for prompt delivery of high quantity orders.

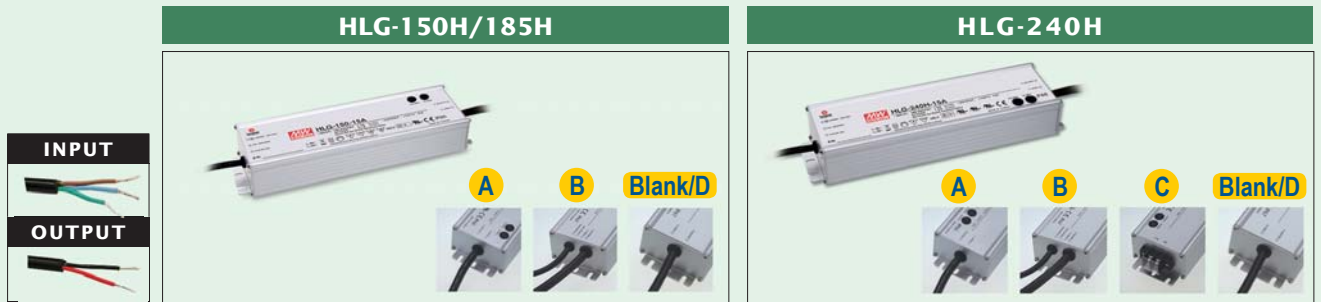
# H LG series

150~240W Metal Case with PFC

## Features

- Constant voltage+constant current modes
- Universal AC input (up 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 LED lighting and street lighting applications
- Protections:  
Short circuit / Over current / Over voltage / Over temp.

- Multiple models for choice:  
**A-Type:** IP65 rated. Output voltage and 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)  
**C-Type:** Terminal block for I/O connection (HLG-240H)  
**Blank-Type:** IP67 rated. Cable for I/O connection  
**D-Type(option):** IP67 rated. Timer dimming function, contact MEAN WELL for details
- Optional CCC & RCM models available (HLG-150H/185H/240H-A/B/Blank-Type)
- 7 years warranty



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~+70°C (refer to output derating curve)	
Safety standards	UL8750, TUV EN61347-1, EN61347-2-13, PSE J61347-1, J61347-2-13 (except for HLG-240H C-Type) approved; UL1012, UL60950-1, TUV EN60950-1 approved for HLG-240H only	
EMC standards	EN55015, EN55022 class B, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547	
Connection	Input	UL rated, SJTW 18AWGx3C (30cm); Terminal block for HLG-240H C-Type
	Output	A/D/Blank-Type: SJTW 14AWGx2C (30cm) ; B-Type: SJTW 14AWGx2C (30cm)+SJTW 18AWGx2C (30cm); C-Type: Terminal block (HLG-240H)
Dimension (LxWxH)(mm)	A/B/D/Blank-Type: 228x 68x 38.8	A/B/D/Blank-Type: 244.2x 68x 38.8 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, 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%
HLG-185H-30(A)	30V, 0~6.20A	±1.0%	200mV	93.5%

Model No.	Output	Tol.	R&N	Effi.
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, 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, C, D or Blank

★ HLG-185H-12A/24A/48A & HLG-240H-12A/24A/48A are our popular models. We will keep sufficient stock for prompt delivery of high quantity orders.



# HLG series

320~600W Metal Case with PFC

## Features

- Constant voltage+constant current modes
- Universal AC input (up 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 (HLG-600H A-Type only)
- Suitable for LED lighting and street lighting applications
- Protections:  
Short circuit / Over current / Over voltage / Over temp.

- Multiple models for choice:  
**A-Type:** IP65 rated. Output voltage and 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) (\*: 0~10VDC for HLG-600H)  
**C-Type:** Terminal block for I/O connection (HLG-320H only)  
**Blank-Type:** IP67 rated. Cable for I/O connection (HLG-320H only)  
**D-Type(option):** IP67 rated. Timer dimming function, contact MEAN WELL for details (HLG-320H only)
- Optional RCM models available (HLG-320H-A/B/Blank-Type)
- 7 years warranty

INPUT	
OUTPUT	
320W	600W



AC input voltage range	90~305VAC; 127~431VDC	
AC inrush current (max.)	Cold start, 70A 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~+70°C (refer to output dearting curve)	
Safety standards	UL8750, TUV EN61347-1/2-13, PSE J61347-1/2-13 (except for C-Type) approved	UL60950-1, UL8750, ENEC EN61347-1/2-13, EN62384 approved
EMC standards	EN55015, EN55022 class B, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11,EN61547	
Connection	Input	A/B/D/Blank-Type: UL rated, SJTW 18AWGx3C (30cm); C-Type: Terminal block
	Output	A/D/Blank-Type: SJTW 14AWGx2C (30cm) B-Type: SJTW 14AWGx2C (30cm) + SJTW 18AWGx2C (30cm) C-Type: Terminal block
Dimension (LxWxH)(mm)	252x 90x 43.8	280x 144x 48.5

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-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%
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, C, D or Blank

○ = A, B

# HLG-C series

70~150W Metal Case with PFC

## Features

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

- Multiple models for choice:
  - 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)
  - D-Type (option):** IP67 rated. Timer dimming function, contact MEAN WELL for details
- 7 years warranty



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, 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~+70°C (refer to output derating curve)	
Safety standards	HLG-60H-C/80H-C: UL8750, TUV EN61347-1, EN61347-2-13, PSE J61347-1, J61347-2-13 approved HLG-120H-C: UL8750, ENEC EN61347-1, EN61347-2-13, EN62384, PSE J61347-1, J61347-2-13 approved	
EMC standards	EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547	
Connection	Input	UL rated, SJTW 16AWGx3C(30cm)
	Output	A&D-Type: SJTW 16AWGx2C(30cm) B-Type: SJTW 16AWGx2C(30cm)+ SJTW 16AWGx2C(30cm) A&D-Type: STW 16AWGx2C(30cm) for HLG-120H-C350 SJTW 16AWGx2C(30cm) for others B-Type: STW 16AWGx2C(30cm) + SJTW 16AWGx2C(30cm) for HLG-120H-C350; SJTW 16AWGx2C(30cm) + SJTW 16AWGx2C(30cm) for others
Dimension (LxWxH)(mm)	171x 61.5x 36.8	195.6x 61.5x 38.8

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

Model No.	Output	Io Tol.	R&N	Effi.
HLG-60H-C350(A)	100~200V, 350mA	±5%	1V	91%
HLG-60H-C700(A)	50~100V, 700mA	±5%	0.5V	90.5%

○ = A, B or D

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

Model No.	Output	Io Tol.	R&N	Effi.
HLG-80H-C350(A)	167~257V, 350mA	±5%	1V	91.5%
HLG-80H-C700(A)	84~129V, 700mA	±5%	0.5V	91.5%

○ = A, B or D

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

Model No.	Output	Io Tol.	R&N	Effi.
HLG-120H-C350(A)	215~430V, 350mA	±5%	2V	94%
HLG-120H-C500(A)	150~300V, 500mA	±5%	1.5V	94%
HLG-120H-C700(A)	107~215V, 700mA	±5%	1V	94%
HLG-120H-C1050(A)	74~148V, 1050mA	±5%	1V	94%
HLG-120H-C1400(A)	54~108V, 1400mA	±5%	1V	93.5%

○ = A, B or D

# HLG-C series

200~320W Metal Case with PFC

## Features

- **Constant current mode**
- Universal AC input (up 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/320H-C)**
- Suitable for dry, damp, and wet location
- Suitable for LED lighting and street lighting applications
- Protections: Short circuit / Over voltage / Over temperature
- Multiple models for choice:
  - 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) (\*: 0~10VDC for HLG-320H-C)
  - 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/320H-C)
  - DA-Type (option):** IP67 rated. **DALI control technology** (HLG-320H-C only)
- 7 years warranty



AC input voltage range	90~305VAC; 127VDC~431VDC		
AC inrush current (max.)	Cold start, 55A at 230VAC	Cold start, 75A at 230VAC	Cold start, 70A 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, rise, hold up time	500ms, 80ms, 16ms at full load and 230VAC	500ms, 80ms, 14ms at full load and 230VAC	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~+70°C (refer to output derating curve)		
Safety standards	UL8750 ; PSE J61347-1, J61347-2-13(HLG-185H-C only) approved		
EMC standards	EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547		
Connection	Input	UL rated, SJTW 16AWGx3C(30cm)	
	Output	A&D-Type: SJTW 16AWGx2C(30cm)★ B-Type: SJTW 16AWGx2C(30cm) + SJTW 16AWGx2C(30cm)★	A-Type: STW 18AWGx2C(30cm) B&D2-Type: STW 8AWGx2C(30cm) + SJTW 18AWGx2C(30cm)
Dimension (LxWxH)(mm)	228x 68x 38.8	244.2x 68x 38.8	252x 90x 43.8

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

1-10VDC (B-Type) PFC CBCE

Model No.	Output	Io Tol.	R&N	Effi.
HLG-185H-C500(A)	200~400V, 500mA	±5%	2V	94%
HLG-185H-C700(A)	143~286V, 700mA	±5%	1.5V	94%
HLG-185H-C1050(A)	95~190V, 1050mA	±5%	1V	94%
HLG-185H-C1400(A)	71~143V, 1400mA	±5%	1V	94%

○ = A, B or D

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

1-10VDC (B-Type) Type HL PFC CBCE

Model No.	Output	Io Tol.	R&N	Effi.
HLG-240H-C700(A)	178~357V, 700mA	±5%	2V	93.5%
HLG-240H-C1050(A)	119~238V, 1050mA	±5%	1.5V	93.5%
HLG-240H-C1400(A)	89~179V, 1400mA	±5%	1V	94%

Model No.	Output	Io Tol.	R&N	Effi.
HLG-240H-C1750(A)	71~143V, 1750mA	±5%	1V	94%
HLG-240H-C2100(A)	59~119V, 2100mA	±5%	1V	93.5%

○ = A, B or D

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

0-10VDC (B-Type) DALI (DA-Type) PFC CBCE

Model No.	Output	Io Tol.	R&N	Effi.
HLG-320H-C700(A)	214~428V, 700mA	±5%	2V	94.0%
HLG-320H-C1050(A)	152~305V, 1050mA	±5%	1.5V	94.0%
HLG-320H-C1400(A)	114~229V, 1400mA	±5%	1.2V	94.0%
HLG-320H-C1750(A)	91~183V, 1750mA	±5%	1V	94.0%
HLG-320H-C2100(A)	76~152V, 2100mA	±5%	0.8V	94.0%
HLG-320H-C2800(A)	57~114V, 2800mA	±5%	0.6V	94.0%
HLG-320H-C3500(A)	46~91V, 3500mA	±5%	0.5V	94.0%

○ = A, B, D2 or DA

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

★ For the output cable of HLG-185H-C500 please refer to the specification.

