



# *LED Power Supply*

## *Your Reliable Power Partner*



*June*  
**2015**

# 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 5,000 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 5W to 10,000W, for more selection.

Please visit our website for more details — [www.meanwell.com](http://www.meanwell.com)

## New Products Overview

### APV/APC-8

8W Economical Low Wattage

- Class II (no F.G.) , 90~264VAC input
- Constant voltage mode for APV-8  
Constant current mode for APC-8
- Low cost, high reliability
- 2 years warranty



Page  
2-3

### ELG-75/100/150/240 ELG-75/100/150/240-C

75~240W New Outdoor Lighting Series

- 180~295VAC input with PFC
- Fanless design and high IP level
- Meet 6kV surge immunity
- Diversified options: 3 in 1 dimming function /  
Smart Timing Dimming
- 5 years warranty



Page  
26-27

### GSC18/25/40 B/E

18~40W External Power with PFC

- Class II (no F.G.) , 90~277VAC input
- No load power consumption<0.15W
- Constant current mode for GSC series
- Dekra ENEC EN61347-1, EN61347-2-3 listed
- 3 years warranty



Page  
9

### HLG-240H-C

250W High Output Voltage (>60VDC)  
with PFC

- 90~305VAC input
- Fanless design and high IP level, suitable for outdoor  
environment
- 3 in 1 dimming function
- 5 years warranty



Page  
33

# Contents

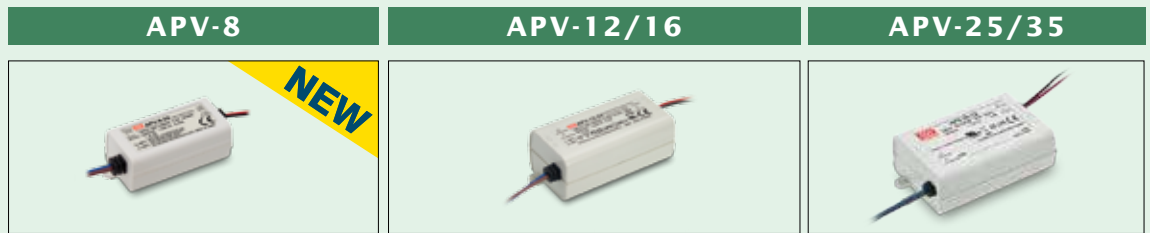
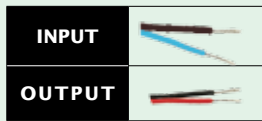
<b>AP series</b>	8~35W	2~3	<b>CLG series</b>	60~150W	25
▪ Low Cost with Rectangular Plastic Case			▪ PFC Function ▪ Metal Case ▪ IP65 & 67		
<b>LP series</b>	18~150W	4~7	<b>ELG series</b>	75~240W	26
▪ Slim Plastic Case ▪ IP67			▪ PFC Function ▪ Metal Case ▪ IP65 & 67		
<b>ELN series</b>	30~60W	8	<b>ELG-C series</b>	75~240W	27
▪ Dimming Option ▪ Plastic Case			▪ PFC Function ▪ Metal Case ▪ IP65 & 67		
<b>GSC series</b>	18~40W	9	<b>HLG series</b>	40~600W	28~31
▪ PFC Function ▪ Adaptor Style			▪ High Efficiency with PFC Function		
<b>OWA series</b>	60~120W	10	▪ 3 in 1 Dimming ▪ Metal Case ▪ IP65 & 67		
▪ PFC Function (90~120W) ▪ External Power			<b>HLG-C series</b>	70~240W	32~33
<b>PWM series</b>	40~120W	11	▪ C.C. Output with High Output Voltage >60VDC		
▪ PFC Function ▪ C.V. PWM Style Output			▪ PFC Function ▪ Metal Case		
▪ Plastic Case ▪ 3 in 1 Dimming ▪ IP67			▪ 3 in 1 Dimming ▪ IP65 & 67		
<b>PLM series</b>	12~40W	12	<b>HVG(C) series</b>	65~150W	34~35
▪ PFC Function ▪ Push Terminal I/O			▪ PFC Function ▪ Metal Case ▪ IP65 & 67		
<b>PLM-E series</b>	12~40W	13	▪ 180~528VAC Wide Input Range		
▪ PFC Function ▪ Push Terminal I/O			▪ C.C. Output with High Output Voltage >60VDC for HVGC Series		
<b>NPF series</b>	40~120W	14	<b>HBG series</b>	60~240W	36
▪ PFC Function ▪ Plastic Case			▪ PFC Function ▪ Circular Shape Power		
▪ 3 in 1 Dimming ▪ ErP Compliance ▪ IP67			▪ 3 in 1 Dimming ▪ IP65 & 67 (100~240W)		
<b>LPF series</b>	16~90W	15	<b>HSG series</b>	70W	37
▪ PFC Function ▪ Plastic Case			▪ PFC Function ▪ Rectangular Metal Case ▪ IP65		
▪ 3 in 1 Dimming ▪ IP67			<b>ULP series</b>	150W	
<b>PLD series</b>	16~60W	16	▪ U-bracket Type ▪ PFC Function		
▪ PFC Function ▪ Plastic Case			<b>LDH series</b>	Single Channel DC/DC Driver	
<b>PCD series</b>	16~60W	17	▪ Step-up Driver ▪ C. C. Output ▪ Pin / Wire Style		
▪ PFC Function ▪ AC Phase-cut Dimming			<b>LDD/LDB series</b>	Single Channel DC/DC Driver	38~39
<b>PLN series</b>	20~96W	18	▪ LDD: Step-down Driver ; LDB: Buck-boost Driver		
▪ PFC Function ▪ Plastic Case ▪ IP64			▪ Pin / Wire / SMD Style		
<b>HLN series</b>	40~80W	19	<b>DAP-04</b>		40
▪ PFC Function ▪ Plastic Case ▪ IP64			▪ DALI to PWM Converter ▪ 4 DALI Output Channels		
▪ 3 in 1 Dimming			<b>SPD-20</b>		
<b>PLC series</b>	30~96W	20	▪ 20kA Surge Protection Device ▪ Plastic Case		
▪ PFC Function ▪ Screw Terminal I/O			<b>WPD-06 / WPD-06SWT</b>		41
<b>LCM series</b>	25~60W	21	▪ Wireless DC multi-channel PWM Dimmer		
▪ PFC Function			▪ EnOcean switch Transmitter		
▪ Plastic Case with Push Terminal I/O			<b>Certification Chart</b>		42~43
▪ Multiple-Stage C.C. Level Selectable by DIP S.W.			<b>Quick Selection Map</b>		44~46
▪ DALI Interface and Push DIM			<b>Comparison Chart</b>		46~48
<b>PLP series</b>	20~60W	22	<b>Waterproof Output Connector</b>		49
▪ PFC Function ▪ PCB Type					
<b>HLP series</b>	40~80W	23			
▪ PFC Function ▪ PCB Type ▪ 3 in 1 Dimming					
<b>CEN series</b>	60~96W	24			
▪ PFC Function ▪ Metal Case ▪ IP66					

# AP series

## 8~35W Single Output LED Power Supply

### ► Features

- Universal AC input / Full range
- Fully isolated plastic case
- Protections: Short circuit / Overload / Over voltage
- **Constant voltage mode**
- No load power consumption <0.5W for APV-8
- IP30 design
- Withstand 300VAC surge input for 5 seconds (APV-25/35)
- 94V-0 flame retardant plastic case
- Isolation class II, no F.G.
- Class 2 power unit / Pass LPS (except for APV-8)
- Cooling by free air convection
- 100% full load burn-in test
- Low cost, high reliability
- Small and compact size
- Suitable for LED lighting and moving sign applications
- 2 years warranty



	APV-8	APV-12/16	APV-25/35
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	Design refer to IEC60950-1, EN61347-1/2-13, UL8750	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 22	77x 40x 29	84x 57x 29.5

### APV-8 Series (C.V. mode)

Model No.	Output	Tol.	R&N	Effi.
APV-8-5	5V, 0~1.4A	±5%	150mV	74%
APV-8-12	12V, 0~0.67A	±5%	150mV	80%
APV-8-24	24V, 0~0.34A	±5%	200mV	81%

### APV-12 Series (C.V. mode)

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 (C.V. mode)

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 (C.V. mode)

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 (C.V. mode)

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%

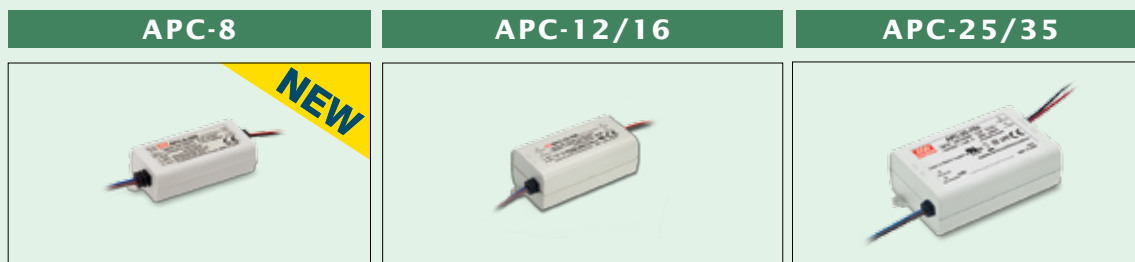
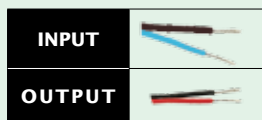
Note: The models on this page might not be suitable for lighting applications in EU countries. Please check with your local authorities for the possible use of the model of interest.

# AP series

## 8~35W Single Output LED Power Supply

### ► Features

- Universal AC input / Full range
- Fully isolated plastic case
- Protections: Short circuit / Over voltage (except for APC-8)
- **Constant current mode**
- No load power consumption <0.5W for APC-8
- IP30 design
- Withstand 300VAC surge input for 5 seconds (APC-25/35)
- 94V-0 flame retardant plastic case
- Class 2 power unit / Pass LPS (except for APC-8, APC-25-350 & APC-35-350/500)
- Isolation class II, no F.G.
- Cooling by free air convection
- 100% full load burn-in test
- Low cost, high reliability
- Small and compact size
- Suitable for LED lighting and moving sign applications
- 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	Design refer to IEC60950-1, IEC61347-1/2-13, UL8750	UL8750, IEC/EN61347-1/2-13(LVD) approved, Design refer to IEC60950-1	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 22	77x 40x 29	84x 57x 29.5

### APC-8 Series (C.C. mode)



Model No.	Output	Io Tol.	R&N	Effi.
APC-8-250	16~32V, 250mA	±5%	350mV	82.5%
APC-8-350	11~23V, 350mA	±5%	300mV	81.5%
APC-8-500	8~16V, 500mA	±5%	300mV	81%
APC-8-700	5~11V, 700mA	±5%	250mV	80%

### APC-12 Series (C.C. mode)



Model No.	Output	Io 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 (C.C. mode)



Model No.	Output	Io 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 (C.C. mode)



Model No.	Output	Io 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 (C.C. mode)



Model No.	Output	Io 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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# LP series

## 18~35W Single Output LED Power Supply

### ► Features

- LPL-18: 90~132VAC input only  
LPH-18: 180~264VAC input only  
LPV: 90~264VAC input
- Fully encapsulated with IP67 level
- Protections: Short circuit / Overload / Over voltage / Over temperature (LPH-18/LPL-18 only)
- **Constant voltage mode**
- Class 2 power unit / Pass LPS (LPV-20/35)
- Isolation class II, no F.G.
- Withstand 300VAC surge input for 5 seconds (LPV-20/35)
- Cooling by free air convection
- 100% full load burn-in test
- Low cost, high reliability
- Suitable for LED-based decorative/architectural lighting, LED stage, theater lighting, and LED electronic displays
- 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, EN61347-1, EN61347-2-13 approved for LPH-18		LPV-20: TUV EN60950-1, UL879, UL1310 approved LPV-35: IEC61347-1, IEC61347-2-13, 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)
Dimension (LxWxH)(mm)		140x 30x 22		118x 35x 26	148x 40x 30

### LPL-18 Series (C.V. mode)



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 (C.V. mode)



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 (C.V. mode)



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 (C.V. mode)



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%

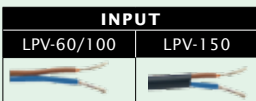




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# LP series

## 60~150W Single Output LED Power Supply

### Features

- LPV-60/100: 90~264VAC input  
LPV-150: 180~305VAC input only
- Fully encapsulated with IP67 level
- Protections: Short circuit / Overload / Over voltage / Over temperature (LPV-150 only)
- **Constant voltage mode**
- Class 2 power unit / Pass LPS (LPV-60-12/15/24/36/48 only)
- Isolation class II, no F.G.
- Withstand 300VAC surge input for 5 seconds (LPV-60/100)
- Cooling by free air convection
- 100% full load burn-in test
- Low cost, high reliability
- Suitable for LED-based decorative/architectural lighting, LED stage, theater lighting, and LED electronic displays
- 2 years warranty

	LPV-60	LPV-100	LPV-150	
<b>INPUT</b> LPV-60/100    LPV-150  <b>OUTPUT</b> LPV-60/100    LPV-150 				
	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, 60A at 230VAC	
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	UL879, UL8750 approved; Design refer to IEC60950-1		
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, 18AWGx2C (60cm)	UL rated, 18AWGx2C (30cm)	UL rated, SJTW 18AWGx2C (30cm)
	Output	UL rated, 16AWGx2C (60cm)	UL rated, 14AWGx2C (30cm)	UL rated, SJTW 14AWGx2C (30cm)
Dimension (LxWxH)(mm)	162.5x 42.5x 32	190x 52x 37	191x 63x 37.5	

### LPV-60 Series (C.V. mode)



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 (C.V. mode)



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-150 Series (C.V. mode)



Model No.	Output	Tol.	R&N	Effi.
LPV-150-12	12V, 0~10A	±5%	200mV	87%
LPV-150-15	15V, 0~10A	±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%

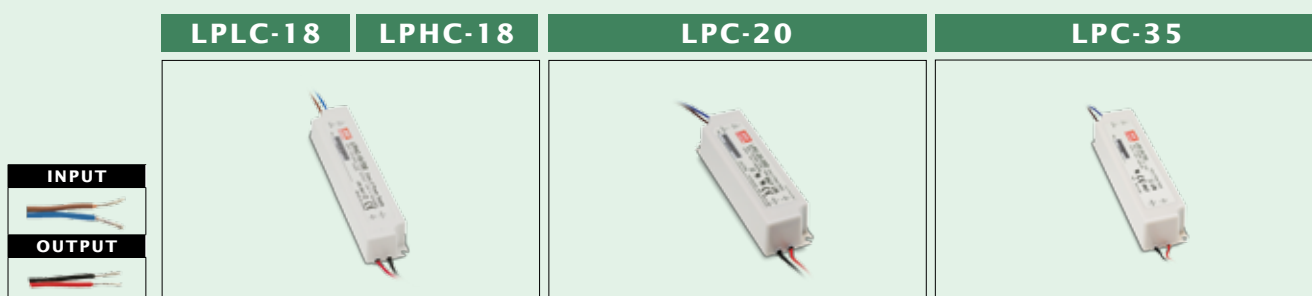
Note: The models on this page might not be suitable for lighting applications in EU countries. Please check with your local authorities for the possible use of the model of interest.

