



**MEAN WELL**

**HLG-240-36A**

• INPUT: 100-240V ~ 4.0A 50/60Hz

• OUTPUT: +36V = 6.7A

V+ (WHITE) ○

V- (BLACK) ○

Vo ADJ.

Io ADJ.

t<sub>c</sub>: 90°C  
t<sub>a</sub>: 50°C



SELV



UL us E127738

**CE** **IP65**

MADE IN TAIWAN

**PV-600-48**

2/8 Stage Switching Mode Battery Charger

• Suitable for lead-acid batteries  
 • LED Indicator: Red → Full Orange → Charging Green → Battery Full  
 • Warning: **⚠ WARNING**  
 • Do not touch the output terminals during charging.  
 • Do not connect the output terminals to a load during charging.  
 • Do not touch the output terminals during charging.

2  
 15.5A  
 60/60Hz  
 66.7A  
 MADE IN TAIWAN

2010 October

*Your Reliable Power Partner*  
 Standard Switching Power Supply Manufacturer

Предлагаем продукцию MEAN WELL  
 и другие ЭЛЕКТРОННЫЕ КОМПОНЕНТЫ  
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# Introduction

## Green Power *for* A Better Tomorrow

As a leading branded standard switching power supply manufacturer, MEAN WELL has planned to dedicate in green energy power solutions in responding to the global environment protection awareness raised. The green energy related products including LED power supply, green adaptor, DC/AC solar inverter, and battery charger will be the main focus of MEAN WELL's product roadmap.

Here are four featured product families for your quick information:

### 94% High Efficiency LED Power Supply

#### HLG series (80~320W)

Featuring with extremely high efficiency, high power factor, and IP65~67 protection level, HLG series are good solutions for LED street lighting, LED electric display, LED decorative lighting, and general outdoor power supply usage.

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### Green Battery Charger

#### GC series (30~220W)

Possessing very low "no load power consumption" and up to 94% of high efficiency, the whole series are real energy-saving at both standby mode and active mode, which could be rated as the most "green" battery charger in the market.

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### Green Adaptor

#### GS series (6~220W)

GS series products are designed by state of the art circuit topology to achieve high efficiency and low no load power consumption in the same time. Full product series comply with EISA 2007 as well as ErP step 2.

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### DC/AC Solar Inverter

#### TN series(1500~3000W)

Consolidating with solar panels and remote controller (IRC3), TN series can construct an independent solar power system to save the precious energy.

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## ■ Enclosed Switching Power Supply

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## ■ DC/AC Power Inverter

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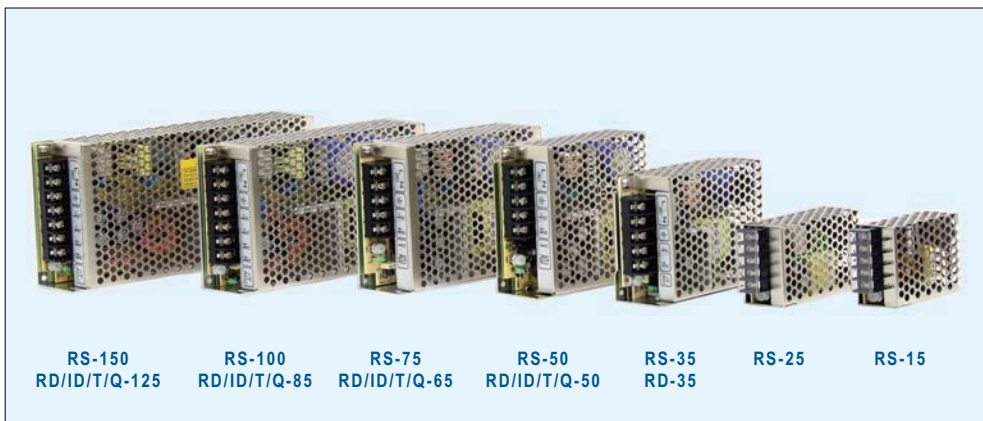
## ■ Accessories / Case Drawing

<b>Case Drawing</b>	Case 901 / 902 / 903 / 905 / 906 / 907 Case 910/912(B)/915A/916(A/B)/919/920A Case 926 / 927 / 928 / 929 / 931 / 932 Case 935 / 939 / 940 / 941 / 943 / 946A Case 952B / 963 / 971A / 977A / 980A / 986 Case 987A / 988 / 995 / 996A / 998A, TN/S-1500	93 94 95 96 97 98
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	: New Announced		: Available by Request
	: New Product within 1 Year		: Supplementary Information
	: Under Development		