# HVG series

65~150W Metal Case with PFC

## Features

- Constant voltage+constant current modes
- 180~528VAC wide input range
- High efficiency up to 91.5%
- Class 2 power unit / Pass LPS (HVG-65/100)
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires (HVG-100/150)
- Suitable for dry, damp, and wet location
- Suitable for LED lighting and street lighting applications
- Protections: Short circuit / Over current / Over voltage / Over temperature

• Multiple models for choice:

**A-Type:** IP65 rated. Output voltage and constant current level can be adjusted through internal potentiometer

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

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

• 5 years warranty



		HVG-65	HVG-100	HVG-150
AC input voltage range		180~528VAC (single phase); 254~747VDC		
AC inrush current (max.)		Cold start, 25A at 480VAC	Cold start, 25A at 480VAC	Cold start, 35A 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	400ms, 80ms, 18ms 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~+70°C (refer to output derating curve)		
Safety standards		UL8750 approved		
EMC standards		EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547, FCC part 15 subpart B		
Connection	Input	UL rated, STW 18AWGx3C (30cm)		
	Output	A&D-Type	SVT 18AWGx2C (30cm)	
		B-Type	SVT 18AWGx2C (30cm)+UL2517 18AWGx2C (30cm)	
Dimension (LxWxH)(mm)		189x 61.5x 36.8	236x 68x 38.8	245x 68x 38.8

## HVG-65 Series



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

○ = A, B or D

Model No.	Output	Tol.	R&N	Effi.
HVG-100-36(A)	36V, 0~2.65A	±1.0%	200mV	90.5%
HVG-100-42(A)	42V, 0~2.28A	±1.0%	200mV	90.5%
HVG-100-48(A)	48V, 0~2A	±1.0%	200mV	91.0%
HVG-100-54(A)	54V, 0~1.77A	±1.0%	200mV	91.0%

○ = A, B or D

## 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%

○ = A, B or D

## HVG-100 Series



Model No.	Output	Tol.	R&N	Effi.
HVG-100-15(A)	15V, 0~5A	±2.0%	150mV	89.0%
HVG-100-20(A)	20V, 0~4.8A	±1.0%	150mV	90.0%
HVG-100-24(A)	24V, 0~4A	±1.0%	150mV	91.0%
HVG-100-30(A)	30V, 0~3.2A	±1.0%	200mV	91.0%

# HVG series

240~320W Metal Case with PFC

## Features

- Constant voltage+constant current modes
- 180~528VAC wide input range
- High efficiency up to 94%
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires
- Suitable for dry, damp, and wet location
- Suitable for LED lighting and street lighting applications
- Protections: Short circuit / Over current / Over voltage / Over temperature

• Multiple models for choice:

- A-Type:** IP65 rated. Output voltage and constant current level can be adjusted through internal potentiometer
- B-Type:** IP67 rated and built-in 3 in 1 dimming function (0~10VDC, PWM signal, or resistance)
- D2-Type (option):** IP67 rated. Smart timer dimming function\*, contact MEAN WELL for details

• 5 years warranty



AC input voltage range	180~528VAC ; 254~747VDC		
AC inrush current (max.)	Cold start 50A at 480VAC		
DC adjustment range	±7% rated output voltage (A-Type only)	-10%~+8% 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% shut down o/p voltage, re-power on to recover		
Over temperature protection	Shut down and latch off o/p voltage, re-power on to recover		
Setup, rise, hold up time	500ms, 150ms, 12ms at full load and 347VAC/480VAC	500ms, 80ms, 15ms 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~+70°C (refer to output derating curve)		
Safety standards	UL8750 approved		
EMC standards	FCC Part 15 subpart B, EN61000-4-2,3,4,5,6,8,11, EN61547		
Connection	Input	UL rated, STW 18AWGx3C (30cm)	
	Output	A-Type	SJTW 14AWGx2C (30cm)
		B&D2-Type	SJTW 14AWGx2C (30cm) + UL2517 22AWGx2C (30cm)
Dimension (LxWxH)(mm)	254.2x 68x 38.8	262x 90x 43.8	

## 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%

## 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%
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%
HVG-320-54(A)	54V, 0~6A	±1%	350mV	94%

○ = A, B or D2

○ = A, B or D2

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

# HVGC series

65~150W Metal Case with PFC

## ► 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 LED lighting and street lighting applications
- Protections: Short circuit / Over voltage / Over temperature

- Multiple models for choice:
  - 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 (0~10VDC, PWM signal, or resistance)
  - D-Type (option):** IP67 rated. Timer dimming function, contact MEAN WELL for details
- 5 years warranty



		HVGC-65	HVGC-100	HVGC-150
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~+70°C (refer to output derating curve)		
Safety standards		HVGC-65: UL8750, ENEC EN61347-1, EN61347-2-13, EN62384 approved HVGC-100/150: UL8750, TUV EN61347-1, EN61347-2-13 approved		
EMC standards		EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547, FCC part 15 subpart B		
Connection	Input	UL rated, STW 18AWGx3C (30cm)		
	Output	A&D-Type	SJTW 18AWGx2C (30cm)	STW 18AWGx2C (30cm)
		B-Type	SJTW 18AWGx2C (30cm)+UL2517 18AWGx2C (30cm)	STW 18AWGx2C (30cm)+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.	R&N	Effi.
HVGC-65-350(A)	18~186V, 350mA	±5%	1.0V	90.0%
HVGC-65-500(A)	13~130V, 500mA	±5%	0.7V	90.5%
HVGC-65-700(A)	9~93V, 700mA	±5%	0.5V	90.5%
HVGC-65-1050(A)	6~62V, 1050mA	±5%	0.3V	90.0%

○ = A, B or D

### HVGC-100 Series



Model No.	Output	Io Tol.	R&N	Effi.
HVGC-100-350(A)	29~285V, 350mA	±5%	1V	91%
HVGC-100-700(A)	15~142V, 700mA	±5%	0.5V	91%

○ = A, B or D

### HVGC-150 Series



Model No.	Output	Io Tol.	R&N	Effi.
HVGC-150-350(A)	42~428V, 350mA	±5%	2.0V	91%
HVGC-150-500(A)	30~300V, 500mA	±5%	1.5V	91%
HVGC-150-700(A)	21~215V, 700mA	±5%	1.0V	91%
HVGC-150-1050(A)	15~143V, 1050mA	±5%	0.7V	90%
HVGC-150-1400(A)	12~107V, 1400mA	±5%	0.5V	90%

○ = A, B or D

# HVGC series

240~320W Metal Case with PFC

## ► 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 LED lighting and street lighting applications
- Protections: Short circuit / Over voltage / Over temperature

- Multiple models for choice:
  - 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 (0~10VDC, PWM signal, or resistance)
  - D2-Type (option):** IP67 rated. Smart timer dimming function\*, contact MEAN WELL for details
- 5 years warranty



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~+70°C (refer to output derating curve)	
Safety standards		UL8750 approved	
EMC standards		FCC Part 15 subpart B, EN61000-4-2,3,4,5,6,8,11, EN61547	
Connection	Input	UL rated, STW 18AWGx3C (30cm)	
	Output	A-Type	STW 18AWGx2C (30cm)
		B&D2-Type	STW 18AWGx2C (30cm)+UL2517 22AWGx2C (30cm)
Dimension (LxWxH)(mm)		254.2x 68x 38.8      262x 90x 43.8	

## HVGC-240 Series



Model No.	Output	Io Tol.	R&N	Effi.
HVGC-240-700(A)	171.4~342.8V, 700mA	±5%	2V	93.5%
HVGC-240-1050(A)	114.3~228.6V, 1050mA	±5%	1.5V	93%
HVGC-240-1400(A)	85.7~171.4V, 1400mA	±5%	1V	93%
HVGC-240-1750(A)	68.5~137.1V, 1750mA	±5%	1V	93%
HVGC-240-2100(A)	57.2~114.3V, 2100mA	±5%	1V	92.5%
HVGC-240-2800(A)	42.9~85.7V, 2800mA	±5%	1V	92.5%
HVGC-240-3500(A)	34.3~68.6V, 3500mA	±5%	1V	92.5%

## HVGC-320 Series



Model No.	Output	Io Tol.	R&N	Effi.
HVGC-320-700(A)	214~428V, 700mA	±5%	2V	93.5%
HVGC-320-1050(A)	152.4~304.8V, 1050mA	±5%	1.5V	93.5%
HVGC-320-1400(A)	114.3~228.6V, 1400mA	±5%	1V	93.5%
HVGC-320-1750(A)	91.4~182.8V, 1750mA	±5%	1V	93.5%
HVGC-320-2100(A)	76.2~152.4V, 2100mA	±5%	1V	93.5%
HVGC-320-2800(A)	57~114.3V, 2800mA	±5%	1V	93.5%
HVGC-320-3500(A)	45.7~91.4V, 3500mA	±5%	1V	93%

○ = A, B or D2

○ = A, B or D2

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

# HBG series

60~240W Circular Shape with PFC

## Features

- Constant current mode (HBG-60/100)
- Constant voltage+constant current modes (HBG-160/240)
- Universal AC input (up to 305VAC) / Full range (up to 295VAC for HBG-60)
- High efficiency up to 93.5%
- Patented metal housing design for HBG-100/160/240 (Patent No.: CN201220314551)
- 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, no F.G. (HBG-60)
- Class 2 power unit (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-100/160/240
  - 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)
  - Blank-Type: IP67 rated. Cable for I/O connection
- Optional CCC (100~240W) & RCM models available
- 5 years warranty