# LP series

## 18~35W Single Output LED Power Supply

### ► Features

- LPLC-18: 90~132VAC input only  
LPHC-18: 180~264VAC input only  
LPC-20/35: 90~264VAC input
- Fully encapsulated with IP67 level
- Protections: Short circuit / Over voltage / Over temperature (except for LPC-20/35)
- **Constant current mode**
- Withstand 300VAC surge input for 5 seconds (only for LPC-20/35)
- Class 2 power unit / Pass LPS (LPC-20/35)
- Isolation class II, no F.G.
- Cooling by free air convection
- 100% full load burn-in test
- Low cost, high reliability
- Suitable for LED-based decorative / architectural lighting, LED stage, theater lighting, and LED electronic displays
- 2 years warranty



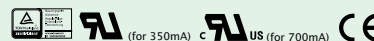
	LPLC-18	LPHC-18	LPC-20	LPC-35
AC input voltage range	90~132VAC	180~264VAC	90~264VAC	
AC inrush current (max.)	Cold start, 40A at 115VAC	Cold start, 50A at 230VAC	Cold start, 70A at 230VAC	Cold start, 55A at 230VAC
Over voltage protection	105%~135% rated output voltage			
Withstand voltage	I/P-O/P: 3kVAC			
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 (C.C. mode)



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 (C.C. mode)



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 (C.C. mode)



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 (C.C. mode)



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 Single Output LED Power Supply

### ► Features

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

	LPC-60	LPC-100	LPC-150												
<table border="1"> <tr> <th colspan="2">INPUT</th> </tr> <tr> <td>60W / 100W</td> <td>150W</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <th colspan="2">OUTPUT</th> </tr> <tr> <td>60W / 100W</td> <td>150W</td> </tr> <tr> <td></td> <td></td> </tr> </table>	INPUT		60W / 100W	150W			OUTPUT		60W / 100W	150W					
INPUT															
60W / 100W	150W														
OUTPUT															
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 (C.C. mode)**

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 (C.C. mode)**

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 (C.C. mode)**

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 Single Output LED Power Supply

### Features

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

		ELN-30	ELN-60
<b>INPUT</b> <b>OUTPUT (standard)</b> <b>OUTPUT (Dimming Function)</b>			
	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%

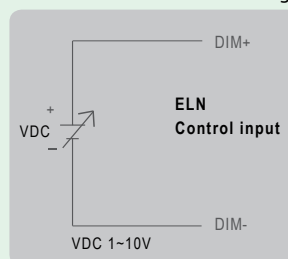
### Dimming Control (optional)

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 :

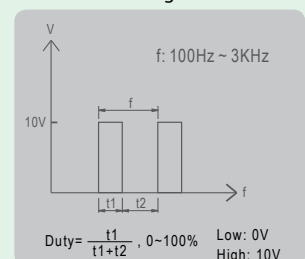
1~10VDC external control signal



Order No.: ELN-30-5D

#### P Type :

PWM control signal



Order No.: ELN-30-5P

# GSC series

18~40W External Power with PFC

## ► Features

- Universal AC input (up to 277VAC) / Full range
- Built-in active PFC function
- Protection: Short circuit
- Fully isolated plastic case
- **Constant current mode**
- **No load power consumption <0.15W**
- IP30 design
- Isolation class II, no F.G.
- Cooling by free air convection
- IEC320-C8 or 2 pole EURO plug
- Low cost, high reliability
- Suitable for indoor LED lighting applications
- 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 approved	
EMC standards	EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547	
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	

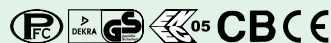
## GSC18 Series



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 Power

## Features

- Universal AC input / Full range
- Built-in active PFC function (OWA-90/120)
- High efficiency up to 91%
- No load power consumption <0.15W
- Energy efficiency Level VI
- Protections: Short circuit / Over current / Over voltage / Over temp.
- Cooling by free air convection
- Fully isolated plastic case
- Fully encapsulated with IP67 level for power body
- Isolation class II, no F.G.
- Class 2 power unit (OWA-60 & OWA-90-20~54)
- Suitable for dry and damp location
- 5 years warranty



AC input voltage range	90~264VAC ; 127~370VDC			
AC inrush current (max.)	Cold start, 65A at 230VAC		Cold start, 60A at 230VAC	
Over current protection	95%~108% constant current limiting, auto-recovery			
Over voltage protection	110%~140% rated output voltage			
Over temp. protection	Shut down output voltage, re-power on to recover			
Setup, rise, hold up time	500ms, 80ms, 16ms at full load and 230VAC			
Withstand voltage	I/P-O/P: 3.75KVAC			
Working temperature	-35~+70°C		-40~+70°C (refer to output derating curve)	
Safety standards	U-Type	UL8750 listed approved		
	E-Type	DEKRA IEC/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) E-Type : XLR 4P, male type
		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; UL246416AWGx2C (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	±4.0%	150mV	88%
OWA-60□-15	15V, 0~4A	±4.0%	150mV	89%
OWA-60□-20	20V, 0~3A	±4.0%	150mV	89%
OWA-60□-24	24V, 0~2.5A	±3.0%	150mV	90%
OWA-60□-30	30V, 0~2A	±3.0%	200mV	90%
OWA-60□-36	36V, 0~1.67A	±2.0%	200mV	90%
OWA-60□-42	42V, 0~1.5A	±1.0%	250mV	90%
OWA-60□-48	48V, 0~1.25A	±1.0%	250mV	91%
OWA-60□-54	54V, 0~1.12A	±1.0%	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	±4.0%	150mV	89%
OWA-90□-15	15V, 0~6A	±4.0%	150mV	90%
OWA-90□-20-△	20V, 0~4.5A	±4.0%	150mV	90%
OWA-90□-24-△	24V, 0~3.75A	±3.0%	150mV	90%

Model No.	Output	Tol.	R&N	Effi.
OWA-90□-30-△	30V, 0~3A	±3.0%	200mV	90%
OWA-90□-36-△	36V, 0~2.5A	±2.0%	200mV	91%
OWA-90□-42-△	42V, 0~2.15A	±1.0%	250mV	91%
OWA-90□-48-△	48V, 0~1.88A	±1.0%	250mV	91%
OWA-90□-54-△	54V, 0~1.67A	±1.0%	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	±4.0%	150mV	87.5%
OWA-120□-15	15V, 0~8A	±4.0%	150mV	89%
OWA-120□-20	20V, 0~6A	±4.0%	150mV	90%
OWA-120□-24	24V, 0~5A	±4.0%	150mV	90.5%
OWA-120□-30	30V, 0~4A	±3.0%	200mV	90%
OWA-120□-36	36V, 0~3.4A	±2.0%	200mV	90%
OWA-120□-42	42V, 0~2.9A	±1.0%	250mV	90.5%
OWA-120□-48	48V, 0~2.5A	±1.0%	250mV	90.5%
OWA-120□-54	54V, 0~2.3A	±1.0%	350mV	90.5%

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

# PWM series

40~120W PWM Output with PFC

## Features

- Universal AC input (up to 305VAC) / Full range
- **Constant voltage PWM style output**
- Built-in active PFC function
- High efficiency up to 90.5%
- **No load power consumption <0.5W**
- Protections:
  - Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Fully isolated plastic case
- Fully encapsulated with IP67 level
- Class 2 power unit (except for PWM-90-12 & PWM-120)
- Isolation class II, no F.G.
- **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
- **5 years warranty**



AC input voltage range	90~305VAC; 127~431VDC		
AC inrush current (max.)	Cold start, 50A at 230VAC	Cold start, 60A at 230VAC	
Overload protection	108%~120% hiccup mode, auto-recovery		
Over voltage protection	113%~142% rated output voltage		
Over temp. protection	Shut down o/p voltage, re-power on to recover		
Setup, 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		
Connection	Input	UL rated, SJTW 18AWGx2C (30cm)	
	Output	UL2464 18AWG x2C (30cm)+ 22AWG x2C (30cm)	SJTW 16AWGx2C (30cm)+ UL2464 18AWGx2C (30cm)
Dimension (LxWxH) (mm)	150x 53x 35	171x 63x 37.5	191x 63x 37.5

## PWM-40 Series



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

## PWM-90 Series



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

## PWM-60 Series



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

## PWM-120 Series



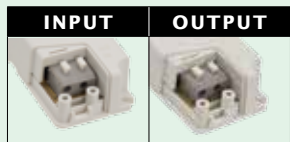
Model No.	Output	Tol.	Effi.
PWM-120-12	12V, 0~10A	±4%	88.0%
PWM-120-24	24V, 0~5A	±4%	90.0%
PWM-120-36	36V, 0~3.4A	±2%	90.0%
PWM-120-48	48V, 0~2.5A	±1%	90.5%

# PLM series

12~40W Constant Current with PFC

## Features

- 110~295VAC input
- Built-in active PFC function
- Protections: Short circuit / Over temperature (PLM-40)
- Fully isolated plastic case
- Constant current mode
- No load power consumption <0.5W
- 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)
- Cooling by free air convection
- Low cost, high reliability
- Suitable for indoor LED lighting applications
- 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 Constant Current with PFC

## Features

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

	PLM-12E	PLM-25E	PLM-40E
			
<b>INPUT</b>			
<b>OUTPUT</b>			

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 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-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%

# NPF series

40~120W Single Output with PFC

## ► Features

- Universal AC input (up to 305VAC) / Full range
- Built-in active PFC function
- High efficiency up to 90%
- No load power consumption <0.15W (<0.5W for D-Type)
- Protections:
  - Short circuit / Over current / Over voltage / Over temperature
- Cooling by free air convection
- Fully isolated plastic case with IP67 level
- Class 2 power unit [except for NPF-90(D)-12/15 & NPF-120(D)]
- Isolation class II, no F.G.
- Built-in 3 in 1 dimming function (0~10VDC, PWM signal or resistance) for D type
- Suitable for dry, damp, and wet location
- 5 years warranty



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		
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)
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	86.0%
NPF-40□-15	15V, 0~2.67A	±4%	150mV	87.0%
NPF-40□-20	20V, 0~2A	±4%	150mV	88.0%
NPF-40□-24	24V, 0~1.67A	±3%	150mV	89.0%
NPF-40□-30	30V, 0~1.34A	±3%	200mV	89.0%
NPF-40□-36	36V, 0~1.12A	±2%	200mV	90.0%
NPF-40□-42	42V, 0~0.96A	±1%	200mV	90.0%
NPF-40□-48	48V, 0~0.84A	±1%	200mV	90.0%
NPF-40□-54	54V, 0~0.76A	±1%	350mV	90.0%

## 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	86.0%
NPF-60□-15	15V, 0~4A	±4%	150mV	87.0%
NPF-60□-20	20V, 0~3A	±4%	150mV	88.0%
NPF-60□-24	24V, 0~2.5A	±3%	150mV	89.0%
NPF-60□-30	30V, 0~2A	±3%	200mV	90.0%
NPF-60□-36	36V, 0~1.67A	±2%	200mV	90.0%
NPF-60□-42	42V, 0~1.43A	±1%	200mV	90.0%
NPF-60□-48	48V, 0~1.25A	±1%	200mV	90.0%
NPF-60□-54	54V, 0~1.12A	±1%	350mV	90.0%

## 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	88.0%
NPF-120□-20	20V, 0~6A	±4%	150mV	89.0%
NPF-120□-24	24V, 0~5A	±4%	150mV	89.5%
NPF-120□-30	30V, 0~4A	±3%	200mV	89.0%
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	90.0%
NPF-120□-54	54V, 0~2.3A	±1%	350mV	90.0%