# Enclosed-G3 Series

High Reliability Miniature



## Features

- No load power consumption <0.5W (RS-15~75)
- All using 105°C long life electrolytic capacitors
- Protections: Short circuit / Overload / Over voltage
- Meet EMS EN50082-2/EN61000-6-2 heavy industry level (35~150W)
- Withstand 300VAC surge input for 5 sec.
- High operating temperature up to 70°C
- Withstand 5G vibration test
- Miniature size, high power density
- High efficiency, long life and high reliability
- 100% full load burn-in test
- Suitable for critical applications
- 3 years warranty

## General Specification (Please refer to www.meanwell.com for detail spec.)



Model No.	RS-15	RS-25	RS-35 RD-35	RS-50 RD / ID / T / Q-50	RS-75 RD / ID / T / Q-65	RS-100 RD / ID / T / Q-85	RS-150 RD / ID / T / Q-125
AC input voltage range	85~264VAC, 120~370VDC		88~264VAC, 124~370VDC		115 / 230VAC by switch		
AC inrush current (max.)	Cold start, 65A at 230VAC	30A at 230VAC	36A at 230VAC	33A at 230VAC	40A at 230VAC		50A at 230VAC
DC adjustment range	±10% by potential meter for single output; CH1 -5%~+10% by potential meter for multiple output						
Overload protection	>105%, hiccup mode	110%~180%	110%~150% hiccup mode, auto-recovery (150% ~190% for RID-125-1205/2405)				
Over voltage protection	115%~135%, Shut off	115%~135% rated output voltage, hiccup mode, auto-recovery					
Withstand voltage	I/P - O/P: 3kVAC, I/P - FG: 1.5kVAC, O/P - FG: 0.5kVAC, 1 minute						
Working temperature	-20°C~+70°C (refer to the derating curve for different models)						
Vibration	10~500Hz, 5G 10min/1 cycle, period for 60 min each along X, Y, Z axes						
Safety standards	UL60950-1, TUV EN60950-1 approved						
EMC standards	EN55022 class B, EN61000-3-2,3, EN61000-4-2,3,4,5,6,8,11, ENV50204, EN61000-6-2 (EN50082-2) (35~150W)						
Connection	Terminal block for input and output						
Dimension (LxWxH)(mm)	62.5x 51x 28	78x 51x 28	99x 82x 35	99x 97x 36	129x 98x 38	159x 97x 38	199x 98x 38
Case No.	971A	931A	932A	905B	903	901C	902
Packing	108pcs /15.0kg	60pcs /13.0kg	45pcs /14.0kg	45pcs /19.5kg	30pcs /14.2kg	24pcs /15.4kg	20pcs /15.4kg

### 15W — Single Output

Model No.	Output	Tol.	R&N	Effi.
RS-15-3.3	3.3V, 0~3.0A	±3%	80mV	72%
RS-15-5	5V, 0~3.0A	±2%	80mV	77%
RS-15-12	12V, 0~1.3A	±1%	120mV	81%
RS-15-15	15V, 0~1.0A	±1%	120mV	81%
RS-15-24	24V, 0~0.625A	±1%	200mV	82%
RS-15-48	48V, 0~0.313A	±1%	200mV	82%

RS-50-15	15V, 0~3.4A	±1%	120mV	86.0%
RS-50-24	24V, 0~2.2A	±1%	120mV	88.0%
RS-50-48	48V, 0~1.1A	±1%	200mV	89.0%

### 75W — Single Output

Model No.	Output	Tol.	R&N	Effi.
RS-75-3.3	3.3V, 0~15A	±3%	80mV	75.0%
RS-75-5	5V, 0~12A	±2%	80mV	79.0%
RS-75-12	12V, 0~6.0A	±1%	120mV	84.5%
RS-75-15	15V, 0~5.0A	±1%	120mV	86.0%
RS-75-24	24V, 0~3.2A	±1%	120mV	88.5%
RS-75-48	48V, 0~1.6A	±1%	200mV	89.5%