		HBG-60	HBG-100	HBG-160	HBG-240
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
Setup, rise, hold up time		500ms at 230VAC for setup time	500ms, 80ms, 12ms at full load and 230VAC	500ms, 200ms, 12ms at full load and 230VAC	500ms, 120ms, 15ms 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~+70°C	-40~+60°C (refer to output derating curve)		
Safety standards		UL8750, ENEC EN61347-1, EN61347-2-13, EN62384, GB19510.14, GB19510.1 approved	UL8750, ENEC EN61347-1, EN61347-2-13, EN62384 approved	UL8750, TUV EN61347-1, EN61347-2-13 approved, design refer to TUV EN60950	UL8750, ENEC EN61347-1, EN61347-2-13, EN62384 approved
EMC standards		EN55015, EN61000-3-2 Class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11; EN61547, GB17743, GB17625.1	EN55015, EN61000-3-2 Class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547		EN55015, EN61000-3-2 Class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547
Connection	Input	SJTW 18AWGx2C (30cm)	SJTW 18AWGx3C (30cm)		
	Output	SVT 18AWGx2C (20cm)	A & Blank Type: SJTW 18AWGx2C (20cm) B Type: SJTW 18AWGx2C (20cm) + UL2517 22AWGx2C (30cm)	A & Blank Type: SJTW 18AWGx2C (20cm) B Type: SJTW 18AWGx2C (20cm) + SVT 18AWGx2C (30cm)	A & Blank Type: SJTW 14AWGx2C (30cm) B Type: SJTW 14AWGx2C (30cm) + SVT 18AWGx2C (30cm)
Dimension (DxH)(mm)		φ110x 60.5	φ130x 66.5	φ151.68x 66.5	φ191.5x 69

## 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	Tol.	Effi.
HBG-100-24(A)	24V, 0~4A	±2%	90.5%
HBG-100-36(A)	36V, 0~2.7A	±2%	91.0%
HBG-100-48(A)	48V, 0~2A	±2%	91.0%
HBG-100-60(A)	60V, 0~1.6A	±2%	91.5%

## 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 or Blank

## HBG-240 Series

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 or Blank



# HSG/ULP/FDL series

## HSG-70 series 70W Rectangular Metal Case



L127.2x W90x H38.8 mm

- Constant voltage + constant current modes
- Output current adjustable through internal potentiometer
- Built-in active PFC function
- IP65 design
- Suitable for LED lighting and moving sign applications
- Protections: Short circuit / Over current / Over voltage / Over temperature
- 3 years warranty

AC input voltage range	90~305VAC; 127~431VDC
Current adjustment range	60%~100%
Over current protection	95%~108% constant current limiting
Over voltage protection	112%~140% rated output voltage
Withstand voltage	I/P-O/P: 3.75kVAC, I/P-FG: 2kVAC, O/P-FG: 0.5kVAC
Working temperature	-40~+70°C
Safety standards	Design refer to UL 8750, EN61347-1, EN61347-2-13
EMC standards	EN55015, EN61000-3-2 class C, EN61000-3-3, EN61547, EN61000-4-2,3,4,5,6,8,11
Connection	Input H05RN-F 1.0mm <sup>2</sup> x3C (30cm)
	Output CCC 1.5mm <sup>2</sup> x2C (30cm)

Model No.	Output	Tol.	R&N	Effi.
HSG-70-12	12V, 0~5A	±2.5%	150mV	88%
HSG-70-18	18V, 0~4A	±2.0%	200mV	89%
HSG-70-24	24V, 0~3A	±1.0%	200mV	89%
HSG-70-36	36V, 0~2A	±1.0%	200mV	90%
HSG-70-48	48V, 0~1.5A	±1.0%	200mV	90%

## ULP-150 series 150W U-Bracket Single Output with PFC



L215x W67.4x H33 mm

- Constant voltage mode
- High efficiency up to 93%
- U-bracket low profile: 33mm
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- 3 years warranty

AC input voltage range	90~295VAC; 127~417VDC
AC inrush current (max.)	Cold start, 65A at 230VAC
Overload protection	130%~185% hiccup mode, auto-recovery
Over voltage protection	110%~135% rated output voltage
Setup, rise, hold up time	500ms, 100ms, 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	-30~+70°C
Safety standards	Design refer to UL8750, EN61347-1, EN61347-2-13
EMC standards	EN55015, EN61000-3-2 class C, EN61000-3-3, EN61547, EN61000-4-2,3,4,5,6,8,11

Model No.	Output	Tol.	R&N	Effi.
ULP-150-12	12V, 0~12.5A	±2%	100mV	91.5%
ULP-150-15	15V, 0~10A	±2%	150mV	91.5%
ULP-150-24	24V, 0~6.3A	±2%	150mV	93.0%
ULP-150-36	36V, 0~4.2A	±2%	250mV	93.0%
ULP-150-48	48V, 0~3.2A	±2%	250mV	93.0%

## FDL-65 series 65W Metal Case with PFC



L151 x W53 x H31.5mm

- Constant current mode
- IP65 design
- No load power consumption <0.5W
- Suitable for LED flooding lighting, moving sign
- Protections: Short circuit / Over voltage / Over temperature
- 3 years warranty

AC input voltage range	180~295VAC; 254 ~ 417VDC
Over voltage protection	90%~105% rated output voltage
Over temp. protection	Hiccup mode, auto-recovery after fault condition is removed
Withstand voltage	I/P-O/P:3.75KVAC, I/P-FG:2KVAC, O/P-FG:1.5KVAC
Working Temperature	-40 ~ +70°C (Refer to "Derating Curve")
Safety Standards	LVD EN61347-1, EN61347-2-13, GB19510.1, GB19510.14 approved
EMC Standards	EN55015, EN61000-3-2 Class C, EN61000-3-3, EN61547, GB17743, GB17625.1, EN61000-4-2,3,4,5,6,8,11

Model No.	Output	I <sub>o</sub>	Tol.	R&N	Effi.
FDL-65-1550	25.2~42V	770~1550mA	±5%	4.2V	90%

Model No.	Output	I <sub>o</sub>	Tol.	R&N	Effi.
FDL-65-1800	21.6~36V	900~1800mA	±5%	3.6V	90%

# PCB Type

(with PFC)

- HBG-P Series (60~240W)
- IDPV Series (45~65W)
- IDPC Series (45~65W)
- PLP Series (20~60W)
- HLP Series (40~80W)

# HBG-P series

60~240W Circular Shape PCB with PFC

## Features

• Constant current mode (HBG-60P/100P)

Constant voltage+constant current modes (HBG-160P/240P)

• Universal AC input (up to 305VAC) /

Full range (up to 295VAC for HBG-60P)

• High efficiency up to 93.5%

• Class II power unit, no F.G. (HBG-60P)

• Class 2 power unit (HBG-60P)

• Suitable for dry, damp, and wet location

• Protections: Short circuit / Over temperature

• 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)

• 5 years warranty

		HBG-60P	HBG-100P	HBG-160P	HBG-240P
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, 80ms, 12ms at full load and 230VAC	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 derating curve)		
Safety standards		UL8750, ENEC EN61347-1, EN61347-2-13, EN62384 approved			
EMC standards		EN55015, EN61000-3-2 Class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547			
Connection	Input	UL1015 18AWGx2C (30cm)	SJTW 18AWGx3C (30cm)		
	Output	UL1015 18AWGx2C (30cm)	A Type: SJTW 18AWGx2C (20cm) B Type: SJTW 18AWGx2C (20cm) + UL2517 22AWGx2C (30cm)	A Type: SJTW 18AWGx2C (20cm) B Type: SJTW 18AWGx2C (20cm) + SVT 18AWGx2C (30cm)	A Type: SJTW 14AWGx2C (30cm) B Type: SJTW 14AWGx2C (30cm) + SVT 18AWGx2C (30cm)
Dimension (DxH)(mm)		φ99 x 26	φ104 x 34	φ124.6 x 34	φ144 x 31

## HBG-60P 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-160P Series



Model No.	Output	Tol.	Effi.
HBG-160P-36(A)	36V, 0~24.4A	±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

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



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

○ = A, B

## HBG-240P Series



Model No.	Output	Tol.	Effi.
HBG-160P-36(A)	36V, 0~6.7A	±2%	92.5%
HBG-160P-48(A)	48V, 0~5A	±2%	93.0%
HBG-160P-60(A)	60V, 0~4.0A	±2%	93.5%







○ = A, B

# IDPV series

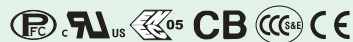
45~65W PCB Type with PFC

## ► Features

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

	IDPV-45	IDPV-65
<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, 15A at 230VAC	
Setup, rise, hold up time	500ms, 1200ms, 5ms	
Short circuit protection	Hiccup mode, auto-recovery	
Withstand voltage	I/P-O/P: 3.75KVAC	
Working temperature	-20~+40°C	
Safety standards	UL8750, ENEC EN61347-1, EN61347-2-13, EN62384, GB19510.14, GB19510.1 approved	
EMC standards	EN55015, EN61000-3-2 Class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547, GB17743, GB17625.1	
Connection (Input/Output)	4+4P push-in terminal block for Blank-Type, 4+6P for A-Type	
Dimension (LxWxH) mm	120 x 66.5 x 20.5	130 x 67.5 x 20.5

## IDPV-45 Series



Model No.	Output	Tol.	Effi.
IDPV-45□-12	12V, 0~3.75A	±4%	86%
IDPV-45□-24	24V, 0~1.88A	±3%	89%
IDPV-45□-36	36V, 0~1.25A	±2%	90%
IDPV-45□-48	48V, 0~0.94A	±1%	90%
IDPV-45□-60	60V, 0~0.75A	±1%	90%

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

## IDPV-65 Series



Model No.	Output	Tol.	Effi.
IDPV-65□-12	12V, 0~5A	±4%	86%
IDPV-65□-24	24V, 0~2.7A	±3%	89%
IDPV-65□-36	36V, 0~1.8A	±2%	90%
IDPV-65□-48	48V, 0~1.35A	±1%	90%
IDPV-65□-60	60V, 0~1.08A	±1%	90%





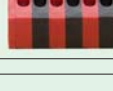
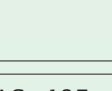
□ = Blank/A; Blank: without auxiliary output, A: with auxiliary function

# IDPC series

45~65W PCB Type with PFC

## ► Features

- Constant current mode
- Flicker free design
- IDPC-45: 90~295VAC input  
IDPC-65: 180~295VAC input only
- No load power consumption <0.5W for 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 for A-Type
- Suitable for indoor LED lighting applications
- Protection: Short circuit
- 3 years warranty

	IDPC-45	IDPC-65
<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	
Short circuit protection	Hiccup mode, auto-recovery	
Withstand voltage	I/P-O/P: 3.75KVAC	
Working temperature	-20~+40°C	
Safety standards	UL8750, ENEC EN61347-1, EN61347-2-13, EN62384, GB19510.14, GB19510.1 approved	
EMC standards	EN55015, EN61000-3-2 Class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547, GB17743, GB17625.1	
Connection (Input/Output)	4+4P push-in terminal block for Blank-Type, 4+6P for A-Type	
Dimension (LxWxH) mm	120 x 66.5 x 20.5	130 x 67.5 x 20.5