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



# LPF series

16~90W Single Output with PFC

## Features

- Universal AC input (up to 305VAC) / Full range
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Built-in active PFC function
- Fully isolated plastic case
- Isolation class II, no F.G.
- Class 2 power unit
- Built-in 3 in 1 dimming function (1~10VDC, PWM signal or resistance) for D type
- Fully encapsulated with IP67 level [optional for LPF-16(D)]
- Cooling by free air convection
- Suitable for LED lighting and moving sign applications
- Suitable for dry, damp, and wet location
- 5 years warranty



	LPF-16(D)/25(D)	LPF-40(D)/60(D)	LPF-90(D)
AC input voltage range	90~305VAC ; 127~431VDC		
AC inrush current (max.)	LPF-16(D): Cold start, 45A LPF-25(D): Cold start, 50A	LPF-40(D): Cold start, 50A LPF-60(D): Cold start, 55A	Cold start, 55A at 230VAC
Over current protection	95% ~108% constant current, auto-recovery		
Over voltage protection	110%~150% rated output voltage		
Setup, rise, hold up time	500ms, 80ms, 16ms at full load and 230VAC		500ms, 200ms, 16ms at full load and 230VAC
Withstand voltage	I/P - O/P: 3.75kVAC		
Working temperature	-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)/60(D)/90(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-40/60: UL rated, SVT 18AWGx2C (30cm) LPF-40D/60D: UL2464 18AWGx2C(30cm)+22AWGx2C (30cm)
Dimension (LxWxH)(mm)	148x 40x 32	162.5x 43x 32	161x 61x 36

## LPF-16 Series

Model No.	Output	Tol.	R&N	Effi.
LPF-16-12	12V, 0~1.34A	±4.0%	150mV	83.0%
LPF-16-15	15V, 0~1.07A	±4.0%	150mV	83.0%
LPF-16-20	20V, 0~0.80A	±4.0%	150mV	84.5%
LPF-16-24	24V, 0~0.67A	±4.0%	150mV	84.5%
LPF-16-30	30V, 0~0.54A	±4.0%	200mV	84.5%
LPF-16-36	36V, 0~0.45A	±4.0%	250mV	85.0%
LPF-16-42	42V, 0~0.39A	±4.0%	250mV	85.0%
LPF-16-48	48V, 0~0.34A	±4.0%	250mV	85.0%
LPF-16-54	54V, 0~0.30A	±4.0%	350mV	84.5%

## LPF-25 Series

Model No.	Output	Tol.	R&N	Effi.
LPF-25-12	12V, 0~2.10A	±4.0%	150mV	84.0%
LPF-25-15	15V, 0~1.67A	±4.0%	150mV	84.0%
LPF-25-20	20V, 0~1.25A	±4.0%	150mV	85.0%
LPF-25-24	24V, 0~1.05A	±4.0%	150mV	85.5%
LPF-25-30	30V, 0~0.84A	±4.0%	200mV	85.5%
LPF-25-36	36V, 0~0.70A	±4.0%	250mV	85.5%
LPF-25-42	42V, 0~0.60A	±4.0%	250mV	85.5%
LPF-25-48	48V, 0~0.53A	±4.0%	250mV	86.0%
LPF-25-54	54V, 0~0.47A	±4.0%	350mV	86.0%

## LPF-40 Series

Model No.	Output	Tol.	R&N	Effi.
LPF-40-12	12V, 0~3.34A	±4.0%	150mV	84.0%
LPF-40-15	15V, 0~2.67A	±4.0%	150mV	85.0%
LPF-40-20	20V, 0~2.00A	±4.0%	150mV	86.0%

Model No.	Output	Tol.	R&N	Effi.
LPF-40-24	24V, 0~1.67A	±4.0%	150mV	87.0%
LPF-40-30	30V, 0~1.34A	±4.0%	200mV	88.0%
LPF-40-36	36V, 0~1.12A	±4.0%	250mV	88.0%
LPF-40-42	42V, 0~0.96A	±4.0%	250mV	88.5%
LPF-40-48	48V, 0~0.84A	±4.0%	250mV	89.0%
LPF-40-54	54V, 0~0.76A	±4.0%	350mV	89.0%

## LPF-60 Series

Model No.	Output	Tol.	R&N	Effi.
LPF-60-12	12V, 0~5.00A	±4.0%	150mV	86%
LPF-60-15	15V, 0~4.00A	±4.0%	150mV	87%
LPF-60-20	20V, 0~3.00A	±4.0%	150mV	88%
LPF-60-24	24V, 0~2.50A	±4.0%	150mV	89%
LPF-60-30	30V, 0~2.00A	±4.0%	200mV	90%
LPF-60-36	36V, 0~1.67A	±4.0%	250mV	90%
LPF-60-42	42V, 0~1.43A	±4.0%	250mV	90%
LPF-60-48	48V, 0~1.25A	±4.0%	250mV	90%
LPF-60-54	54V, 0~1.12A	±4.0%	350mV	90%

## LPF-90 Series

Model No.	Output	Tol.	R&N	Effi.
LPF-90-15	15V, 0~5.00A	±4.0%	150mV	89.0%
LPF-90-20	20V, 0~4.50A	±4.0%	150mV	89.5%
LPF-90-24	24V, 0~3.75A	±4.0%	150mV	90.0%
LPF-90-30	30V, 0~3.00A	±4.0%	200mV	90.5%
LPF-90-36	36V, 0~2.50A	±4.0%	200mV	90.5%
LPF-90-42	42V, 0~2.15A	±4.0%	200mV	90.5%
LPF-90-48	48V, 0~1.88A	±4.0%	200mV	90.5%
LPF-90-54	54V, 0~1.67A	±4.0%	200mV	90.5%

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

# PLD series

16~60W Constant Current with PFC

## Features

- PLD-16: 115VAC or 230VAC input  
PLD-25: 90~295VAC input  
PLD-40/60: 230VAC input only
- Built-in active PFC function
- Fully isolated plastic case
- **Constant current mode**
- IP30 design
- Class 2 power unit / Pass LPS (PLD-16/25)
- Isolation class II, no F.G.
- Protections: Short circuit / Over temperature
- Suitable for indoor LED lighting applications
- Cooling by free air convection
- 3 years warranty

		PLD-16	PLD-25	PLD-40	PLD-60													
<table border="1"> <thead> <tr> <th colspan="3">INPUT</th> </tr> <tr> <th>A-Type</th> <th>B-Type</th> <th>PLD-25</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th colspan="2">OUTPUT</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> </tbody> </table>		INPUT			A-Type	B-Type	PLD-25				OUTPUT							
INPUT																		
A-Type	B-Type	PLD-25																
OUTPUT																		
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 <input type="checkbox"/>	24~48V, 350mA	±5%	4.6V	84.5%
PLD-16-700 <input type="checkbox"/>	16~24V, 700mA	±5%	2.7V	84.5%
PLD-16-1050 <input type="checkbox"/>	12~16V, 1050mA	±5%	2.2V	84.0%
PLD-16-1400 <input type="checkbox"/>	8~12V, 1400mA	±5%	2.0V	82.5%

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

## PLD-25 Series



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

## PLD-40 Series



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

## PLD-60 Series



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

# PCD series

16~60W Constant Current with AC Dimmable

## Features

- AC phase-cut dimming, work with leading edge and trailing edge TRIAC dimmers
- PCD-16/25: 115VAC or 230VAC input
- PCD-40/60: 230VAC input only
- Built-in active PFC function
- Fully isolated plastic case
- Constant current mode
- IP30 design
- Class 2 power unit / Pass LPS (PCD-16/25)
- Isolation class II, no F.G.
- Protections: Short circuit / Over temperature
- Cooling by free air convection
- 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

# PLN series

20~96W Single Output with PFC

## Features

- Universal AC input (up to 295VAC) / Full range
- Fully isolated plastic case with IP64 level
- Built-in active PFC function
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Class 2 power unit / Pass LPS
- Isolation class II, no F.G. for PLN-20/30
- User adjustable output voltage (except for PLN-20) and current protection level
- Cooling by free air convection
- Suitable for LED lighting and moving sign applications
- 2 years warranty

	PLN-20	PLN-30	PLN-45/60	PLN-100
<b>INPUT</b>				
PLN-20	PLN-30			PLN-45/60/100
<b>OUTPUT</b>				
PLN-20	PLN-30/45/60/100			
AC input voltage range	90~277VAC; 127~392VDC		90~295VAC ; 127~417VDC	
AC inrush current (max.)	Cold start, 35A at 230VAC			Cold start, 40A 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 Output	UL rated, UL1015 18AWGx2C (32cm)	UL rated, SVT 18AWGx2C (32cm)	UL rated, SVT 18AWGx3C (30cm) UL rated, SVT 18AWGx2C (30cm)
Dimension (LxWxH) (mm)	148.5x 38.5x 28		145x 47x 30	181x 61.5x 35 200x 70.5x 35

## PLN-20 Series



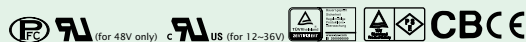
Model No.	Output	Tol.	R&N	Effi.
PLN-20-12	12V, 0~1.6A	±10%	2.5V	80.0%
PLN-20-18	18V, 0~1.1A	±10%	3.0V	81.0%
PLN-20-24	24V, 0~0.8A	±10%	3.0V	82.0%
PLN-20-36	36V, 0~0.55A	±10%	3.0V	83.0%
PLN-20-48	48V, 0~0.42A	±10%	3.8V	83.5%

## 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%

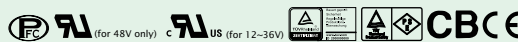
## PLN-45 Series



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%

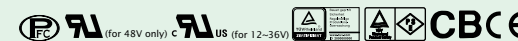
Model No.	Output	Tol.	R&N	Effi.
PLN-45-24	24V, 0~1.9A	±10%	2.7V	86.5%
PLN-45-27	27V, 0~1.7A	±10%	2.7V	86.5%
PLN-45-36	36V, 0~1.25A	±10%	3.6V	87.5%
PLN-45-48	48V, 0~0.95A	±10%	4.6V	87.5%

## 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



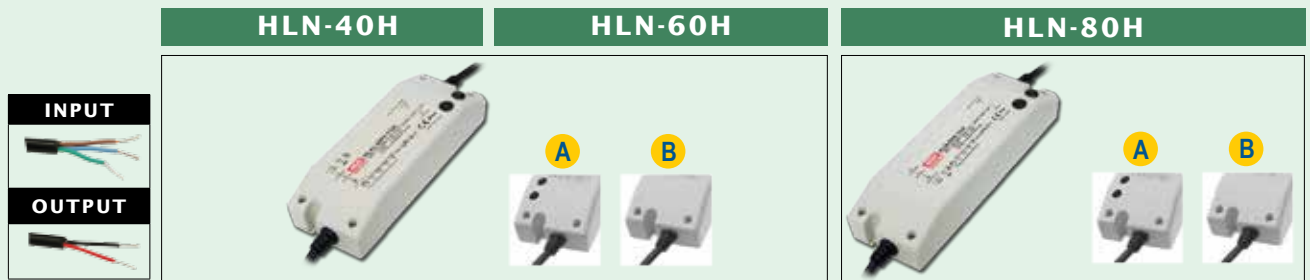
Model No.	Output	Tol.	R&N	Effi.
PLN-100-12	12V, 0~5.0A	±3%	150mV	83.0%
PLN-100-15	15V, 0~5.0A	±3%	150mV	85.0%
PLN-100-20	20V, 0~4.8A	±3%	150mV	88.5%
PLN-100-24	24V, 0~4.0A	±3%	150mV	88.5%
PLN-100-27	27V, 0~3.55A	±3%	150mV	88.0%
PLN-100-36	36V, 0~2.65A	±2%	150mV	88.0%
PLN-100-48	48V, 0~2.0A	±2%	200mV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

# HLN series

40~80W Single Output with PFC

## ► Features

- Universal AC input (up to 305VAC) / Full range
- Fully isolated plastic case with IP64 level
- Built-in active PFC function
- Protections:
  - Short circuit / Over current / Over voltage / Over temperature
- Class 2 power unit / Pass LPS
- High efficiency up to 91%
- Cooling by free air convection
- Suitable for dry, damp location
- Suitable for LED lighting and moving sign applications
- 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)	161 x 61.5 x 35		181 x 61.5 x 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

# PLC series

30~96W Single Output with PFC

## Features

- Universal AC input / Full range
- Fully isolated plastic case with screw terminal style of I/O
- Adjustable output voltage and current level
- Built-in active PFC function
- High efficiency up to 89%
- Class 2 power unit / Pass LPS
- Isolation class II, no F.G. for PLC-30
- Cooling by free air convection
- Protections: Short circuit / Over current / Over voltage / Over temperature
- 100% full load burn-in test
- Suitable for LED lighting and moving sign applications
- 2 years warranty



	PLC-30	PLC-45/60	PLC-100
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 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		
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%

# LCM series

## 25~60W Multiple-Stage Output Current LED Power Supply

### Features

- Output current level selectable by DIP switch
- LCM-25(DA): 180~277VAC input only  
LCM-40(DA)/60(DA): 180~295VAC input only
- Built-in active PFC function
- Protections: Short circuit / Over voltage (40W/60W only) / Over temp.
- Cooling by free air convection
- Fully isolated plastic case
- 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 0~10Vdc and PWM signal dimming function (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
- 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 approved; CQC GB19510.1, GB19510.14 for LCM-40(DA)/60(DA)	
DALI standards	Comply with IEC62386-101, 102, 207 (LCM-25DA/40DA/60DA only)	
EMC standards	EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547; GB17743, GB17625.1 for LCM-40(DA)/60(DA)	
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 and PWM signal dimming function.
- ▶ LCM-25DA/40DA/60DA have DALI interface and push dimming function.