### 25W — Single Output

Model No.	Output	Tol.	R&N	Effi.
RS-25-3.3	3.3V, 0~6.0A	±3%	80mV	73.5%
RS-25-5	5V, 0~5.0A	±2%	80mV	78.5%
RS-25-12	12V, 0~2.1A	±1%	120mV	81.5%
RS-25-15	15V, 0~1.7A	±1%	120mV	83.5%
RS-25-24	24V, 0~1.1A	±1%	120mV	86.0%
RS-25-48	48V, 0~0.57A	±1%	200mV	85.0%

### 100W — Single Output

Model No.	Output	Tol.	R&N	Effi.
RS-100-3.3	3.3V, 0~20A	±3%	80mV	74%
RS-100-5	5V, 0~16A	±2%	80mV	77%
RS-100-12	12V, 0~8.5A	±1%	120mV	81%
RS-100-15	15V, 0~7.0A	±1%	120mV	82%
RS-100-24	24V, 0~4.5A	±1%	120mV	84%
RS-100-48	48V, 0~2.3A	±1%	200mV	84%

### 35W — Single Output

Model No.	Output	Tol.	R&N	Effi.
RS-35-3.3	3.3V, 0~7.0A	±3%	80mV	76.5%
RS-35-5	5V, 0~7.0A	±2%	80mV	80.5%
RS-35-12	12V, 0~3.0A	±1%	120mV	84.5%
RS-35-15	15V, 0~2.4A	±1%	120mV	86.0%
RS-35-24	24V, 0~1.5A	±1%	120mV	88.0%
RS-35-48	48V, 0~0.8A	±1%	200mV	88.5%

### 150W — Single Output

Model No.	Output	Tol.	R&N	Effi.
RS-150-3.3	3.3V, 0~30A	±3%	80mV	74%
RS-150-5	5V, 0~26A	±2%	80mV	78%
RS-150-12	12V, 0~12.5A	±1%	120mV	83%
RS-150-15	15V, 0~10A	±1%	120mV	84%
RS-150-24	24V, 0~6.5A	±1%	120mV	86%
RS-150-48	48V, 0~3.3A	±1%	200mV	87%

### 50W — Single Output

Model No.	Output	Tol.	R&N	Effi.
RS-50-3.3	3.3V, 0~10A	±3%	80mV	78.0%
RS-50-5	5V, 0~10A	±2%	80mV	83.0%
RS-50-12	12V, 0~4.2A	±1%	120mV	84.5%



# Enclosed-G3 Series

## 35W — Dual Output

Model No.	Output	Tol.	R&N	Effi.	Max.
RD-35A	5V, 0.3~4.0A	±2%	80mV	72%	32W
	12V, 0.2~1.0A	±6%	120mV	77%	
RD-35B	5V, 0.3~4.0A	±2%	80mV	79%	35W
	24V, 0.2~1.3A	±5%	120mV	82%	
RD-3513	13.5V, 0.3~2.0A	±4%	120mV	84%	35W
	-13.5V, 0.2~0.57A	±4%	120mV	85%	

## 50W — Dual Output (Output isolated for RID-50A/B)

Model No.	Output	Tol.	R&N	Effi.	Max.
RD-50A	5V, 0.3~6.0A	±2%	80mV	79%	54W
	12V, 0.3~3.0A	±7%	120mV		
RD-50B	5V, 0.3~6.0A	±2%	80mV	80%	54W
	24V, 0.2~2.0A	+8%, -4%	120mV		

## 65W — Dual Output (Output isolated for RID-65A/B)

Model No.	Output	Tol.	R&N	Effi.	Max.
RD-65A	5V, 0.3~8.0A	±2%	80mV	79%	66W
	12V, 0.2~4.0A	±6%	120mV		
RD-65B	5V, 0.3~8.0A	±2%	80mV	78%	68W
	24V, 0.2~3.0A	+4%, -6%	150mV		

## 85W — Dual Output (Output isolated for RID-85A/B)

Model No.	Output	Tol.	R&N	Effi.	Max.
RD-85A	5V, 2.0~10A	±2%	80mV	78%	88W
	12V, 0.3~5.0A	±5%	120mV		
RD-85B	5V, 2.0~10A	±2%	80mV	80%	88W
	24V, 0.3~2.5A	±5%	150mV		

## 125W — Dual Output

Model No.	Output	Tol.	R&N	Effi.	Max.
RD-125A	5V, 2.0~15A	±5%	80mV	82%	131W
	12V, 0.5~10A	±7%	120mV		
RD-125B	5V, 2.0~10A	±5%	80mV	85%	133W
	24V, 0.4~5.0A	±7%	150mV		