## IDPC-45 Series



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

## IDPC-65 Series



Model No.	Output	Tol.	Effi.
IDPC-65□-700	69 ~ 93V, 700mA	±4%	86%
IDPC-65□-1050	46 ~ 62V, 1050mA	±3%	89%
IDPC-65□-1400	34 ~ 46V, 1400mA	±2%	90%
IDPC-65□-1750	27 ~ 36V, 1750mA	±1%	90%

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

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

# PLP series

20~60W PCB Type with PFC

## Features

- Constant current mode
- Universal AC input / Full range
- Isolation class II, no F.G. for PLP-20
- Class 2 power unit / Pass LPS
- Suitable for built-in LED lighting systems
- Protections: Short circuit / Over current / Over voltage / Over temperature (PLP-20 only)
- Cooling by free air convection
- 2 years warranty



AC input voltage range	90~277VAC; 127~392VDC	90~264VAC; 127~370VDC
AC inrush current (max.)	Cold start, 25A at 230VAC	PLP-45: Cold start, 30A at 230VAC PLP-60: Cold start, 35A at 230VAC
Current adjustment range	75%~100%	
Over current protection	Range	95%~110%      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-O/P: 3.75kVAC, I/P-FG: 2kVAC, O/P-FG: 1.5kVAC
Working temperature	-30~+60°C	-30~+70°C (refer to output derating curve)
Safety standards	UL8750, TUV EN61347-1, EN61347-2-13, GB19510.14, GB19510.1 approved	
EMC standards	EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547, GB17743, GB17625.1	
Connection	UL1015 18AWGx2C (30cm)	3+2P / 3.96mm pitch, JST P/N: B3P / B2P-VH
Dimension (LxWxH)(mm)	140x 32x 22	101.6x 50.8x 29.6

### PLP-20 Series



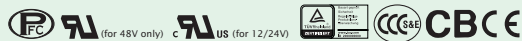
Model No.	Output	Tol.	R&N	Effi.
PLP-20-12	12V, 0~1.6A	±10%	2.5V	80.0%
PLP-20-18	18V, 0~1.1A	±10%	3.0V	81.0%
PLP-20-24	24V, 0~0.8A	±10%	3.0V	82.0%
PLP-20-36	36V, 0~0.55A	±10%	3.0V	83.0%
PLP-20-48	48V, 0~0.42A	±10%	3.8V	83.5%

### PLP-45 Series



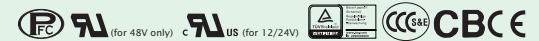
Model No.	Output	Tol.	R&N	Effi.
PLP-45-12	12V, 0~3.8A	±10%	4.2V	86%
PLP-45-24	24V, 0~1.9A	±10%	3.8V	89%
PLP-45-48	48V, 0~0.95A	±10%	4.8V	89%

### 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%

### 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

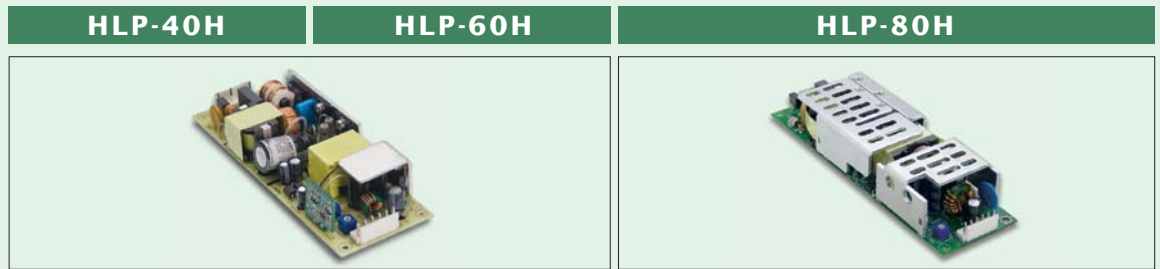
	Protection against overheating to prevent the lamp controlgear case temperature under any conditions of use from exceeding the indicated value (110°C)
	Suitable for direct mounting on normally flammable surfaces, such as wood (>2mm)
	Based on VDE0710-14, can be installed inside a wooden material like wooden cabinet. The minimum distance between the product enclosure to wooden material in each side is defined.
<b>LPS</b>	Limited power source
$t_c: 80^\circ\text{C}$ $t_a: 40^\circ\text{C}$	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

# HLP series

40~80W PCB Type with PFC

## ► 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



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		
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:1.5kVAC		
Working temperature	-40~+70°C (refer to output derating curve)		
Safety standards	UL8750, TUV EN61347-1, EN61347-2-13, GB19510.14, GB19510.1 approved; Design refer to EN60335-1(HLP-40H/60H), UL60950-1, EN60950-1		
EMC standards	EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547, GB17743, GB17625.1		
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%

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-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%

## 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 Controller & Accessory

## DC/DC LED Driver

- LDH Series (45W)
- LDD-L Series (300~1500mA)
- LDD-H Series (300~1500mA)
- LDB-L Series (300~600mA)

## Controller & Accessory

- DAP-04 (DALI to PWM Converter)
- SPD-20 (Surge Protect Device)
- SDP-001 (Smart Timer Dimming Programmer)
- POB series (AC LED Module)
- WPD-06 (EnOcean Dimmer Kit)
- PIR-045 (Passive Infrared Sensor)
- RFP series (RF Controller)
- NCL/IRL (LED Strips)





# LDH series

## DC-DC LED Driver

### Features

- Constant current step-up mode
- Wide input and output voltage range
- High efficiency up to 95%
- Comply with EN55015 / FCC part 15 without additional input filter and capacitors
- DALI dimming function for DA and WDA type
- Fully enclosed plastic case (UL 94V-0)
- Low cost, high reliability
- Protections: Short circuit / Over voltage / Under voltage
- 3 years warranty

### LDH-45



Output current accuracy (Typ.)		±5% at 12VDC input
PWM dimming & ON/OFF control	Remote ON/OFF	Leave open if not used <ul style="list-style-type: none"> <li>▪ Power ON with dimming: PWM DIM~DIM- &gt; 2~8VDC or open circuit</li> <li>▪ Power OFF: PWM DIM ~ DIM- &lt; 0.5VDC or short</li> </ul>
	PWM frequency	1K~10KHz
Analog dimming & ON/OFF control	Remote ON/OFF	Leave open if not used <ul style="list-style-type: none"> <li>▪ Power ON with dimming: Analog DIM ~ DIM- &gt; 0.25~8VDC or open circuit</li> <li>▪ Power OFF: Analog DIM ~ DIM- &lt; 0.2VDC or short</li> </ul>
	Short circuit protection	Power OFF and fuse open
Over voltage protection		>115% rated output voltage
Working temperature		-40~+70°C
EMC standards		EN55015, EN61547, EN61000-4-2,3,4,6,8
Dimension (LxWxH)(mm)		75x 53x 22.7

### LDH-45A Series



Model No.	Input (VDC)	Output		Io Tol.	Effi.	Dimming
		Voltage (VDC)	Current (mA)			
LDH-45A-350 ○	9~18	12~86	350mA	±5%	91%	Blank&W: PWM+Analog
LDH-45A-500 ○	9~18	12~86	500mA	±5%	90%	
LDH-45A-700 ○	9~18	12~64	700mA	±5%	90%	DA&WDA: DALI
LDH-45A-1050 ○	9~18	12~43	1050mA	±5%	91%	

○=Blank, W, DA or WDA ; Blank: pin style, PWM+analog dimming; W: Wire style, PWM+analog dimming;  
 DA: pin style, DALI dimming; WDA: Wire style, DALI dimming

### LDH-45B Series



Model No.	Input (VDC)	Output		Io Tol.	Effi.	Dimming
		Voltage (VDC)	Current (mA)			
LDH-45B-350 ○	18~32	21~126	350mA	±5%	93%	Blank&W: PWM+Analog
LDH-45B-500 ○	18~32	21~86	500mA	±5%	94%	
LDH-45B-700 ○	18~32	21~64	700mA	±5%	95%	DA&WDA: DALI
LDH-45B-1050 ○	18~32	21~43	1050mA	±5%	95%	

○=Blank, W, DA or WDA ; Blank: pin style, PWM+analog dimming; W: Wire style, PWM+analog dimming;  
 DA: pin style, DALI dimming; WDA: Wire style, DALI dimming

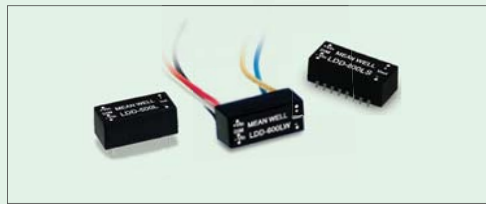
# LDD-L series

## DC-DC LED Driver

### Features

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

LDD-300~700L/LW/LS



LDD-1000~1500L/LW/LS



Output current accuracy (Typ.)		±5% at 24VDC input	
PWM dimming & ON/OFF control	Remote ON/OFF	Leave open if not used <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 <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
EMC standards		EN55015, EN61547, EN61000-4-2,3,4,6,8, FCC part 15 class B	
Operating case temp. (max.)		100°C	
Dimension (LxWxH)(mm)		L/LW: 22.6x 9.9x 8.9 LS: 25.4x 10.5x 9.3	L/LW: 31.8x 20.3x 12.2 LS: 31.8x 20.3x 10.9

### LDD-L Series



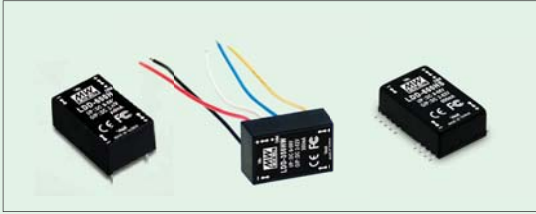
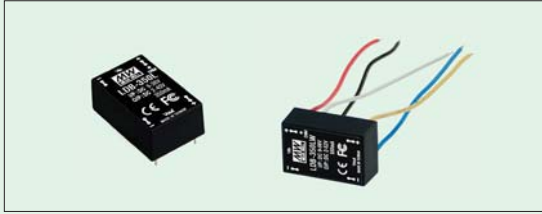
Model No.	Input (VDC)	Output		Io Tol.	Effi.	Dimming
		Voltage (VDC)	Current (mA)			
LDD-300L □	9~36 (9~32 for S style)	2~32 (2~28 for S style)	300	±5%	95%	PWM
LDD-350L □			350			
LDD-500L □			500			
LDD-600L □			600			
LDD-700L □			700			
LDD-1000L □	6~36	2~30	1000			PWM+Analog
LDD-1200L □			1200			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