# PLP series

20~60W Single Output with PFC

## ► Features

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



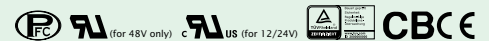
AC input voltage range	90~277VAC; 127~392VDC	90~264VAC; 127~370VDC
AC inrush current (max.)	Cold start, 25A at 230VAC	PLP-45: Cold start, 30A at 230VAC PLP-60: Cold start, 35A at 230VAC
Current adjustment range	75%~100%	
Over current protection	Range	95%~110%      100%~110%
	Type	Constant current limiting, 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 approved	
EMC standards	EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547	
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 26.6      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 <sub>c</sub> : 80°C t <sub>a</sub> : 40°C	Full load operation up to 40°C with surface temperature of case < 80°C
<b>SELV</b>	Vo < 120VDC can have this mark on the unit

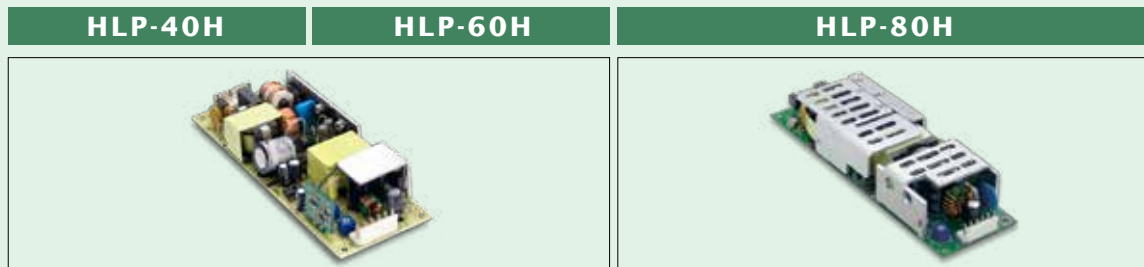


# HLP series

40~80W Single Output with PFC

## ► Features

- Universal AC input (up to 305VAC) / Full range
- Protections:
  - Short circuit / Over current / Over voltage / Over temperature
- Built-in active PFC function
- Output constant current level adjustable
- Class 2 power unit / Pass LPS
- Cooling by free air convection
- Suitable for built-in LED lighting system
- 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		
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 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		
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



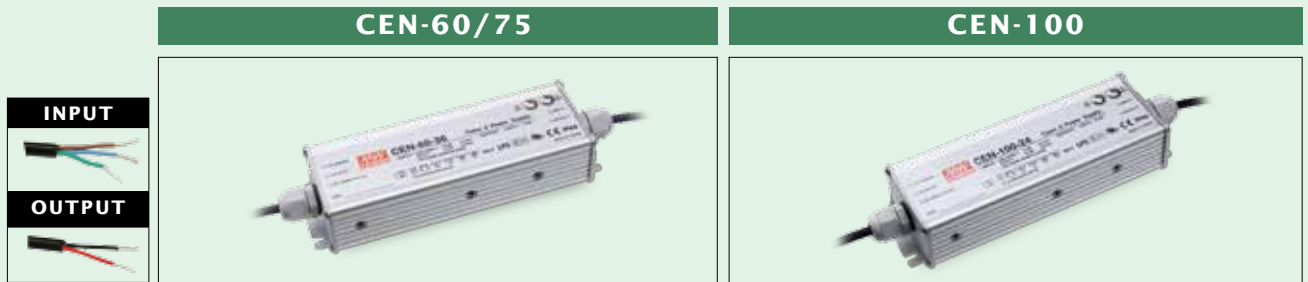
Model No.	Output	Tol.	R&N	Effi.
HLP-80H-12	12V, 0~5.0A	±2.5%	150mV	87.5%
HLP-80H-15	15V, 0~5.0A	±2.0%	150mV	88.5%
HLP-80H-20	20V, 0~4.0A	±1.0%	150mV	89.5%
HLP-80H-24	24V, 0~3.4A	±1.0%	150mV	90.0%
HLP-80H-30	30V, 0~2.7A	±1.0%	200mV	90.0%
HLP-80H-36	36V, 0~2.3A	±1.0%	200mV	90.0%
HLP-80H-42	42V, 0~1.95A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

# CEN series

60~96W Single Output with PFC

## Features

- Universal AC input (up to 295VAC) / Full range
- Protections:
  - Short circuit / Over current / Over voltage / Over temperature
- Built-in active PFC function
- IP66 design
- Meet 4kV surge immunity level (IEC61000-4-5)
- Class 2 power unit / Pass LPS
- Cooling by free air convection
- Suitable for dry, damp, and wet location
- Suitable for LED lighting and moving sign applications
- 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%

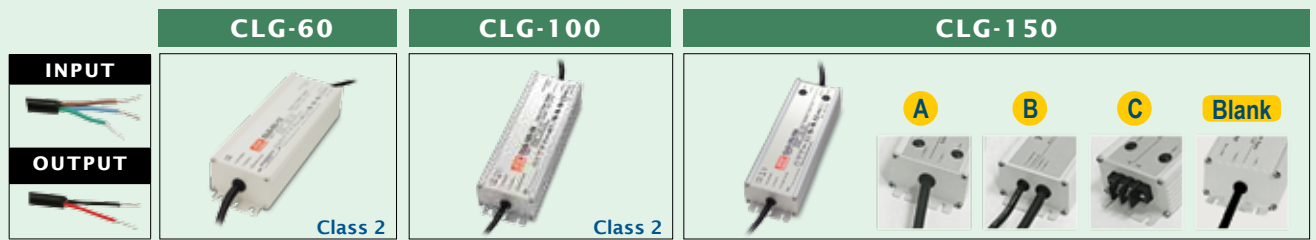
# CLG series

60~150W Single Output with PFC

## Features

- Universal AC input (up to 295VAC) / Full range
- Protections:  
Short circuit / Over current / Over voltage / Over temperature
- Built-in active PFC function
- IP67/IP65 design for indoor or outdoor installations (except for CLG-150 C-Type)
- Output current adjustable through output cable or internal potentiometer (CLG-150)
- Class 2 power unit / Pass LPS (CLG-60/100)
- Cooling by free air convection

- Suitable for LED lighting, street lighting and moving sign applications
- Meet 4kV surge immunity level (IEC 61000-4-5)
- 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%

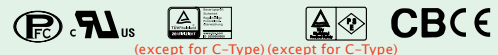
## CLG-100 Series



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

★ CLG-60-12/24/48, CLG-100-12/24/48 & CLG-150-12A/24A/36A/48A are our popular models. We will keep sufficient stock for prompt delivery of high quantity orders.

# ELG series

75~240W Single Output with PFC

## Features

- 180~295VAC input only
- Protections: Short circuit / Over current / Over voltage / Over temp.
- Built-in active PFC function
- High efficiency up to 93%
- IP67 / IP65 design for indoor or outdoor installations
- Output current adjustable through output cable or internal potentiometer
- Cooling by free air convection
- Suitable for dry / damp / wet locations
- Suitable for LED lighting and street lighting applications
- Meet 6KV surge immunity level (IEC61000-4-5)
- No load power consumption <0.5W
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires
- 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. Cable for I/O connection
  - D-Type(option):** IP67 rated. **Smart Timing Dimming function**
- 5 years warranty



		ELG-75	ELG-100	ELG-150	ELG-240
AC input voltage range	180~295VAC; 255~417VDC		Cold start, 60A at 230VAC		Cold start, 65A at 230VAC
AC inrush current (max.)	Cold start, 60A at 230VAC		Cold start, 65A at 230VAC		Cold start, 75A at 230VAC
DC adjustment range	±10% rated output voltage (A-Type only)				
Current adjustment range	50%~100%				
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	-40~+70°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	UL rated, SJTW 18AWGx2C (30cm)			
	Output	Blank/A-Type: SJTW 18AWGx2C (30cm) B/D/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/D/DA-Type: SJTW 14AWGx2C (30cm)+UL2517 22AWGx2C (30cm) for ELG-150-12/24; SJTW 18AWGx2C (30cm)+UL2517 22AWGx2C (30cm) for others		Blank/A-Type: SJTW 14AWGx2C (30cm) B/D/DA-Type: SJTW 14AWGx2C (30cm)+ UL2517 22AWGx2C (30cm)
Dimension (LxWxH) (mm)	180x 63x 35.5	199x 63x 35.5	219x 63x 35.5		244x 71x 35.5

### ELG-75 Series

0-10VDC (B type) UL/CUL/ENEC/CB/CE pending

Model No.	Output	Tol.	R&N	Effi.
ELG-75-12(A)	12V, 0~5A	±3%	150mV	86%
ELG-75-24(A)	24V, 0~3.15A	±3%	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%	250mV	90%

○ = Blank, A, B or D

### ELG-100 Series

0-10VDC (B type) UL/CUL/ENEC/CB/CE pending

Model No.	Output	Tol.	R&N	Effi.
ELG-100-24(A)	24V, 0~4.0A	±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%
ELG-100-48(A)	48V, 0~2A	±2%	300mV	90%
ELG-100-54(A)	54V, 0~1.78A	±2%	350mV	91%

○ = Blank, A, B or D

### ELG-150 Series

0-10VDC (B type) UL/CUL/ENEC/CB/CE pending

Model No.	Output	Tol.	R&N	Effi.
ELG-150-12(A)	12V, 0~10A	±3%	150mV	88%
ELG-150-24(A)	24V, 0~6.25A	±3%	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%	250mV	90%
ELG-150-54(A)	54V, 0~2.8A	±2%	350mV	91%

○ = Blank, A, B or D

### ELG-240 Series

0-10VDC (B type) UL/CUL/ENEC/CB/CE pending

Model No.	Output	Tol.	R&N	Effi.
ELG-240-12(A)	12V, 0~16A	±3%	150mV	90%
ELG-240-24(A)	24V, 0~10A	±2%	200mV	92%
ELG-240-36(A)	36V, 0~6.66A	±2%	250mV	92%
ELG-240-42(A)	42V, 0~5.71A	±2%	250mV	92.5%
ELG-240-48(A)	48V, 0~5A	±2%	250mV	93%
ELG-240-54(A)	54V, 0~4.45A	±2%	350mV	93%

○ = Blank, A, B or D

# ELG-C series

75~240W Constant Current with PFC

## Features

- Constant current output with high output voltage >60VDC (except ELG-75-C1400)
- 180~295VAC input only
- Built-in active PFC function
- High efficiency up to 93%
- Protections:
  - Short circuit / Over voltage / Over temperature
- Cooling by free air convection
- Output current adjustable through output cable or internal potentiometer
- IP67 / IP65 design for indoor or outdoor installations
- Suitable for dry / damp / wet locations
- Suitable for LED lighting and street lighting applications
- Meet 6KV surge immunity level (IEC61000-4-5)
- No load power consumption <0.5W
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires
- Multiple models for choice:
  - Blank-Type:** IP67. Cable for I/O connection
  - 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. **Smart Timing Dimming function**
- 5 years warranty



	ELG-75-C	ELG-100-C	ELG-150-C	ELG-240-C
AC input voltage range	180~295VAC; 255~417VDC			
AC inrush current (max.)	Cold start, 60A at 230VAC		Cold start, 65A at 230VAC	Cold start, 75A at 230VAC
Current adjustment range	50%~100%			
Over voltage protection	105%~145% rated output voltage			
Over temperature protection	Shut down O/P voltage, re-power on to recover			
Setup, rise, hold up time	500ms, 100ms, 10ms at full load and 230VAC		500ms, 85ms, 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	-40~+70°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	UL rated, SJTW 18AWG x2C (30cm)		
	Output	Blank/A-Type: SJTW 18AWGx2C (30cm) B/D/DA-Type: SJTW 18AWGx2C (30cm)+ UL2517 22AWGx2C (30cm)	Blank/A-Type: STW 18AWGx2C (30cm) for ELG-150-C500 and ELG-240-C700; SJTW 18AWGx2C (30cm) for others B/D/DA-Type: STW 18AWGx2C (30cm)+UL2517 22AWGx2C (30cm) for ELG-150-C500 and ELG-240-C700; SJTW 18AWGx2C (30cm)+ UL2517 22AWGx2C (30cm) for others	
Dimension (LxWxH) (mm)	180x 63x 35.5	199x 63x 35.5	219x 63x 35.5	244x 71x 35.5

## ELG-75-C Series

0-10VDC (B type) UL/CUL/ENEC/CB/CE pending

Model No.	Output	Tol.	R&N	Effi.
ELG-75-C350(A)	107~214V, 350mA	±5%	2V	91%
ELG-75-C500(A)	75~150V, 500mA	±5%	1.5V	91%
ELG-75-C700(A)	53~107V, 700mA	±5%	1V	90%
ELG-75-C1050(A)	35~71V, 1050mA	±5%	1V	90%
ELG-75-C1400(A)	27~54V, 1400mA	±5%	0.5V	90%

○ = Blank, A, B or D

## ELG-100-C Series

0-10VDC (B type) UL/CUL/ENEC/CB/CE pending

Model No.	Output	Tol.	R&N	Effi.
ELG-100-C350(A)	143~286V, 350mA	±5%	3V	91%
ELG-100-C500(A)	100~200V, 500mA	±5%	2V	91%
ELG-100-C700(A)	71~143V, 700mA	±5%	1.5V	90%
ELG-100-C1050(A)	48~95V, 1050mA	±5%	1V	90%
ELG-100-C1400(A)	35~72V, 1400mA	±5%	1V	90%