## 125W — Dual Output (Output isolated for RID-125)

Model No.	Output	Tol.	R&N	Effi.	Max.
RD-125-1224	12V, 1.0~7.0A	±2%	120mV	85%	133W
	24V, 0.4~5.0A	+8%, -5%	200mV		
*RD-125-2412	24V, 0.5~5.0A	±2%	200mV	85%	133W
	12V, 1.0~7.0A	±10%	120mV		
RD-125-1248	12V, 1.0~7.0A	±2%	120mV	85%	138W
	48V, 0.2~2.5A	+8%, -5%	240mV		
*RD-125-4812	48V, 0.3~2.5A	±2%	240mV	85%	138W
	12V, 1.0~7.0A	±10%	120mV		
RD-125-2448	24V, 0.5~4.0A	±1%	200mV	86%	144W
	48V, 0.2~2.5A	±4%	240mV		
*RD-125-4824	48V, 0.3~2.5A	±1%	240mV	86%	144W
	24V, 0.5~4.0A	±8%	240mV		
RID-125-1205	12V, 2.0~10.5A	±2%	120mV	80%	125W
	5V, 0.0~3.0A	±3%	80mV		
RID-125-2405	24V, 2.0~5.3A	±2%	120mV	83%	125W
	5V, 0.0~3.0A	±3%	80mV		

\*Modified

## 50W — Quad Output (RT-50 without -5V or -12V output)

Model No.	Output	Tol.	R&N	Effi.	Max.
RQ-50B	5V, 0.5~6.0A	±2%	80mV	74%	46W
	12V, 0.2~1.5A	±6%	120mV		
	-5V, 0.0~1.0A	±2%	100mV		
RQ-50C	-12V, 0.0~1.0A	±2%	80mV	75%	50W
	5V, 0.5~6.0A	±2%	80mV		
	15V, 0.2~1.5A	±6%	120mV		
RQ-50D	-5V, 0.0~1.0A	±2%	100mV	79%	53W
	-15V, 0.0~1.0A	±2%	80mV		
	5V, 0.5~6.0A	±6%	80mV		
	12V, 0.2~1.5A	±6%	120mV		
	24V, 0.1~1.0A	+7%, -5%	180mV		
	-12V, 0.0~1.0A	±2%	80mV		

## 65W — Quad Output (RT-65 without -5V or -12V output)

Model No.	Output	Tol.	R&N	Effi.	Max.
RQ-65B	5V, 0.5~8.0A	±2%	80mV	76%	63W
	12V, 0.2~3.0A	+7%, -5%	120mV		
	-5V, 0.0~1.0A	±5%	80mV		
RQ-65C	-12V, 0.0~1.0A	±5%	80mV	76%	65W
	5V, 0.5~8.0A	±2%	80mV		
	15V, 0.2~3.0A	+8%, -4%	120mV		
RQ-65D	-5V, 0.0~1.0A	±5%	80mV	78%	68W
	-15V, 0.0~1.0A	±5%	80mV		
	5V, 0.5~8.0A	±2%	80mV		
	12V, 0.2~3.0A	±6%	120mV		
	24V, 0.1~1.5A	±8%	180mV		
	-12V, 0.0~1.0A	±5%	80mV		

## 85W — Quad Output (RT-85 without -5V or -12V output)

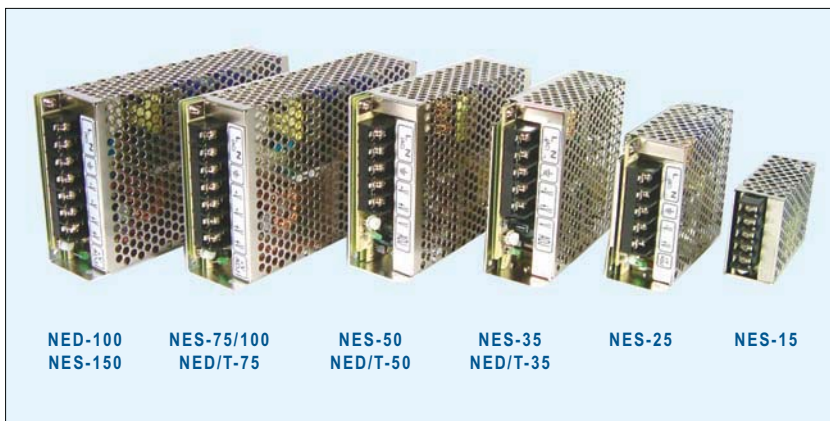
Model No.	Output	Tol.	R&N	Effi.	Max.
RQ-85B	5V, 2.0~10A	±2%	80mV	76%	81W
	12V, 0.3~4.0A	+7%, -3%	120mV		
	-5V, 0.0~1.0A	±8%	100mV		
RQ-85C	-12V, 0.0~1.0A	±5%	80mV	77%	83W
	5V, 2.0~10A	±2%	80mV		
	15V, 0.3~4.0A	+3%, -7%	120mV		
RQ-85D	-5V, 0.0~1.0A	±8%	100mV	78%	84W
	-15V, 0.0~1.0A	±5%	80mV		
	5V, 2.0~10A	±2%	80mV		
	12V, 0.3~4.0A	+7%, -3%	120mV		
	24V, 0.1~1.5A	±8%	150mV		
	-12V, 0.0~1.0A	±5%	80mV		