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

# 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 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)
- 3 years warranty

		LDD-H/HW/HS	LDB-L/LW
			
Output current accuracy		±3% at 24VDC input; ±4% at 48VDC input for LDD-H/HW; ±5% at 48VDC input for LDD-HS	±5%
PWM dimming & ON/OFF control	Remote ON/OFF	Leave open if not used ▪ Power ON with dimming: DIM ~ -Vin >2.5~6VDC or open circuit ▪ Power OFF: DIM ~ -Vin <0.8VDC or short	▪ Power ON with dimming: DIM ~ -Vin >2~5VDC or open circuit ▪ Power OFF: DIM ~ -Vin <0.1VDC or short
	PWM frequency	100~1KHz	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~+85°C (refer to output derating curve)	-40~+71°C (refer to output derating curve)
EMC standards		EN55015, EN61547, 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 LDD-HS: 31.8x 20.3x 10.9	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%
<b>NEW</b> LDD-1200H△	9~52	2~46	1200	±5%	95%
<b>NEW</b> LDD-1500H△	9~52	2~46	1500	±5%	96%

## LDB-L Series



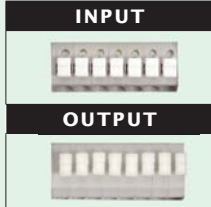
Model No.	Input (VDC)	Output		Io Tol.	Effi.
		Voltage (VDC)	Current (mA)		
LDB-300L△	9~36	2~40	300	±5%	90%
LDB-350L△	9~36	2~40	350	±5%	90%
LDB-500L△	9~30	2~32	500	±5%	91%
LDB-600L△	9~28	2~30	600	±5%	91%

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

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

# DAP-04(S01)/SPD-20

## DAP-04(-S01)



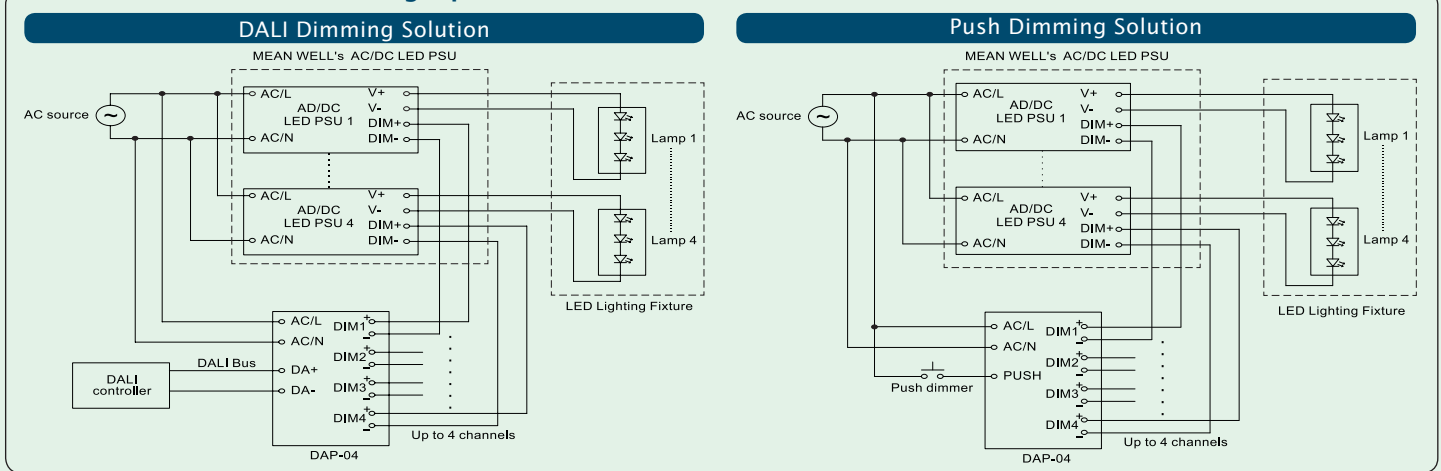
## 4 Channel DALI to PWM Converter

- Convert DALI signal to PWM signal
- Comply with DALI standards (IEC62386-101,102,207)
- Universal AC input (up 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 <b>NEW</b>
AC input voltage range	90~305VAC ; 127~431VDC	
Power consumption(typ.)	0.5W	
Dimming range	1~100%	10~100%
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	EN61347-1, EN61347-2-11, EN61058-1 clause 8/17/20/25 approved	
DALI standards	Comply with IEC62386-101, 102, 207	
EMC standards	EN55015, EN61000-3-2,3, EN61000-4-2,3,4,5,6,8,11, EN61547	

### Connection of Dimming Operation



## SPD-20

## 20kA Surge Protection Device



- UL1449 3rd Edition, Type 2 component assemblies
- Line to Ground & Line to Line protected
- Parallel (3 wires) connection style
- LED status indicators
- IP67 design
- Suitable for surge protection of LED drivers



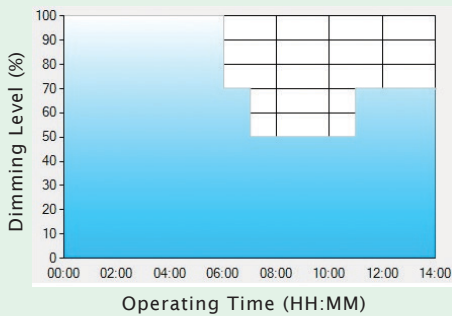
Model No.	SPD-20-240P	SPD-20-277P
Operating voltage	240VAC, 50/60Hz	277VAC, 50/60Hz
MCOV (Max. Continuous Operating Voltage)	300VAC	320VAC
VPR (Voltage Protection Rating)	≤1500V (L-FG, N-FG, L-N)	
IN (Nominal Discharge Current)	5kA	
Max. Surge Current (8/20μs)	20kA	
SCCR (Short Circuit Current Rating)	5kA	
Response time	<25ns	
Operating temperature	-40~+70°C	
Safety standard	UL1449 3rd Edition, TUV EN61643-11 approved	UL1449 3rd Edition approved
Connection [L (Black)/N (White)/FG (Green)]	FEP 10AWG (15cm)	

# Smart Timer Dimming Function

## 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.

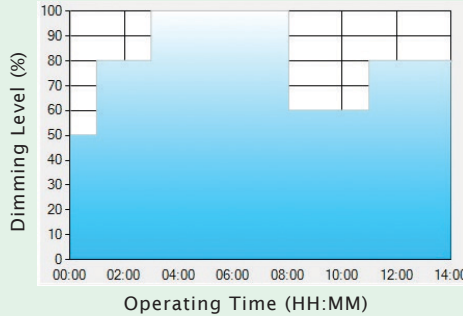
Ex : D01-Type: the profile recommended for residential lighting



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%

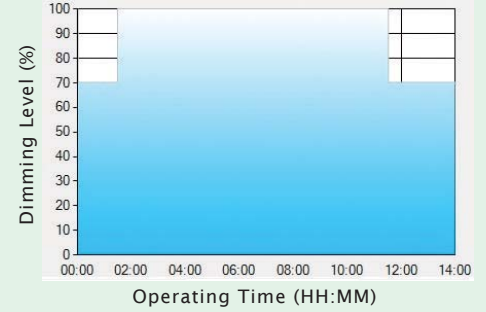
Ex : D02-Type: the profile recommended for street lighting



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.

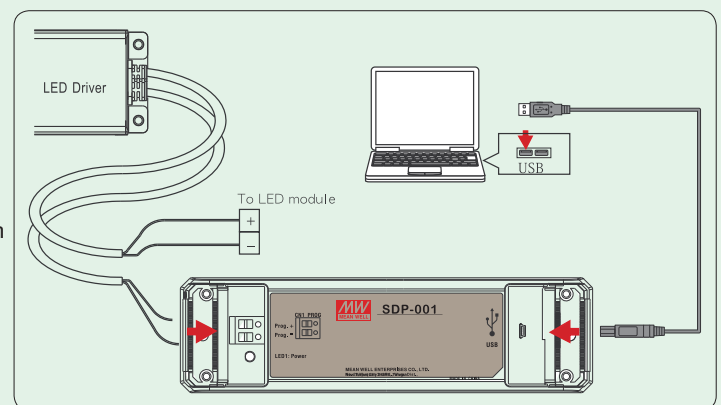
## SDP-001

## 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



## POB

## AC Plug-in LED Module



- Direct AC input
- TRIAC dimming available
- High systematic efficacy >100 lm/w @3000K CRI80
- High power factor >0.95
- No flicker compliant with Japan PSE regulations
- 3 years warranty

Model No.	POB-30L-3K/-4K	POB-30H-3K/4K
Color temperature	3K: 3000K; 4K: 4000K	
Rated power	35W	
voltage range	110~120VAC	220~240VAC, up to 270VAC
Total harmonic distortion	<17%	
Efficiency (Typ.)	90%	
Working temperature	-20~50°C	
Safety standard	UL8750(POB-30L); EN62031(LVD) (POB-30H)	
EMF standards	EN62493	
EMC standards	EN55015, EN61547, EN61000-3-2, EN61000-3-3	
CE-photo-biological test	EN62471	

# WPD-06/PIR-045 series

## WPD-06/WPD-06SWT

## Wireless DC Multi-channel PWM Dimmer Kit



WPD-06

WPD-06SWT

- EnOcean compliant products, up to 30 meters wireless distance
- Operating frequency 868MHz (other frequency for outside EU available on request)
- WPD-06 (PWM dimmer):
  - 6 protected channels, independent dimming control on each channel
  - Up to 128 wireless batteryless switches connected possible
  - Built-in 3 wire push dimming function ports
  - Suitable for constant voltage lighting application, Possible for constant current lighting application
  - Multiple dimmer application via CANBus (optional)
  - Conformal coating for highly humid environment
- WPD-06SWT (switch transmitter):
  - Batteryless switch with cycles >50000 times
  - Maintenance free
- 5 years warranty

Model No.	WPD-06
Input voltage range	10-32VDC SELV
Rated output current	4.5A each channel, 27A for the entire module
Rated output power	324W (input: 12V); 648W (input: 24V)
Output dimming range	1 to 100%; Switching frequency: 125Hz
DC input current	27A
Input standby power	1.2W (Typ.)
Overload protection	150% rated output power for 300ms max. Electronic shut down rated at 5A. Restart by switching on again the output of channel
Over voltage protection	Transient protection starting at 33V
Working temperature	-40~+60°C
Input / Output terminal	Clamping spring disconnectable terminal for solid or stranded copper conductors 0.25 to 2.5mm <sup>2</sup>
Dimension(LxWxH)(mm)	110x 77x 26.4