○ = Blank, A, B or D

## ELG-150-C Series

0-10VDC (B type) UL/CUL/ENEC/CB/CE pending

Model No.	Output	Tol.	R&N	Effi.
ELG-150-C500(A)	150~300V, 500mA	±5%	2V	92%
ELG-150-C700(A)	107~214V, 700mA	±5%	1.5V	92%
ELG-150-C1050(A)	72~143V, 1050mA	±5%	1V	92%
ELG-150-C1400(A)	54~107V, 1400mA	±5%	1V	91%
ELG-150-C1750(A)	43~86V, 1750mA	±5%	0.8V	91%
ELG-150-C2100(A)	36~72V, 2100mA	±5%	0.8V	91%

○ = Blank, A, B or D

## ELG-240-C Series

0-10VDC (B type) UL/CUL/ENEC/CB/CE pending

Model No.	Output	Tol.	R&N	Effi.
ELG-240-C700(A)	172~343V, 700mA	±5%	2.5V	93%
ELG-240-C1050(A)	114~228V, 1050mA	±5%	2.5V	93%
ELG-240-C1400(A)	86~171V, 1400mA	±5%	1.5V	92%
ELG-240-C1750(A)	69~137V, 1750mA	±5%	1V	92%
ELG-240-C2100(A)	57~115V, 2100mA	±5%	1V	92%

○ = Blank, A, B or D

# HLG series

40~60W High Efficiency with PFC

## Features

- Universal AC input (up to 305VAC) / Full range
- Protections:
  - Short circuit / Over current / Over voltage / Over temperature
- Built-in active PFC function
- High efficiency up to 90.5%
- IP67 / IP65 design for indoor or outdoor installations
- Output current adjustable through output cable or internal potentiometer
- Cooling by free air convection
- Suitable for dry, damp, and wet location
- Suitable for LED lighting and street lighting applications
- Meet 4kV surge immunity level (IEC61000-4-5)

- Class 2 power unit
- 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 models available (HLG-40H/60H-A/B/Blank-Type)
- **5 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%	
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 High Efficiency with PFC

## Features

- Universal AC input (up to 305VAC) / Full range
- Protections:
  - Short circuit / Over current / Over voltage / Over temperature
- Built-in active PFC function
- High efficiency up to 93.5%
- IP67 / IP65 design for indoor or outdoor installations
- Output current adjustable through output cable or internal potentiometer
- Cooling by free air convection
- Suitable for dry, damp, and wet location
- Suitable for LED lighting and street lighting applications
- Meet 4kV surge immunity level (IEC61000-4-5)
- Class 2 power unit / Pass LPS (except for HLG-120H)

- 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):** 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 (safety pending for 100W/120W)
- Optional CCC models available (HLG-80H/100H/120H-A/B/Blank type)
- 5 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%	
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	±1.0%	150mV	93%
HLG-100H-24(A)	24V, 0~4.0A	±1.0%	150mV	93%
HLG-100H-30(A)	30V, 0~3.2A	±1.0%	200mV	93%
HLG-100H-36(A)	36V, 0~2.65A	±1.0%	200mV	93%

Model No.	Output	Tol.	R&N	Effi.
HLG-100H-42(A)	42V, 0~2.28A	±1.0%	200mV	93%
HLG-100H-48(A)	48V, 0~2.0A	±1.0%	200mV	93%
HLG-100H-54(A)	54V, 0~1.77A	±1.0%	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.

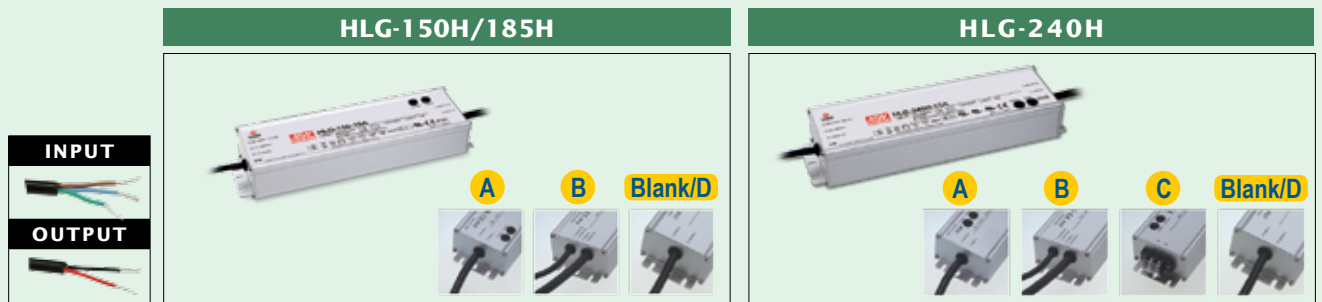
# HLG series

150~240W High Efficiency with PFC

## Features

- Universal AC input (up to 305VAC) / Full range
- Protections: Short circuit / Over current / Over voltage / Over temp.
- Built-in active PFC function
- High efficiency up to 94%
- IP67 / IP65 design for indoor or outdoor installations (except for HLG-240H C-Type)
- Output current adjustable
- Cooling by free air convection
- Suitable for LED lighting and street lighting applications
- Meet 4kV surge immunity level (IEC61000-4-5)
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires

- 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 (safety pending)
- Optional CCC models available (HLG-150H/185H/240H-A/B/Blank-Type)
- 5 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%	
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.

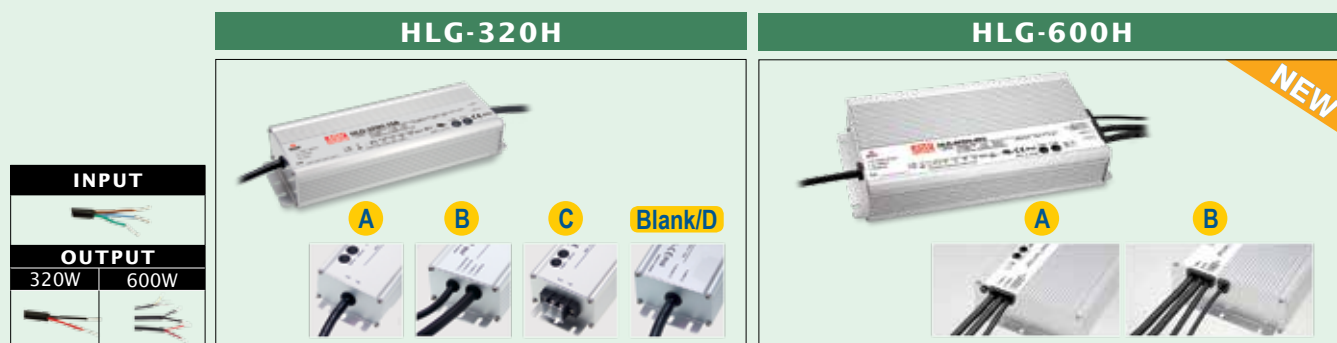


# HLC series

320~600W High Efficiency with PFC

## Features

- Universal AC input (up to 305VAC) / Full range
- Protections:
  - Short circuit / Over current / Over voltage / Over temp.
  - Built-in active PFC function
  - High efficiency up to 96%
  - IP67 / IP65 design for indoor or outdoor installations (except for HLG-320H C-Type)
  - Output current adjustable through output cable or internal potentiometer
  - Cooling by free air convection
  - Suitable for LED lighting and street lighting applications
  - 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)
- 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)
- 5 years warranty



		HLG-320H	HLG-600H
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% rated output current adjustable by internal potentiometer (for A-Type & HLG-320H 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, 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 de-rating curve)	
Safety standards		UL8750, TUV EN61347-1/2-13, PSE J61347-1/2-13 (HLG-320H A/B/D/Blank-Type only) 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	UL rated, SJTW 18AWGx3C (30cm)
	Output	A/D/Blank-Type: SJTW 14AWGx2C (30cm) B-Type: SJTW 14AWGx2C (30cm) + SJTW 18AWGx2C (30cm) C-Type: Terminal block	A-Type: SJTW 14AWGx2C (30cm)+ SJTW 14AWGx2C (30cm) + UL2517 22AWGx3C(30cm) B-Type: SJTW 14AWGx2C (30cm)+ SJTW 14AWGx2C (30cm) + UL2517 22AWGx3C(30cm)+ UL2517 18AWGx2C (30cm)
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%	150mV	92.0%
HLG-600H-15(A)	15V, 0~36A	±2%	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 Constant Current with PFC

## Features

- Constant current output with high output voltage >60VDC
- Universal AC input (up to 305VAC)/ Full range
- Built-in active PFC function
- High efficiency up to 94%
- Protections: Short circuit / Over voltage / Over temperature
- Cooling by free air convection
- Output current adjustable through output cable or internal potentiometer
- IP67 / IP65 design for indoor or outdoor installations
- Suitable for dry, damp, and wet location
- Suitable for LED lighting and street lighting applications
- 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
- 5 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%	50%~100%
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%

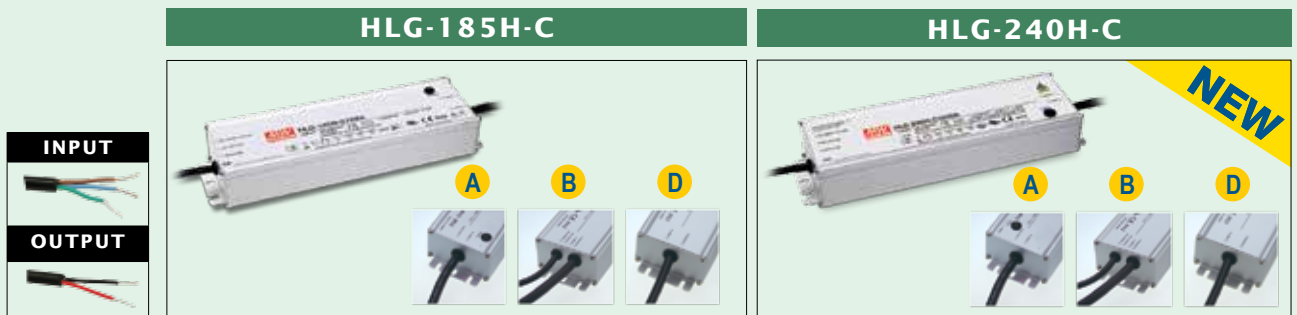
○ = A, B or D

# HLG-C series

200~250W Constant Current with PFC

## Features

- Constant current output with high output voltage >60VDC
- Universal AC input (up to 305VAC) / Full range
- Built-in active PFC function
- High efficiency up to 94%
- Protections: Short circuit / Over voltage / Over temperature
- Cooling by free air convection
- Output current adjustable through output cable or internal potentiometer
- IP67 / IP65 design for indoor or outdoor installations
- Suitable for dry, damp, and wet location
- Suitable for LED lighting and street lighting applications
- 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
- 5 years warranty



AC input voltage range	90~305VAC; 127VDC~431VDC	
AC inrush current (max.)	Cold start, 55A at 230VAC	Cold start, 75A at 230VAC
Current adjustment range	50%~100%	
Short circuit protection	Constant current limiting, auto-recovery	
Over voltage protection	105~120%, Shut down o/p voltage, re-power on to recover	
Over temp. protection	Shut down o/p voltage, auto-recovery	
Setup, rise, hold up time	500ms, 80ms, 16ms at full load and 230VAC	500ms, 80ms, 14ms 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, ENEC EN61347-1, EN61347-2-13, EN62384; 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: STW 16AWGx2C(30cm) HLG-185H-C500; SJTW 16AWGx2C(30cm) for others B-Type: STW 16AWGx2C(30cm) + SJTW 16AWGx2C(30cm) for HLG-185H-C500; SJTW 16AWGx2C(30cm) + SJTW/6AWGx2C(30cm) for others
Dimension (LxWxH)(mm)	228x 68x 38.8	244.2x 68x 38.8

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



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)



Model No.	Output	Io Tol.	R&N	Effi.
HLG-240H-C700(A)	178~357V, 700mA	±5%	2V	92.5%
HLG-240H-C1050(A)	119~238V, 1050mA	±5%	1.5V	92.5%
HLG-240H-C1400(A)	89~179V, 1400mA	±5%	1V	92.5%
HLG-240H-C1750(A)	71~143V, 1750mA	±5%	1V	93%
HLG-240H-C2100(A)	59~119V, 2100mA	±5%	1V	93%

○ = A, B or D

## HLG-320H-C Series

### 320W Constant Current with PFC

Under Development

- High output voltage >60VDC
- Universal AC input (up to 305VAC) / Full range
- Built-in active PFC function
- High efficiency up to 94%
- Protections: Short circuit / Over voltage / Over temperature
- Cooling by free air convection
- 5 years warranty

# HVG series

65~150W Wide Input Range with PFC

## Features

- 180~528VAC wide input range
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Built-in active PFC function
- High efficiency up to 91.5%
- IP67 / IP65 design for indoor or outdoor installations
- Cooling by free air convection
- Output current adjustable through output cable or internal potentiometer
- Class 2 power unit / Pass LPS (HVG-65/100)

- Suitable for dry, damp, and wet location
- Suitable for LED lighting and street lighting applications
- 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



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		
Current adjustment range	60%~100%	55%~100%	
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 class B		
Connection	Input	UL rated, STW 18AWGx3C (30cm)	
	Output	A&D-Type	SJTW 14AWGx2C (30cm)
B-Type		SJTW 14AWGx2C (30cm)+ UL2517 18AWGx2C (30cm)	SJTW 14AWGx2C (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

## 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%

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

# HVGC series

65~150W Wide Input Range with C.C. Output

## ► Features

- 180~528VAC wide input range
- Protections: Short circuit / Over voltage / Over temperature
- Built-in active PFC function
- High efficiency up to 91%
- IP67 / IP65 design for indoor or outdoor installations
- Cooling by free air convection
- Constant current mode
- Output current adjustable through output cable or internal potentiometer
- Suitable for dry, damp, and wet location

- Suitable for LED lighting and street lighting applications
- 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%		
Over voltage protection		105%~115% 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, 150ms, 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		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 class 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-240/320 Series

240~320W Wide Input Range

Under Development

- Wide input range 180~528VAC
- Built-in active PFC function
- -40°C~+70°C wide operating range
- Protections:
  - Short circuit / Over current / Over voltage / Over temperature
- Fanless design, cooling by free air convection
- IP67 / IP65 design for indoor or outdoor installations
- Withstand 5G vibration test
- 3 in 1 dimming function(0~10Vdc, PWM signal, or resistance)
- Suitable for dry / damp / wet locations
- 5 years warranty

# HBG series

60~240W Circular Shape for Bay Lighting

## Description

HBG series are high performance LED power supplies specially designed for the high/low bay lighting and spot lighting applications. Featuring with circular shape, these series are easy to be assembled with the mechanical structure of high/low bay lighting fixtures. The enclosures can be perfectly configured with the heat sink of lighting fixtures and provide excellent heat dissipation ability, which solve the mechanism limits of old style bay lighting systems using slim shape LED power supplies. (HBG-60 also offers models in PCB type, allowing a better variety for lighting module design consideration.) As long as the temperature on the top of the enclosure can be controlled under 70°C, the power supply service life could be guaranteed up to 40,000 hours.