## 125W — Quad Output (RT-125 without -5V or -12V output)

Model No.	Output	Tol.	R&N	Effi.	Max.
RQ-125B	5V, 2.0~12A	±2%	80mV	79%	120W
	12V, 0.5~4.5A	+8%, -3%	120mV		
	-5V, 0.1~1.0A	+6%, -10%	80mV		
RQ-125C	-12V, 0.0~1.0A	±5%	80mV	80%	123W
	5V, 2.0~12A	±2%	80mV		
	15V, 0.5~4.0A	+8%, -3%	120mV		
RQ-125D	-5V, 0.1~1.0A	+6%, -10%	80mV	82%	124W
	-15V, 0.0~1.0A	±5%	80mV		
	5V, 2.0~12A	±2%	80mV		
	12V, 0.5~4.0A	+8%, -3%	120mV		
	24V, 0.1~2.5A	±8%	150mV		
	-12V, 0.0~1.0A	±5%	80mV		

# Enclosed-NE Series

15~350W Miniature



## Features

- Universal AC input / Full range ( NES/D-100, NES-150 AC input selectable by switch )
- Protections: Short circuit / Overload / Over voltage
- Built-in over temperature protection for NES-15
- Cooling by free air convection
- Small size, high power density
- Low cost, high reliability
- 100% full load burn-in test
- Most economical low wattage solution with safety certificates
- 2 years warranty

## General Specification (Please refer to www.meanwell.com for detail spec.)



Model No.	NES-15	NES-25	NES-35 NED/T-35	NES-50 NED/T-50	NES-75 NED/T-75	NES-100	NES-150 NED-100
AC input voltage range	85~264VAC, 120 ~ 370VDC					115/230VAC by switch	
AC inrush current (max.)	Cold start, 45A at 230VAC						
DC adjustment range	±10% by potential meter for single output; CH1 -5~+10% by potential meter for multiple output					-5% ~ +10% (NES-100/150) CH1 -5% ~ +10% (NED-100)	
Overload protection	>105%	110%~150% hiccup mode, auto-recovery					
Over voltage protection	115%~135% rated output voltage, shut off					115%~135% hiccup mode, auto-recovery	
Withstand voltage	I/P - O/P: 3kVAC, I/P - FG: 1.5kVAC, O/P - FG: 0.5kVAC, 1 minute						
Working temperature	-20 ~ +60°C (refer to the derating curve for different models)						
Vibration	10~500Hz, 2G 10min/1 cycle, period for 60 min each along X, Y, Z axes						
Safety standards	UL60950-1, GB4943(NES only) approved, also design refer to TUV EN60950-1						
EMC standards	EN55022 class B, EN61000-3-2,3, EN61000-4-2,3,4,5,6,8,11, ENV50204, GB9254(NES only)						
Connection	Terminal block for input and output						
Dimension (LxWxH)(mm)	78x 51x 28	99x 82x 35	99x 97x 36	129x 98x 38	159x 97x 38	159x 97x 38	199x 98x 38
Case No.	931A	932B	905	903	901	901	902
Packing	60pcs/11.8kg	45pcs/14.5kg	45pcs/17.2kg	45pcs/19.5kg	30pcs/16.6kg	30pcs/17.5kg	30pcs/22kg

### 15W — Single Output

Model No.	Output	Tol.	R&N	Effi.
NES-15-5	5V, 0~3.0A	±2%	150mV	79%
NES-15-12	12V, 0~1.3A	±1%	150mV	81%
NES-15-15	15V, 0~1.0A	±1%	150mV	81%
NES-15-24	24V, 0~0.7A	±1%	200mV	85%
NES-15-48	48V, 0~0.35A	±1%	240mV	82%