Model No.	WPD-06SWT
Transmission power	10mW max.
Working temperature	-25~+65°C
Dimension(LxWxH)(mm)	80x 80x 15

## 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: ≤6 meters
- Sensing angle: <120°
- 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): φ60x 71.3mm
- 2 years warranty

# RFP/NCL/IRL series

## ► Features

- Remote with low power consumption, long operating distance and strong penetration ability
- Independent ID code
- Up to 10 remotes by each receiver
- 4096 high gray scale
- Built-in sleep mode and standby mode
- 5 years warranty

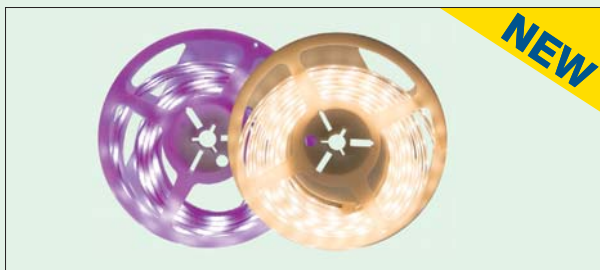


Kit Order No.		RFP-M1M3-3A	RFP-M2M3-3A	RFP-M5M3-3A	RFP-M8M4-3A
Control function		Brightness	Color temperature (neutral white-warm white) and brightness	Color temperature (cold white-warm white) and brightness	Color and brightness
Remote Info	Power input	3VDC (battery CR2032)			
	Working frequency	433.92MHz			
	Remote distance	40~50m			
	Working temperature	-30~55°C			
	Dimensions (LxWxH)(mm)	104x 58x 9			
Receiver Info	Power input	12~24VDC			5~240VDC
	Max current load	3Ax3CH			5Ax4CH
	Max output power	108W(12V)/ 216W(24V)			108W(5V)/ 240W(12V)/ 480W(24V)
	Working temperature	-30~+55°C			
	Dimensions (LxWxH)(mm)	135x30x20			175x44x30

## NCL/IRL Series

## LED Strip Modules

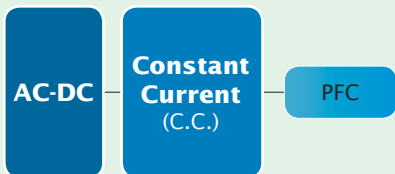
FC CE



- Work with constant voltage 12VDC driver
- IP54 design for NCL series, IP65 design for IRL series
- Flexible and easy to bend shape
- High brightness and maintenance free
- 3 meters per reel
- 2 years warranty

Model No.	NCL-CL1-01	IRL-CL2-01	IRL-RGB-01	IRL-RGBW-01
Color	Standard white	Standard white~Warm white	RGB	RGBW
LED quantity	30LEDs/m	60LEDs/m	30LEDs/m	
Luminous flux	320lm/m	580lm/m	135lm/m	415lm/m
Rated input power	5.4W / m	7.2W/m	6.5W/m	9.6W/m
Wavelength or Color temperature	5500-6500K	SW:5700-6500K WW:2900-3200K	R : 620-630nm G : 515-525nm B : 460-470nm	R : 620-630nm G : 515-525nm B : 460-470nm SW:5500-6500K
Controllable feature	Brightness	Color temperature and brightness	Color and brightness	
Working temperature	-20~+45°C			
Dimension (LxWxH)(mm)	3000x10x4	3000x13.6x7	3000x14.6x6.5	3000x6.8x 6.5

# Quick Selection Map



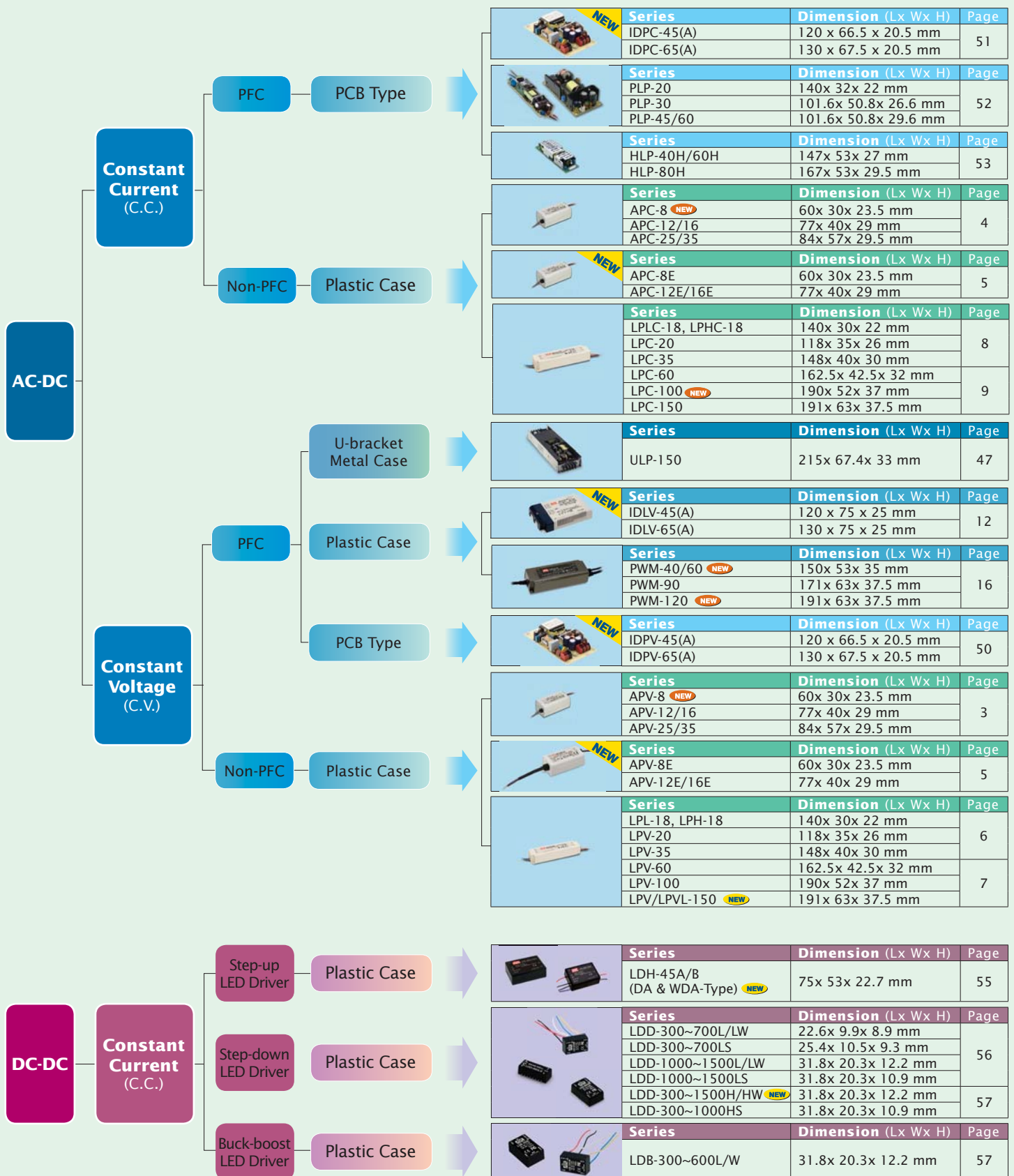
Metal Case

Plastic Case

Series	Dimension (Lx Wx H)	Page
CEN-60/75 CEN-100	185x 62.5x 40.5 mm 195x 62.5x 40.5 mm	30
CLG-60	195.6x 61.5x 38.8 mm	31
ELG-75-C ELG-100-C ELG-150-C ELG-200-C ELG-240-C	180x 63x 35.5 mm 199x 63x 35.5 mm 219x 63x 35.5 mm 244x 71x 35.5 mm	34 35
HLG-60H-C HLG-80H-C HLG-120H-C HLG-185H-C HLG-240H-C HLG-320H-C	171x 61.5x 36.8 mm 195.6x 61.5x 38.8 mm 220x 68x 38.8 mm 228x 68x 38.8 mm 244.2x 68x 38.8 mm 252x 90x 43.8 mm	40 41
HVGC-65 HVGC-100 HVGC-150 HVGC-240 HVGC-320	189x 61.5x 36.8 mm 236x 68x 38.8 mm 245x 68x 38.8 mm 254.2x 68x 38.8 mm 262x 90x 43.8 mm	44 45
HBG-100	φ130x 66.5 mm	46
FDL-65	151x 53x 31.5 mm	47
IDLC-45(A) IDLC-65(A)	120x 75x 25 mm 130x 75x 25 mm	13
PLD-16/25 PLD-40/60	84x 57x 29.5 mm 128x 60x 31.5 mm	14
PCD-16/25 PCD-40/60	84x 57x 29.5 mm 128x 60x 31.5 mm	15
NPF-40D/60D NPF-90D NPF-120D	150x 53x 35 mm 171x 63x 37.5 mm 191x 63x 37.5 mm	17
LPF-16D/25D LPF-40D LPF-60D LPFH-60D LPF-90D	148x 40x 32 mm 162.5x 43x 32 mm 161x 61x 36 mm	18 19
LCM-25(DA) LCM-40(DA)/60(DA)	105x 68x 23 mm 123.5x 81.5x 23 mm	20
LCM-40U(DA) LCM-60U(DA)	123.5x 81.5x 23 mm	21
PLN-20 PLN-30 PLN-45/60	148.5x 38.5x 28 mm 145x 47x 30 mm 181x 61.5x 35 mm	22
GSC18/25/40	79x 54x 33 mm	24
PLM-12/25 PLM-40	145x 38x 22 mm 175x 42x 24 mm	26
PLM-12E / 25E PLM-40E	145x 38x 22 mm 175x 42x 24 mm	27
PLC-30 PLC-45/60	160x 46x 30 mm 181.5x 62x 35 mm	28
HBG-60	φ110x 60.5	46
HBG-60P HBG-100P	φ99x 26 φ104x 34	49