For more detail information, please visit our website: [www.meanwell.com/product/HBG/HBG.html](http://www.meanwell.com/product/HBG/HBG.html)

HBG-60		HBG-100		HBG-160		HBG-240	
	 <b>NEW</b>						
DxH: $\phi 99 \times 26 \text{mm}$	DxH: $\phi 110 \times 60.5 \text{mm}$	DxH: $\phi 130 \times 66.5 \text{mm}$		DxH: $\phi 151.68 \times 66.5 \text{mm}$		DxH: $\phi 191.5 \times 69 \text{mm}$	

## Features

- HBG-60: 90~295VAC input; HBG-100~240: 90~305VAC input
- Built-in active PFC function
- High efficiency up to 93.5%
- Protections: Short circuit / Over current / Over voltage / Over temp. (Short circuit / Over temp. for HBG-60)
- Output current adjustable through internal potentiometer
- Suitable for dry, damp, and wet location
- Two configurations for HBG-60 (constant current mode):
  - Blank-Type:** Enclosed type (plastic enclosure); **P-Type:** PCB type
- Multiple models for HBG-100/160/240 (aluminum case)
  - 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
  - E-Type(option):** IP67 rated. Can be fixed by steel support, contact MEAN WELL for details (HBG-100/160 only)

• 5 years warranty

### HBG-60 Series

Model No.	Output	Io Tol.	Effi.
HBG-60-1050 ○	37~55V, 1050mA	±5%	91%
HBG-60-1400 ○	28~43V, 1400mA	±5%	90%
HBG-60-2100 ○	19~29V, 2100mA	±5%	90%

○ = Blank, P; Blank: Enclosed type, P: PCB type

### HBG-100 Series

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%

○ = A, B, E or Blank

### HBG-160 Series

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

○ = A, B, E or Blank

### HBG-240 Series


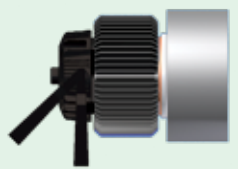



Model No.	Output	Tol.	Effi.
HBG-240-24(A)	24V, 0~10A	±2%	92.5%
HBG-240-36(A)	36V, 0~6.7A	±2%	92.5%
HBG-240-48(A)	48V, 0~5A	±2%	93.0%
HBG-240-60(A)	60V, 0~4A	±2%	93.5%

○ = A, B or Blank

## Construction of High Bay Light with HBG-100/160/240



## Installations with HBG-100/160/240

Spot Light	Stage Light	High Bay Light		
				
			Chain Type	Hanger Type

# HSG/ULP/LDH series

## HSG-70 series 70W Rectangular Metal Case



L127.2x W90x H38.8 mm

- Universal AC input (up to 305VAC)
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Built-in active PFC function
- Output current adjustable through internal potentiometer
- IP65 design
- Cooling by free air convection
- Suitable for LED lighting and moving sign applications
- 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 (refer to output derating curve)	
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

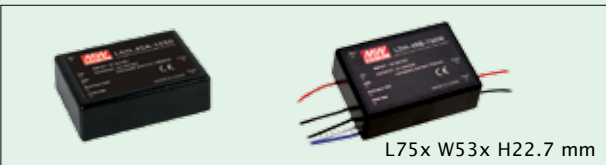
- Universal AC input (up to 295VAC)
- Built-in active PFC function
- High efficiency up to 93%
- Protections: Short circuit / Overload / Over voltage / Over temperature
- **Constant voltage mode**
- Cooling by free air convection
- U-bracket low profile: 33mm
- 3 years warranty

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 (refer to output derating curve)
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%

## LDH-45 Series

## DC-DC Constant Current LED Driver



L75x W53x H22.7 mm

- **Constant current step-up LED driver**
- Wide input and output voltage range
- High efficiency up to 95%
- PWM + analog dimming and remote ON/OFF control
- Protections: Short circuit / Over voltage / Under voltage
- Cooling by free air convection
- Operating temperature range: -40~+70°C
- Fully enclosed plastic case (UL 94V-0)
- 3 years warranty



Output current accuracy	±5%	
PWM dimming & ON/OFF control	Remote ON/OFF	Leave open if not used ▪ Power ON with dimming: PWM DIM ~ DIM- > 2~8VDC or open circuit ▪ Power OFF: PWM DIM ~ DIM- < 0.5VDC or short
	PWM frequency	1K~10KHz
Analog dimming & ON/OFF control	Remote ON/OFF	Leave open if not used ▪ Power ON with dimming: Analog DIM ~ DIM- > 0.25~8VDC or open circuit ▪ Power OFF: Analog DIM ~ DIM- < 0.2VDC or short
	Short circuit protection	Power OFF and fuse open
Over voltage protection	>116% rated output voltage	
Working temperature	-40~+70°C (refer to output derating curve)	
EMC standards	EN55015, EN61547, EN61000-4-2,3,4,6,8	

## LDH-45A Series

Model No.	Input (VDC)	Output		Io Tol.	Effi.
		Voltage (VDC)	Current (mA)		
LDH-45A-350	9~18	12~86	350mA	±5%	91%
LDH-45A-500	9~18	12~86	500mA	±5%	90%
LDH-45A-700	9~18	12~64	700mA	±5%	90%
LDH-45A-1050	9~18	12~43	1050mA	±5%	91%

## LDH-45B Series

Model No.	Input (VDC)	Output		Io Tol.	Effi.
		Voltage (VDC)	Current (mA)		
LDH-45B-350	18~32	21~126	350mA	±5%	93%
LDH-45B-500	18~32	21~86	500mA	±5%	94%
LDH-45B-700	18~32	21~64	700mA	±5%	95%
LDH-45B-1050	18~32	21~43	1050mA	±5%	95%

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

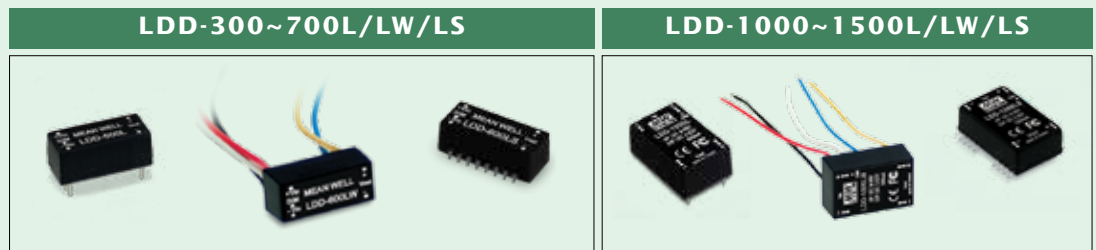
□ = Blank, W ; Blank: pin style, W: wire style

# LDD-L series

## DC-DC Constant Current LED Driver

### Features

- Constant current step-down LED driver
- Wide input and output voltage range
- High efficiency up to 95%
- Comply with EN55015 and FCC part 15 without additional input filter and capacitors
- 300~700mA: PWM dimming and remote ON/OFF control  
1000~1500mA: PWM + analog dimming and remote ON/OFF control
- Protections: Short circuit / Over temperature (300~700mA only)
- Compact size
- Operating temperature range:  
300 ~ 700mA: -40~+85°C  
1000~1500mA: -40~+71°C
- Cooling by free air convection
- 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		±5% at 24VDC input	
PWM dimming & ON/OFF control	Remote ON/OFF	Leave open if not used ■ Power ON with dimming: DIM ~ -Vin >3.5~8VDC or open circuit ■ Power OFF: DIM ~ -Vin <0.5VDC or short	■ Power ON with dimming: DIM ~ -Vin >2.6~5.5VDC or open circuit ■ Power OFF: DIM ~ -Vin <0.4VDC or short
	PWM frequency	100~1KHz	100~500Hz
Analog dimming & ON/OFF control	Remote ON/OFF	None	Leave open if not use ■ Power ON with dimming: DIM ~ -Vin >0.5~2.5VDC or open circuit ■ Power OFF: DIM ~ -Vin <0.4VDC or short
Short circuit protection		Regulated at rated output current, can be continued, auto-recovery	
Over temp.protection		Shut down, recovers automatically after temperature goes down	None
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	
Dimension (LxWxH) (mm)		LDD-300~700L/LW: 22.6x 9.9x 8.9 LDD-300~700LS: 25.4x 10.5x 9.3	LDD-1000~1500L/LW: 31.8x 20.3x 12.2 LDD-1000~1500LS: 31.8x 20.3x 10.9

### LDD-L Series



Model No.	Input (VDC)	Output		Io Tol.	Effi.	Dimming
		Voltage (VDC)	Current (mA)			
LDD-300L <input type="checkbox"/>	9~36 (LDD-300~700LS: 9~32)	2~32 (LDD-300~700LS: 2~28)	300	±5%	95%	PWM
LDD-350L <input type="checkbox"/>			350			
LDD-500L <input type="checkbox"/>			500			
LDD-600L <input type="checkbox"/>			600			
LDD-700L <input type="checkbox"/>			700			
LDD-1000L <input type="checkbox"/>	6~36	2~30	1000			PWM + Analog
LDD-1200L <input type="checkbox"/>			1200			
LDD-1500L <input type="checkbox"/>			1500			

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

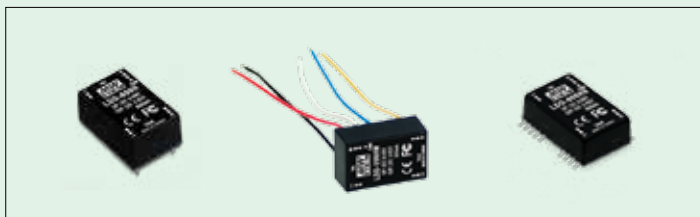


# LDD-H&LDB-L series

DC-DC Constant Current LED Driver

## LDD-H/HW/HS

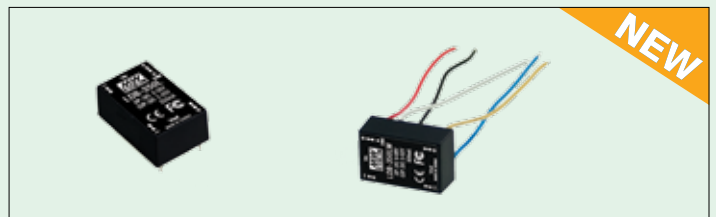
- Constant current step-down LED driver
- Wide input and output voltage range
- High efficiency up to 97%
- Comply with EN55015 and FCC part 15 without additional input filter and capacitors
- PWM dimming and remote ON/OFF control
- Protections: Short circuit / Over temp.
- Compact size
- Operating temperature range: -40~+85°C
- Cooling by free air convection
- Fully enclosed plastic case (UL 94V-0)
- 3 years warranty



Output current accuracy		±3% at 24VDC input; ±4% at 48VDC input for LDD-H/HW; ±5% at 48VDC input for LDD-HS
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;2.5~6VDC or open circuit</li> <li>▪ Power OFF: DIM ~ -Vin &lt;0.8VDC or short</li> </ul>
	PWM frequency	100~1KHz
Short circuit		Regulated at rated output current, can be continued, auto-recovery
Over temperature protection		Shut down, recovers automatically after temperature goes down
Working temperature		-40~+85°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)		LDD-H/HW: 31.8x 20.3x 12.2 LDD-HS: 31.8x 20.3x 10.9

## LDB-L/LW

- Constant current buck-boost LED driver
- Wide input and output voltage range
- High efficiency up to 91%
- Comply with EN55015 and FCC part 15 without additional input filter and capacitors
- PWM dimming and remote ON/OFF control
- Protections: Short circuit / Over temp.
- Operating temperature range: -40~+71°C
- Cooling by free air convection
- Fully enclosed plastic case (UL 94V-0)
- 3 years warranty