### 75W — Single Output

Model No.	Output	Tol.	R&N	Effi.
NES-75-5	5V, 0~14A	±2%	80mV	77%
NES-75-12	12V, 0~6.2A	±1%	120mV	82%
NES-75-15	15V, 0~5.0A	±1%	150mV	83%
NES-75-24	24V, 0~3.2A	±1%	200mV	86%
NES-75-48	48V, 0~1.6A	±1%	240mV	87%

### 25W — Single Output

Model No.	Output	Tol.	R&N	Effi.
NES-25-5	5V, 0~5.0A	±2%	80mV	78%
NES-25-12	12V, 0~2.1A	±1%	120mV	83%
NES-25-15	15V, 0~1.7A	±1%	150mV	84%
NES-25-24	24V, 0~1.1A	±1%	200mV	86%
NES-25-48	48V, 0~0.57A	±1%	240mV	86%

### 100W — Single Output

Model No.	Output	Tol.	R&N	Effi.
NES-100-5	5V, 0~20A	±2%	80mV	80%
NES-100-7.5	7.5V, 0~13.6A	±1%	120mV	81%
NES-100-9	9V, 0~11.2A	±1%	120mV	81%
NES-100-12	12V, 0~8.5A	±1%	120mV	83%
NES-100-15	15V, 0~7.0A	±1%	120mV	84%
NES-100-24	24V, 0~4.5A	±1%	120mV	86%
NES-100-48	48V, 0~2.3A	±1%	150mV	86%

### 35W — Single Output

Model No.	Output	Tol.	R&N	Effi.
NES-35-5	5V, 0~7.0A	±2%	80mV	78%
NES-35-12	12V, 0~3.0A	±1%	120mV	81%
NES-35-15	15V, 0~2.4A	±1%	150mV	83%
NES-35-24	24V, 0~1.5A	±1%	200mV	85%
NES-35-48	48V, 0~0.8A	±1%	240mV	86%

### 150W — Single Output

Model No.	Output	Tol.	R&N	Effi.
NES-150-3.3	3.3V, 0~30A	±3%	80mV	73%
NES-150-5	5V, 0~26A	±2%	80mV	78%
NES-150-7.5	7.5V, 0~20A	±1%	120mV	80%
NES-150-9	9V, 0~16.7A	±1%	120mV	83%
NES-150-12	12V, 0~12.5A	±1%	120mV	83%
NES-150-15	15V, 0~10A	±1%	120mV	83%
NES-150-24	24V, 0~6.5A	±1%	120mV	86%
NES-150-48	48V, 0~3.3A	±1%	200mV	86%

### 50W — Single Output

Model No.	Output	Tol.	R&N	Effi.
NES-50-5	5V, 0~10A	±2%	80mV	79%
NES-50-12	12V, 0~4.2A	±1%	120mV	82%
NES-50-15	15V, 0~3.4A	±1%	150mV	83%
NES-50-24	24V, 0~2.2A	±1%	200mV	86%
NES-50-48	48V, 0~1.1A	±1%	240mV	87%



# Enclosed-NE Series

## 35W — Dual Output

Model No.	Output	Tol.	R&N	Effi.	Max.
NED-35A	5V, 0.5~5.0A	±2%	80mV	78%	32W
	12V, 0.1~1.5A	±6%	120mV		
NED-35B	5V, 0.5~4.0A	±2%	80mV	81%	35W
	24V, 0.2~1.3A	±6%	200mV		

## 50W — Dual Output

Model No.	Output	Tol.	R&N	Effi.	Max.
NED-50A	5V, 1.0~6.0A	±2%	80mV	79%	54W
	12V, 0.3~3.0A	±6%	120mV		
NED-50B	5V, 1.0~6.0A	±2%	80mV	82%	54W
	24V, 0.2~2.0A	±6%	200mV		

## 75W — Dual Output

Model No.	Output	Tol.	R&N	Effi.	Max.
NED-75A	5V, 1.0~8.0A	±2%	80mV	78%	71W
	12V, 0.3~4.0A	±6%	120mV		
NED-75B	5V, 1.0~6.0A	±2%	80mV	81%	73W
	24V, 0.2~3.0A	±6%	200mV		