# Quick Selection Map



# Quick Selection Map

AC-DC		Constant Voltage + Constant Current (C.V.+C.C.)				Series	Dimension (Lx Wx H)	Page					
AC-DC	PFC	Metal Case	Metal Case	Metal Case	Metal Case	CLG-100	222.2x 68x 38.8 mm	31					
						CLG-150	229x 68x 38.8 mm						
						Plastic Case	Plastic Case	Plastic Case	Plastic Case	ELG-75 <b>NEW</b>	180x 63x 35.5 mm	32	
										ELG-100 <b>NEW</b>	199x 63x 35.5 mm		
										ELG-150 <b>NEW</b>	219x 63x 35.5 mm		
		ELG-200 <b>NEW</b>	244x 71x 35.5 mm										
		ELG-240 <b>NEW</b>											
		PCB Type	PCB Type	PCB Type	PCB Type	HLG-40H/60H	171x 61.5x 36.8 mm	36					
						HLG-80H	195.6x 61.5x 38.8 mm	37					
						HLG-100H/120H	220x 68x 38.8 mm	38					
	HLG-150H/185H					228x 68x 38.8 mm							
	HLG-240H					251x 68x 38.8 mm	39						
	HLG-320H	252x 90x 43.8 mm											
	HLG-600H	280x 144x 48.5 mm											
	Non-PFC	Plastic Case	Plastic Case	Plastic Case	Plastic Case	HVG-65	189x 61.5x 36.8 mm	42					
						HVG-100	236x 68x 38.8 mm						
						HVG-150	245x 68x 38.8 mm	43					
						HVG-240 <b>NEW</b>	254.2x 68x 38.8 mm						
						HVG-320 <b>NEW</b>	262x 90x 43.8 mm						
		Plastic Case	Plastic Case	Plastic Case	Plastic Case	Plastic Case	HBC-160	φ151.68x 66.5	46				
HBC-240							φ191.5x 69						
HSG-70							127.2x 90x 38.8 mm	47					
Plastic Case							Plastic Case	Plastic Case	Plastic Case	Plastic Case	NPF-40/60 <b>NEW</b>	150x 53x 35 mm	17
											NPF-90 <b>NEW</b>	171x 63x 37.5 mm	
	NPF-120 <b>NEW</b>	191x 63x 37.5 mm											
	LPF-16/25	148x 40x 32 mm	18										
				LPF-40	162.5x 43x 32 mm								
LPF-60	161x 61x 36 mm	19											
LPFH-60 <b>NEW</b>													
LPF-90													
Non-PFC	Plastic Case	Plastic Case	Plastic Case	Plastic Case	Plastic Case	PLN-100	200x 70.5x 35 mm	22					
						HLN-40H/60H	161x 61.5x 35 mm	23					
									HLN-80H	181x 61.5x 35 mm			
						OWA-90E/U	171x 63x 37.5 mm	25					
									OWA-120E/U <b>NEW</b>	191x 63x 37.5 mm			
	PLC-100	200.5x 69.5x 35 mm	28										
	Plastic Case	Plastic Case	Plastic Case	Plastic Case	Plastic Case	Plastic Case	HBC-160P <b>NEW</b>	φ124.6x 34	49				
							HBC-240P	φ144x 31					
							ELN-30	145x 47x 30 mm	10				
							ELN-60	181x 61.5x 35 mm					
OWA-60E/U <b>NEW</b>							130x 53x 35 mm	25					
ACCESSORIES	ACCESSORIES	ACCESSORIES	ACCESSORIES	ACCESSORIES	ACCESSORIES	DAP-04/DAP-04-S01 <b>NEW</b>	165x 46x 23 mm	58					
						SPD-20	90x 70x 50 mm	58					
						SDP-001 <b>NEW</b>	165x 46x 23 mm	59					
						POB <b>NEW</b>	81.5x 81.5x 22 mm	59					
						WPD-06 <b>NEW</b>	110x 77x 26.4 mm	60					
						WPD-06SWT <b>NEW</b>	80x 80x 15 mm						
						PIR-045 <b>NEW</b>	φ60x 71.3 mm	60					
						RFP <b>NEW</b>		61					
						NCL/IRL <b>NEW</b>	3 meter	61					

# Comparison Chart

Family		PFC (Note 2)		AC Input Range (VAC)	Potted	C.C. or C.V. (Note 1)	IP	Dimming (Note 3)	Vo / Io Adj	Max. Eff.	Warranty (years)	Remark	
Series Name	Type (Note 4)	Single Stage	Two Stage										
HLG-40H / 60H / 80H / 100H / 120H / 150H / 185H / 240H / 320H / 600H	A ★			90~305	✓	C.V.+C.C.	65		✓	96%	7	Vo<60VDC	
	B						67	3 in 1					
	C (240W/320W only)		✓										✓
	Blank (40~320W)							67					
	D (option, 40~320W)							67	Timer				
HLG-60H-C / 80H-C / 120H-C / 185H-C / 240H-C / 320H-C	A ★			90~305	✓	C.C.	65		Io	94%	7	Vo>60VDC	
	B						67	3 in 1					
	D (70~200W)		✓					67	Timer				
	D2 (option, 250W/320W)							67	Smart Timer				
	DA (option, 320W only)							67	DALI				
ELG-75 / 100 / 150 / 200 / 240	A			100~305	✓	C.V.+C.C.	65		✓	93%	5	Vo<60VDC	
	B						67	3 in 1					
	Blank						67						
	D2		✓					67	Smart Timer				
	DA							67	DALI				
	BE (150W only)							67	3 in 1				
ELG-75-C / 100-C / 150-C / 200-C / 240-C	A			100~305	✓	C.C.	65		Io	93%	5	Vo>60VDC	
	B						67	3 in 1					
	Blank						67						
	D2		✓					67	Smart Timer				
	DA							67	DALI				
	BE (150W only)							67	3 in 1				
HBG	60	✓		90~295	✓(half)	C.C.				90%	5	1. Circular shape 2. Metal case (Plastic case for HBG-60)	
	100	A			90~305	✓	C.C.	65		Io			91.5%
		B						67	3 in 1				
	Blank			67									
	160 / 240	A		✓			C.V.+C.C.	65		Io			93.5%
		B						67	3 in 1				
	Blank			67									
	60P	✓		90~295		C.C.				90%		1. Circular shape 2. PCB type	
	100P	A			90~305	✓	C.C.			Io			91.5%
		B							3 in 1				
160P / 240P	A		✓	C.V.+C.C.					Io	93.5%			
	B							3 in 1					
HVG(C)-65 / 100 / 150 / 240 / 320	A			180~528	✓	HVG : C.V.+C.C. HVGC : C.C.	65		HVG: ✓ HVGC: Io	91.5%	5		
	B						67	3 in 1					
	D (option, 65~150W)		✓					67	Timer				
	D2 (option, 240W/320W only)							67	Smart Timer				
FDL-65		✓		180~295	✓	C.C.	65		Io	90%	3		
HSG-70			✓	90~305	✓	C.V.+C.C.	65		Io	90%	3		
CLG-150	A			90~295	✓	C.V.+C.C.	65		✓	91%	3		
	B						67	Resistance					
	C		✓										✓
	Blank							67					

# Quick Selection Map

Family		PFC (Note 2)		AC Input Range (VAC)	Potted	C.C. or C.V. (Note 1)	IP	Dimming (Note 3)	Vo / Io Adj	Max. Eff.	Warranty (years)	Remark
Series Name	Type (Note 4)	Single Stage	Two Stage									
CLG-100			✓	90~295	✓	C.V.+C.C.	67			88.5%	3	
CLG-60		✓		90~295	✓	C.C.	67			89%	3	
CEN-60 / 75 / 100		✓		90~295		C.C.	66		✓	91%	3	
ULP-150			✓	90~295	✓ (half)	C.V.			Vo	93%	3	U-bracket
HLN-40H / 60H / 80H	A		✓	90~305	✓ (60W/80W half)	C.V.+C.C.	64		✓	91%	3	
	B								3 in 1			
LPF-16□ / 25□ / 40□ / 60□ / 90□	D		✓	90~305	✓	Blank Type : C.V.+C.C. D-Type : C.C.	67 (16W option)		3 in 1	90.5%	5	
	Blank											
NPF-40□ / 60□ / 90□ / 120□	D		✓	90~305	✓	Blank Type : C.V.+C.C. D-Type : C.C.	67		3 in 1	91%	5	
	Blank											
PWM-40 / 60 / 90 / 120			✓	90~305	✓	C.V.	67	3 in 1		90.5%	5	PWM output
IDLV-45 / 65	A	✓		45W: 90~295 65W: 180~295		C.V.	20	0~10Vdc or PWM		90%	3	1. Flicker free 2. Push-in terminal
	Blank											
IDLC-45 / 65	A	✓		45W: 90~295 65W: 180~295		C.C.	20	0~10Vdc or PWM		89%		
	Blank											
OWA- 90 / 120			✓	90~264 (OWA-120E: 180~264)	✓	C.C.+C.V.	67*			91%	5	External type
PLN-100			✓	90~295		C.C.+C.V.	64		✓	88.5%	2	
PLN-30 / 45 / 60		✓		90~295		C.C.	64		✓	89%	2	
PLN-20		✓		90~277		C.C.	64		Io	83.5%	2	
PLC-100			✓	90~264		C.V.+C.C.			✓	90%	2	Terminal block I/O
PLC-30 / 45 / 60		✓		90~264		C.C.			✓	89%	2	Terminal block I/O
PCD-16 / 25 / 40 / 60		✓		A: 90~135 B: 180~295	✓ (16W/25W/ 60W half)	C.C.	42	AC Phase-Cut		87%	3	
PLD-16 / 25 / 40 / 60	✓			16W/40W/60W: A: 90~135 B: 180~295	✓ (16W/25W/ 60W half)	C.C.	42			88%	3	
				25W: 90~295								
GSC18 / 25 / 40		✓		90~277	(40W half)	C.C.	40			88%	3	External type
PLM-12 / 25 / 40		✓		110~295		C.C.	30			88%	2	Push terminal
PLM-12E / 25E / 40E				180~295								

# Quick Selection Map

Family		PFC (Note 2)		AC Input Range (VAC)	Potted	C.C. or C.V. (Note 1)	IP	Dimming (Note 3)	Vo / Io Adj	Max. Eff.	Warranty (years)	Remark
Series Name	Type (Note 4)	Single Stage	Two Stage									
LCM-25 / 40 / 60			✓	25W: 180~277 40W/60W: 180~295		C.C.	20	3 in 1		92%	3	Io level selectable in one power unit
LCM-25DA / 40DA / 60DA								DALI & Push DIM				
LCM-40U / 60U				90~132				3 in 1				
LCM-40UDA / 60UDA				DALI & Push DIM								
IDPV-45 / 65	A	✓		45W: 90~295 65W: 180~295		C.V.		0~10Vdc or PWM		90%	3	1. PCB type 2. Flicker free 3. Push-in terminal
	Blank											
IDPC-45 / 65	A	✓		45W: 90~295 65W: 180~295		C.C.		0~10Vdc or PWM		89%		
	Blank											
PLP-20 / 30 / 45 / 60		✓		20W: 90~277 30~60W: 90~264		C.C.			Io	89%	2	PCB type
HLP-40H / 60H / 80H			✓	90~305		C.C.		3 in 1	✓	90.5%	3	PCB type