Output current accuracy		±5%
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;2~5VDC or open circuit</li> <li>▪ Power OFF: DIM ~ -Vin &lt;0.1VDC or short</li> </ul>
	PWM frequency	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~+71°C
EMC standards		EN55015, EN61547, EN61000-4-2,3,4,6,8, FCC part 15 class B
Operating case temp. (max.)		110°C
Dimension (LxWxH)(mm)		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%

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

## LDB-L Series



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

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

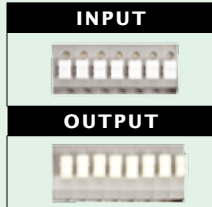
# DALI to PWM Converter & Surge Protection Device

## DAP-04

## 4 Channel DALI to PWM Converter



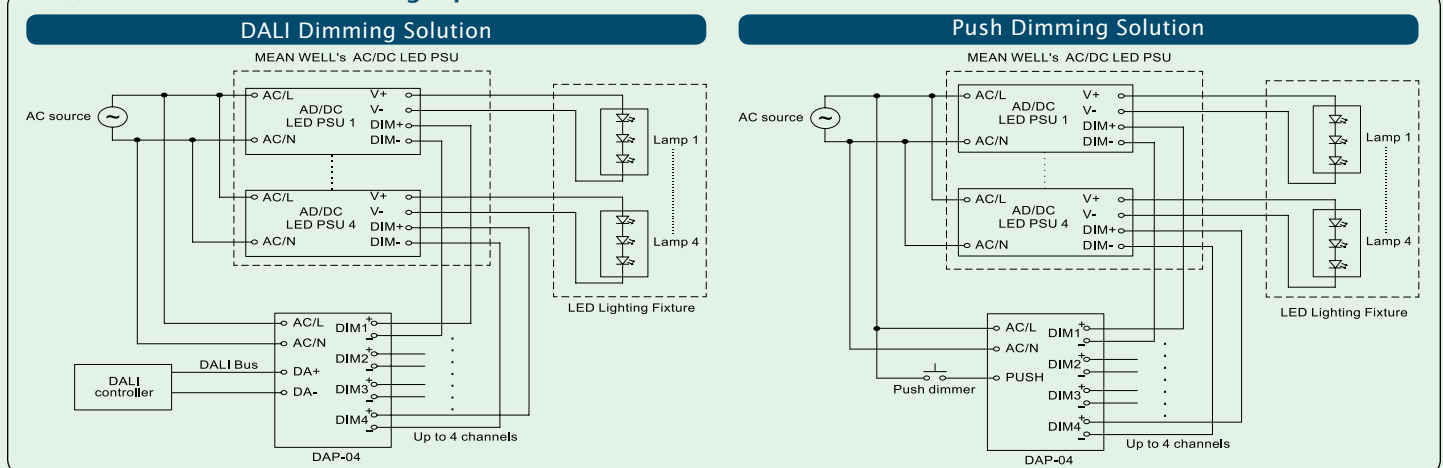
L165x W46x H23 mm



- Universal AC input (up to 305VAC)
- Convert DALI signal to PWM signal
- 4 DALI addressable output channels
- Built-in push dim function
- Dimming range: 1~100%
- Comply with DALI standards (IEC62386-101,102,207)
- PWM active high or active low selectable
- 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 power unit, no FG
- Power consumption < 0.5W
- Suitable to use along with MEAN WELL's AC/DC LED PSU with 3-in-1 dimming function
- 3 years warranty

AC input voltage range	90~305VAC ; 127~431VDC
Power consumption(typ.)	0.5W
Input signal	DALI or push dim
Output signal	PWM, 1 KHz
Output channel	4 channels
Output PWM logic	Active high or active low selectable by jumper (Factory setting is 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



L90x W70x H50 mm

- 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)	FEP 10AWG (15cm)
	N (White)	
	FG (Green)	

# Wireless Dimming Control Solution

**WPD-06**

**Wireless DC Multi-channel PWM Dimmer**



- Work with EnOcean switches with no battery required
- Easy configuration and installation
- Powered by any DC source between 10~32VDC
- Up to 128 wireless batteryless switches connected possible
- Built-in wire push dimming function
- Suitable for constant voltage lighting application
- Optional for constant current lighting application
- Multiple dimmer application via CANBus possible (optional)
- 30 meter wireless distance (Typ.)
- Conformal coating for highly humid environment
- 5 years warranty

DC output voltage	Depending on input voltage
Rated output current	4.5A each channel, 27A for the entire module
Rated output power	324W (input: 12V); 648W (input: 24V)
Output channel	6 protected channels, independent dimming control on each channel
Output dimming range	1 to 100%; Switching frequency: 125Hz
Input voltage range	10~32VDC SELV
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
Wireless distance	30 meter (Typ.)
Frequency operation	868MHz (other frequency for outside EU available on request)
Wire control	3 independent push dimming port
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

**WPD-06SWT**

**EnOcean Switch Transmitter**



- Batteryless
- Wireless
- Easy configuration and installation
- Maintenance free
- High reliability
- Up to 30 meter wireless distance for indoor application

Transmission frequency	868.3MHz
Transmission power	10mW max
Working temperature	-25~+65°C
Mechanical switch cycles	>50000
Dimension (LxWxH) (mm)	80x 80x 15

# Certification Chart

## ► Metal Case

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

Standard \ Series*	Class 2 power unit	UL8750	UL60950-1	UL1012	UL1310	UL879	EN61347-1, EN61347-2-13	PSE J61347-1, J61347-2-13	EN55015	EN61000-3-2 Class □	EN5022 Class □	FCC	CE	CB	CCC★
CEN-60	●	●				●	●	●	●	□			●	●	●
CEN-75	●	●				●	●	●	●	□			●	●	●
CEN-100	●	●					●	●	●	□			●	●	●
ELG-75	●	●					●		●	□			●	●	●
ELG-100	●	●					●		●	□			●	●	●
ELG-150		●					●		●	□			●	●	●
ELG-240		●					●		●	□			●	●	●
ELG-75-C		●					●		●	□			●	●	●
ELG-100-C		●					●		●	□			●	●	●
ELG-150-C		●					●		●	□			●	●	●
ELG-240-C		●					●		●	□			●	●	●
CLG-60	●	●			●	●	●	●	●	□	B		●	●	●
CLG-100	●	●			●	●	●	●	●	□	B		●	●	●
CLG-150		●	●	●		●	●	▲	●	□	B		●	●	▲
HLG-40H	●	●					●	●	●	□			●	●	●
HLG-60H	●	●					●	●	●	□			●	●	●
HLG-80H	●	●					●	●	●	□			●	●	●
HLG-100H	●	●					●	●	●	□	B		●	●	●
HLG-120H		●					●	●	●	□	B		●	●	●
HLG-150H		●					●	●	●	□	B		●	●	●
HLG-185H		●					●	●	●	□	B		●	●	●
HLG-240H		●	●	●			●	●	●	□	B		●	●	▲
HLG-320H		●					●	▲	●	□	B		●	●	▲
HLG-600H		●	●				●	●	●	□	B		●	●	●
HLG-60H-C		●					●	●	●	□			●	●	●
HLG-80H-C		●					●	●	●	□			●	●	●
HLG-120H-C		●					●	●	●	□			●	●	●
HLG-185H-C		●					●	●	●	□			●	●	●
HLG-240H-C		●					●		●	□			●	●	●
HVG-65	●	●							●	□		●			●
HVG-100	●	●							●	□		●			●
HVG-150		●							●	□		●			●
HVGC-65		●					●		●	□		●	●	●	●
HVGC-100		●					●		●	□		●	●	●	●
HVGC-150		●					●		●	□		●	●	●	●
HBG-100		●					●		●	□			●	●	●
HBG-160		●					●		●	□			●	●	●
HBG-240		●					●		●	□			●	●	●
HSG-70									●	□			●		●
ULP-150									●	□			●		

\* : This list is presented alphabetically by series name.

★ CCC models are offered as optional models.

# Certification Chart

## ► Plastic Case & PCB Type

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

Standard	Class 2 power unit	UL8750	UL60950-1	UL1012	UL1310	UL879	EN61347-1, EN61347-2-13	PSE J61347-1, J61347-2-13	EN55015	EN61000-3-2 Class	EN55022 Class	FCC	CE	CB	CCC★
APV-8	●	●					●		●	A			●		●
APV-12	●	●					●		●	A			●		●
APV-16	●	●					●		●	A			●	●	●
APV-25	●	●								A	B		●		
APV-35	●	●								A	B		●		
APC-8									●	A			●		●
APC-12	●	●							●	A			●		●
APC-16	●	●							●	A			●		●
APC-25	▲	▲								A	B		●		
APC-35	▲	▲								A	B		●		
ELN-30/60	●				●					A	B		●		
GSC18/25/40 (B/E)							■			C			●		
HGB-60	●	●					●		●	C			●	●	●
HLN-40/60/80H	●	●					●	●	●	C			●	●	●
HLP-40H/60H/80H	●	●					●	●	●	C			●	●	●
LCM-25/40/60(DA)		●					●	●	●	C			●	●	●
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		●		
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)/90(D)	●	●					●	●	●	C			●	●	●
NPF-40(D)	●	●					●	●	●	C			●	●	●
NPF-60(D)	●	●					●	●	●	C			●	●	●
NPF-90(D)	▲	●					●	●	●	C			●	●	●
NPF-120(D)		●					●	●	●	C			●	●	●
OWA-60E										A	B		●	●	
OWA-60U	●	●										●			
OWA-90E													●		
OWA-90U	▲	●										●			
OWA-120E													●	●	
OWA-120U		●											●		
PCD-16 (A/B)	●	●					▲ B type		▲ B type	C		▲ A type	▲ B type	●	●
PCD-25 (A/B)	●	●					▲ B type		▲ B type	C		▲ A type	▲ B type	●	●
PCD-40							●		●	C			●	●	●
PCD-60							●		●	C			●	●	●
PLC-30	●				●				●	C			●	●	●
PLC-45	●				●				●	C			●	●	●
PLC-60	●				●				●	C	B		●	●	●
PLC-100	●				●				●	C	B		●	●	●
PLD-16 (A/B)	●	●					▲ B type		▲ B type	C		▲ A type	▲ B type	●	●
PLD-25	●	●					●		●	C		●	●	●	●
PLD-40							●		●	C			●	●	●
PLD-60							●		●	C			●	●	●
PLM-12(E)	▲Blank	▲Blank					●		●	C			●	●	●
PLM-25(E)	●Blank	▲Blank					●		●	C			●	●	●
PLM-40(E)		▲Blank					●		●	C			●	●	●
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	●	●					●	●	●	C			●	●	●
PWM-60	●	●					●	●	●	C			●	●	●
PWM-90	●	●					●	●	●	C			●	●	●
PWM-120	▲	●					●	●	●	C			●	●	●

\* : This list is presented alphabetically by series name.

★ : Except LCM-25/40/60(DA) that the standard models are certified for CCC, CCC models for other series are offered as optional models.

■ : GS Mark.

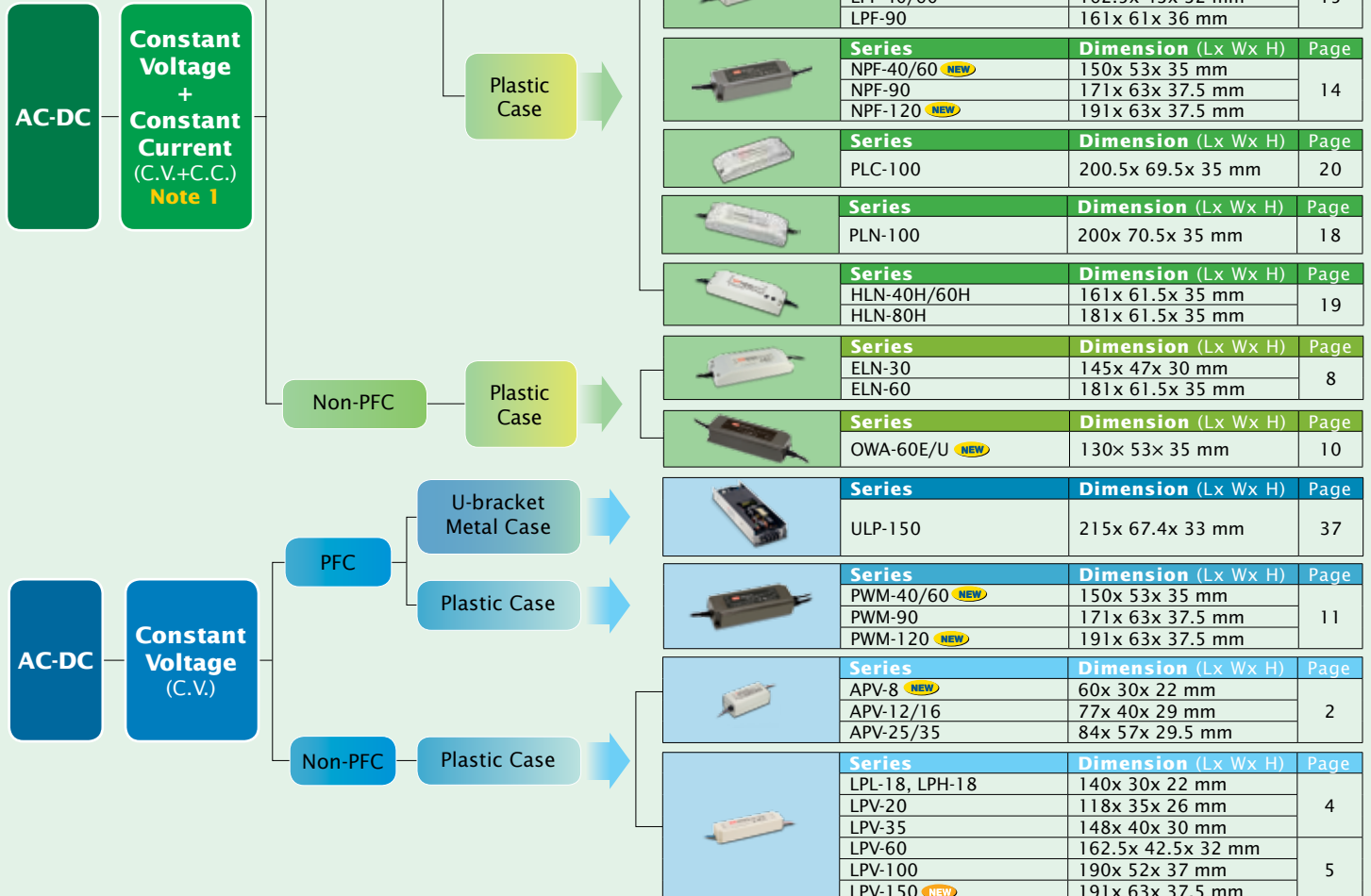
# Quick Selection Map

## Note 1

At the moment of power on, the LED power supply will work in C.V. mode and can provide a peak output current; after the LED turns on, the LED power supply will go into C.C. mode.

## Note 2

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.

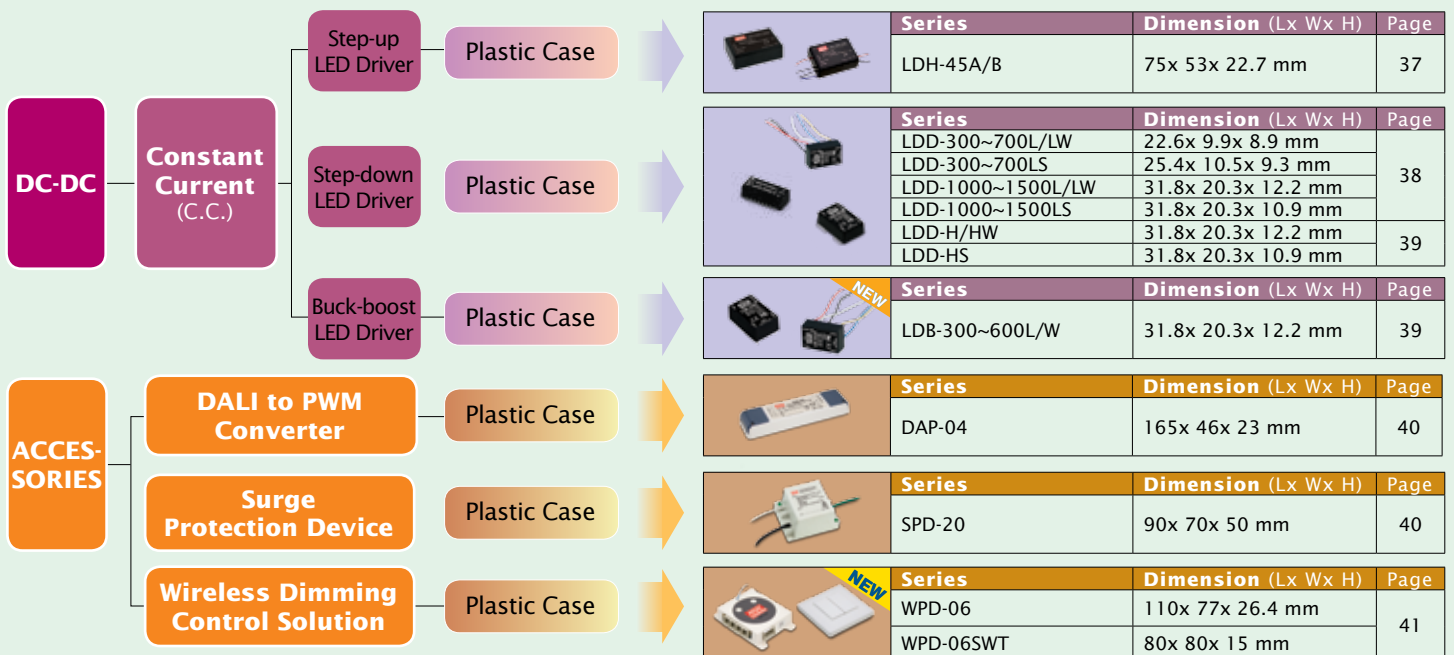


# Quick Selection Map

**AC-DC**  
**Constant Current**  
 (C.C.)  
 Note 2

Category	Sub-Category	Series	Dimension (Lx Wx H)	Page		
Metal Case	Metal Case	CEN-60/75	185x 62.5x 40.5 mm	24		
		CEN-100	195x 62.5x 40.5 mm			
	Metal Case	Metal Case	CLG-60	195.6x 61.5x 38.8 mm	25	
			NEW	ELG-75-C	180x 63x 35.5 mm	27
				ELG-100-C	199x 63x 35.5 mm	
				ELG-150-C	219x 63x 35.5 mm	
				ELG-240-C	244x 71x 35.5 mm	
	Metal Case	Metal Case	HLG-60H-C	171x 61.5x 36.8 mm	32	
			HLG-80H-C	195.6x 61.5x 38.8 mm		
			HLG-120H-C	220x 68x 38.8 mm		
HLG-185H-C			228x 68x 38.8 mm	33		
HLG-240H-C			244.2x 68x 38.8 mm			
Metal Case	Metal Case	HVGC-65	189x 61.5x 36.8 mm	35		
		HVGC-100	236x 68x 38.8 mm			
		HVGC-150	245x 68x 38.8 mm			
Plastic Case	Plastic Case	GSC18/25/40	79x 54x 33 mm	9		
		Plastic Case	PLM-12/25	145x 38x 22 mm	12	
	PLM-40		175x 42x 24 mm			
	Plastic Case	Plastic Case	NEW	PLM-12E / 25E	145x 38x 22 mm	13
			PLM-40E	175x 42x 24 mm		
			Plastic Case	Plastic Case	NPF-40D/60D	
	NPF-90D	171x 63x 37.5 mm				
	NPF-120D	191x 63x 37.5 mm				
	Plastic Case	Plastic Case	LPF-16D/25D	148x 40x 32 mm	15	
			LPF-40D/60D	162.5x 43x 32 mm		
LPF-90D			161x 61x 36 mm			
Plastic Case			Plastic Case	PLD-16/25		84x 57x 29.5 mm
	PLD-40/60	128x 60x 31.5 mm				
	PCD-16/25	84x 57x 29.5 mm				
	PCD-40/60	128x 60x 31.5 mm				
Plastic Case	Plastic Case	PLN-20	148.5x 38.5x 28 mm	18		
		PLN-30	145x 47x 30 mm			
		PLN-45/60	181x 61.5x 35 mm			
Plastic Case	Plastic Case	PLC-30	160x 46x 30 mm	20		
		PLC-45/60	181.5x 62x 35 mm			
Plastic Case	Plastic Case	LCM-25(DA)	105x 68x 23 mm	21		
		LCM-40(DA)/60(DA)	123.5x 81.5x 23 mm			
PCB Type	PCB Type	HBG-60	φ110x 60.5(PCB: φ99x 26)	36		
		PCB Type	PLP-20	140x 32x 22 mm	22	
			PLP-30	101.6x 50.8x 26.6 mm		
PLP-45/60	101.6x 50.8x 29.6 mm					
Plastic Case	Plastic Case	HLP-40H/60H	147x 53x 27 mm	23		
		HLP-80H	167x 53x 29.5 mm			
Non-PFC	Plastic Case	APC-8	60x 30x 22 mm	3		
		APC-12/16	77x 40x 29 mm			
		APC-25/35	84x 57x 29.5 mm			
Non-PFC	Plastic Case	LPLC-18, LPHC-18	140x 30x 22 mm	6		
		LPC-20	118x 35x 26 mm			
		LPC-35	148x 40x 30 mm			
		LPC-60	162.5x 42.5x 32 mm			
		LPC-100	190x 52x 37 mm			
		LPC-150	191x 63x 37.5 mm			

# Quick Selection Map



# 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									
<b>APV-8 / 12 / 16 / 25 / 35</b>				90~264	✓ (16W/35W half)	C.V.	30			85%	2	
<b>APC-8 / 12 / 16 / 25 / 35</b>				90~264	✓ (16W/35W half)	C.C.	30			84%	2	
<b>LPL-18 / LPH-18</b> <b>LPV-20 / 35 / 60 / 100 / 150</b>				LPL: 90~132 LPH: 180~264 LPV-20~100: 90~264 LPV-150: 180~305	✓	C.V.	67			90%	2	
<b>LPLC-18 / LPHC-18</b> <b>LPC-20 / 35 / 60 / 100 / 150</b>				LPLC: 90~132 LPHC: 180~264 LPC-20~100: 90~264 LPC-150: 180~305	✓	C.C.	67			90%	2	
<b>ELN-30 / 60</b>				90~264		C.V.+C.C.	64	1~10Vdc or PWM	✓	88%	2	
<b>OWA-60</b>				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, PWM signal, or resistance.  
 For Timer Dimming and Smart Timing 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



# 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										
<b>HLG-40H / 60H / 80H / 100H / 120H / 150H / 185H / 240H / 320H / 600H</b>	A ★			90~305	✓	C.V.+C.C.	65		✓	96%	5	Vo<60VDC	
	B						67	3 in 1					
	C (240W/320W only)		✓										✓
	Blank (40W~320W)							67					
	D (option, 40~320W)							67	Timer				
<b>HLG-60H-C / 80H-C / 120H-C / 185H-C / 240H-C</b>	A ★			90~305	✓	C.C.	65		Io	94%	5	Vo>60VDC	
	B		✓					67	3 in 1				
	D (option)							67	Timer				
<b>ELG-75 / 100 / 150 / 240</b>	A			180~295	✓	C.V.+C.C.	65		✓	93%	5	Vo<60VDC	
	B						67	3 in 1					
	Blank		✓					67					
	D							67	Smart Timing				
<b>ELG-75-C / 100-C / 150-C / 240-C</b>	A			180~295	✓	C.C.	65		Io	93%	5	Vo>60VDC	
	B						67	3 in 1					
	Blank		✓					67					
	D							67	Smart Timing				
<b>HBG</b>	60	Blank (enclosed)		90~295	✓ (half)	C.C.			Io	91%	5	Circular shape	
		P (PCB)	✓										
	100 / 160 / 240	A			90~305	✓	C.V.+C.C.	65		Io			93.5%
		B						67	3 in 1				
		Blank		✓					67				
	E (option, 100W/160W only)						67						
<b>HVG(C)- 65 / 100 / 150</b>	A			180~528	✓	HVG : C.V.+C.C.	65		HVG: ✓ HVGC: Io	91.5%	5		
	B						67	3 in 1					
	D (option)		✓					67	Timer				
<b>HSG-70</b>			✓	90~305	✓	C.V.+C.C.	65		Io	90%	3		
<b>CLG-150</b>	A			90~295	✓	C.V.+C.C.	65		✓	91%	3		
	B						67	Resistance					
	C		✓										✓
	Blank							67					
<b>CLG-100</b>			✓	90~295	✓	C.V.+C.C.	67			88.5%	3		
<b>CLG-60</b>		✓		90~295	✓	C.C.	67			89%	3		
<b>CEN-60 / 75 / 100</b>		✓		90~295		C.C.	66		✓	91%	3		
<b>ULP-150</b>			✓	90~295	✓ (half)	C.V.			Vo	93%	3	U-bracket	

# 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									
HLN-40H / 60H / 80H	A		✓	90~305	✓ (60W/80W half)	C.V.+C.C.	64	3 in 1	✓	91%	3	
	B											
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
OWA- 90 / 120			✓	90~264	✓	C.V.+C.C.	67*			91%	5	External type
PLN-100			✓	90~295		C.V.+C.C.	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.	30	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.	30			88%	3	
				25W: 90~295								
GSC18 / 25 / 40		✓		90~277	(40W half)	C.C.	30			88%	3	External type
PLM-12 / 25 / 40		✓		110~295		C.C.	30			88%	2	Push terminal
PLM-12E / 25E / 40E				180~295								
LCM-25 / 40 / 60		✓		25W: 180~277 40W/60W: 180~295		C.C.	20	0~10Vdc & PWM		92%	3	Io level selectable in one power unit
LCM-25DA / 40DA / 60DA								DALI & Push DIM				
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


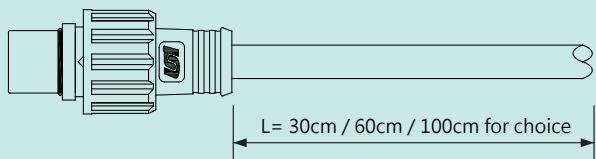
# Waterproof Output Connector

## 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) / HBG / CEN / HSG / HLN / LPF / NPF / PWM / OWA 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


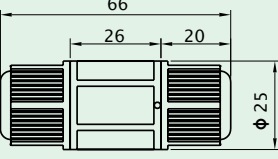
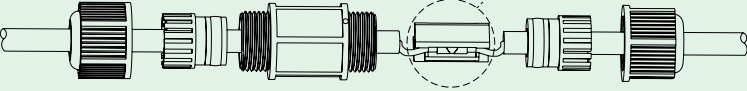
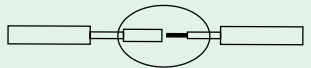
Cable Type

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.



### Taiwan

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