Family		PFC (Note 2)		AC Input Range (VAC)	Potted	C.C. or C.V. (Note 1)	IP	Dimming (Note 3)	Vo / Io Adj	Max. Eff.	Warranty (years)	Remark
Series Name	Type (Note 4)	Single Stage	Two Stage									
APV-8 / 12 / 16 / 25 / 35				90~264	(16W/35W half) ✓	C.V.	42			85%	2	
APC-8 / 12 / 16 / 25 / 35				90~264	(16W/35W half) ✓	C.C.	42			84%	2	
APV-8E / 12E / 16E				180~264	(16W half) ✓	C.V.	42			83%	2	
APC-8E / 12E / 16E				180~264	(16W half) ✓	C.C.	42			83%	2	
LPL-18 / LPH-18 LPV-20 / 35 / 60 / 100 / 150 LPVL-150				LPL: 90~132 LPH: 180~264 LPV-20~100: 90~264 LPV-150: 180~305 LPVL-150: 90~132	✓	C.V.	67			90%	2	
LPLC-18 / LPHC-18 LPC-20 / 35 / 60 / 100 / 150				LPLC: 90~132 LPHC: 180~264 LPC-20~100: 90~264 LPC-150: 180~305	✓	C.C.	67			90%	2	
ELN-30 / 60				90~264		C.V.+C.C.	64	1~10Vdc or PWM	✓	88%	2	
OWA-60				90~264	✓	C.V.+C.C.	67*			91%	5	External type

**Note 1** C.V. represents Constant Voltage Mode Output, whereas C.C. represents Constant Current 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** ■ Non-PFC : PF<0.6 and target at regions where PF compliance is not required.

■ Single-Stage PFC : No hold-up time and higher Ripple & Noise. Not recommended to use in regions with unstable utility.

■ Two-Stage PFC : Longer hold-up time and lower Ripple & Noise. Suitable for LED lighting and general industrial applications.

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

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

**Note 4** ★ are popular models and will have sufficient stock for prompt delivery of high quantity orders.

**Note 5** \* IP67 design for power body

# Certification Chart

## ► Metal Case

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

Standard Series	Class 2 power unit	UL8750 (type "HL")	UL60950-1	UL879	EN61347-1, EN61347-2-13	PSE J61347-1, J61347-2-13	EN55015	EN61000-3-2 Class □	EN55022 Class □	CE	CB	CCC (Note 1)
CEN-60/75	●	●		●	●	●	●	C		●	●	●
CEN-100	●	●			●	●	●	C		●	●	●
ELG-75	●	●HL			●		●	C		●	●	●
ELG-100	●	●HL			●		●	C		●	●	●
ELG-150		●HL			●		●	C		●	●	●
ELG-200	Under Development											
ELG-240		●HL			●		●	C		●	●	●
ELG-75-C		●HL			●		●	C		●	●	●
ELG-100-C		●HL			●		●	C		●	●	●
ELG-150-C		●HL			●		●	C		●	●	●
ELG-200-C	Under Development											
ELG-240-C		●HL			●		●	C		●	●	●
CLG-60/100	●	●		●	●	●	●	C	B	●	●	●
CLG-150		●	●	●	●	▲	●	C	B	●	●	▲
HLG-40H	●	●HL			●	●	●	C		●	●	●
HLG-60H	●	●HL			●	●	●	C		●	●	●
HLG-80H	●	●HL			●	●	●	C		●	●	●
HLG-100H	●	●HL			●	●	●	C	B	●	●	●
HLG-120H		●HL			●	●	●	C	B	●	●	●
HLG-150H		●HL			●	●	●	C	B	●	●	●
HLG-185H		●HL			●	●	●	C	B	●	●	●
HLG-240H		●HL	●		●	●	●	C	B	●	●	▲
HLG-320H		●HL			●	▲	●	C	B	●	●	▲
HLG-600H		●HL	●		●	●	●	C	B	●	●	●
HLG-60H-C		●			●	●	●	C		●	●	●
HLG-80H-C		●			●	●	●	C		●	●	●
HLG-120H-C		●			●	●	●	C		●	●	●
HLG-185H-C		●			●	●	●	C		●	●	●
HLG-240H-C		●HL			●	●	●	C		●	●	●
HLG-320H-C		●HL			●	●	●	C		●	●	●
HVG-65	●	●					●	C				
HVG-100	●	●HL					●	C				
HVG-150		●HL					●	C				
HVG-240		●HL										
HVG-320		●HL										
HVGC-65		●			●		●	C		●	●	
HVGC-100		●			●		●	C		●	●	
HVGC-150		●HL			●		●	C		●	●	
HVGC-240		●HL										
HVGC-320		●HL										

Note1: CCC models are offered as optional models.

# Certification Chart

## ► Metal Case

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

Standard	Class 2 power unit	UL8750 (type"HL")	UL60950-1	UL879	EN61347-1, EN61347-2-13	PSE J61347-1, J61347-2-13	EN55015	EN61000-3-2 Class □	EN55022 Class □	CE	CB	CCC (Note 2)
HBG-100		●HL			●		●	C		●	●	●
HBG-160		●HL			●		●	C		●	●	●
HBG-240		●			●		●	C		●	●	●
HSG-70							●	C		●		●
ULP-150							●	C		●		
FDL-65							●	C		●		●

Note 2 : CCC models for HBG-100/160/240 are offered as optional models.

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

## ► Plastic Case & PCB Type

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

Standard	Class 2 power unit	UL8750 (type"HL")	UL60950-1	UL879	EN61347-1, EN61347-2-13	PSE J61347-1, J61347-2-13	EN55015	EN61000-3-2 Class □	EN55022 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					●					●	●	
APC-8E/12E/16E					●					●	●	
ELN-30/60	●							A	B	●		
GSC18/25/40 (B/E)					■●		●	C		●	●	▲ B type
HBG-60 (P)	●	●			●		●	C		●	●	●
HBG-100P/160P/240P		●			●		●	C		●	●	●
HLN-40/60/80H	●	●			●	●	●	C		●	●	●
HLP-40H/60H/80H	●	●			●		●	C		●	●	●
LCM-25/40/60(DA)		●			●		●	C		●	●	●
LCM-40U(DA)/60U(DA)		●										
IDLV-45(A)/65(A)	●	●			●		●	C		●	●	
IDLC-45(A)/65(A)		●			●		●	C		●	●	●
IDPV-45(A)/65(A)	●	●			●		●	C		●	●	
IDPC-45(A)/65(A)		●			●		●	C		●	●	●

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

■ : GS Mark.

# Certification Chart

## ► Plastic Case & PCB Type

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






Standard Series	Class 2 power unit	UL8750 (type"HL")	UL60950-1	UL879	EN61347-1, EN61347-2:13	PSE J61347-1, J61347-2-13	EN55015	EN61000-3-2 Class	EN55022 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			
LPLC-18								A	A	●		
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)	●	●			●	●	●	C		●	●	●
LPF-40(D)/60(D)	●	●			●	●	●	C		●	●	●
LPF-90(D)	●	●HL			●	●	●	C		●	●	●
LPFH-60(D)								Pending				
NPF-40(D)	●	●HL			●		●	C		●	●	●
NPF-60(D)	●	●HL			●		●	C		●	●	●
NPF-90(D)	▲	●			●		●	C	B	●	●	●
NPF-120(D)		●HL			●		●	C		●	●	●
OWA-60E								A	B	●	●	
OWA-60U	●	●										
OWA-90E										●		
OWA-90U	▲	●										
OWA-120E										●	●	
OWA-120U		●										
PCD-16 (A/B)	●	●			▲ B type		▲ B type	C		▲ B type	●	●
PCD-25 (A/B)	●	●			▲ B type		▲ B type	C		▲ B type	●	●
PCD-40/60					●		●	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(E)	▲Blank	▲Blank			●		●	C		●	●	▲ E type
PLM-25(E)	▲	▲Blank			●		●	C		●	●	▲ E type
PLM-40(E)		▲Blank			●		●	C		●	●	▲ E type
PLN-20	●	●			●	●	●	C		●	●	●
PLN-30	●			●	●	●	●	C		●	●	●
PLN-45	●	●		●	●	●	●	C		●	●	●
PLN-60	●	●		●	●	●	●	C	B	●	●	●
PLN-100	●	●		●	●	●	●	C	B	●	●	●
PLP-20/30/45/60	●	●			●	●	●	C		●	●	●
PWM-40	●	●HL			●		●	C		●	●	●
PWM-60	●	●HL			●		●	C		●	●	●
PWM-90	▲	●			●		●	C		●	●	●
PWM-120		●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.




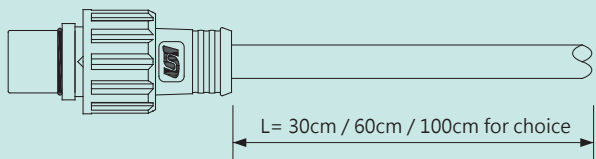
# Waterproof Connector

## 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	Order No. : M20.8-02
	2-pin (5A/PIN)	Suitable Current : 5A max.	4-pin (5A/PIN)	Suitable Current : 10A max.	2-pin (12A/PIN)	Suitable Current : 12A max.	2-pin (20A/PIN)	Suitable Current : 20A max.	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
	

- ▶ 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


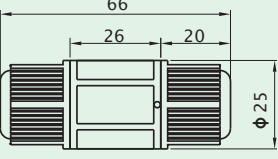
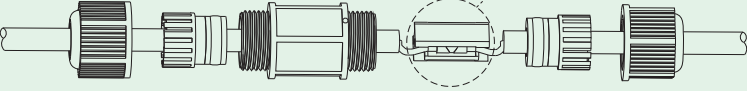
Cable Type

⑤	U1	E1
	SJTW (USA)	H05RN-F (EURO)

Brand Name

⑥	UN	CH
	UNICABLE (Made in Taiwan)	CHOGORI (Made in China)

## Waterproof Cable Joiner

	
Order No. : CJ04-1 CJ04-2	
	<p>CJ04-1 suitable for 14AWG~16AWG CJ04-2 suitable for 18AWG~22AWG</p> <p>Up to four wires can be connected through this cable joiner by soldering or clamping by tools.</p>

- ▶ CJ04 cable joiner can be purchased independently for user's own assembly.



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