## 100W — Dual Output (Output isolated for NED-100□□GD)

Model No.	Output	Tol.	R&N	Effi.	Max.
NED-100A	5V, 2~10A	±2%	80mV	80%	100W
	12V, 0.7~7.0A	±10%	120mV		
NED-100B	5V, 1~10A	±2%	80mV	82%	100W
	24V, 0.3~3.5A	±8%	200mV		
NED-100C	12V, 0~8.0A	±2%	120mV	80%	99W
	5V, 0~3.0A	±3%	80mV		
NED-100D	24V, 0~4.0A	±2%	120mV	82%	99W
	5V, 0~3.0A	±3%	80mV		

## 35W — Triple Output

Model No.	Output	Tol.	R&N	Effi.	Max.
NET-35A	5V, 0.5~4.0A	±2%	80mV	78%	30W
	12V, 0.1~1.5A	±6%	120mV		
	-5V, 0.1~0.5A	±6%	120mV		
NET-35B	5V, 0.5~4.0A	±2%	80mV	79%	33W
	12V, 0.1~1.5A	±6%	120mV		
	-12V, 0.1~0.5A	±6%	120mV		
NET-35C	5V, 0.5~3.5A	±2%	80mV	79%	35W
	15V, 0.1~1.5A	±8%	150mV		
	-15V, 0.1~0.5A	±8%	150mV		
NET-35D	5V, 0.5~3.5A	±2%	80mV	79%	37W
	24V, 0.1~1.0A	±8%	200mV		
	12V, 0.1~1.0A	±8%	120mV		

## 50W — Triple Output

Model No.	Output	Tol.	R&N	Effi.	Max.
NET-50A	5V, 0.6~5.0A	±2%	80mV	76%	47W
	12V, 0.2~2.5A	±6%	120mV		
	-5V, 0.1~0.7A	±5%	120mV		
NET-50B	5V, 0.6~5.0A	±2%	80mV	78%	50W
	12V, 0.2~2.5A	±6%	120mV		
	-12V, 0.1~0.7A	±5%	120mV		
NET-50C	5V, 0.6~5.0A	±2%	80mV	78%	50W
	15V, 0.1~2.0A	±8%	150mV		
	-15V, 0.1~0.7A	±5%	150mV		
NET-50D	5V, 0.6~5.0A	±2%	80mV	79%	51W
	24V, 0.1~1.5A	±8%	200mV		
	12V, 0.1~1.5A	±6%	120mV		

## 75W — Triple Output

Model No.	Output	Tol.	R&N	Effi.	Max.
NET-75A	5V, 0.6~7.0A	±2%	80mV	77%	69W
	12V, 0.2~3.5A	±6%	120mV		
	-5V, 0.1~0.7A	±5%	120mV		
NET-75B	5V, 0.6~7.0A	±2%	80mV	78%	65W
	12V, 0.2~3.5A	±6%	120mV		
	-12V, 0.1~0.7A	±5%	120mV		
NET-75C	5V, 0.6~7.0A	±2%	80mV	78%	72W
	15V, 0.1~3.5A	±8%	150mV		
	-15V, 0.1~0.7A	±5%	150mV		
NET-75D	5V, 0.6~6.0A	±2%	80mV	80%	73W
	24V, 0.1~2.0A	±8%	200mV		
	12V, 0.1~1.5A	±6%	120mV		

## 210W Single Output Switching Power Supply



CASE: 912E 215x 115x 50 mm

- AC input selectable by switch
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Overload Over voltage / Over temp.
- Cooling by free air convection
- Built-in constant current limiting circuit
- 100% full load burn-in test
- LED indicator for power on
- Low cost, high reliability
- 2 years warranty

AC input voltage range ..... 90~132VAC / 180~264VAC selectable by switch  
 DC adjustment range ..... ±10% rated output range  
 Overload protection ..... 105%~150% constant current limiting, auto-recovery  
 Over voltage protection ..... 115%~145% rated output voltage  
 Setup, rise, hold up time ..... 1000ms, 50ms, 20ms at full load and 230VAC  
 Withstand voltage ..... I/P - O/P: 3kVAC, I/P-FG: 1.5kVAC, O/P-FG: 0.5kVAC  
 Working temperature ..... -20°C~50°C (refer to output derating curve)  
 Safety standards ..... UL60950-1 approved  
 CE marking ..... Low voltage directive  
 Packing ..... 0.93kg ; 12pcs / 12kg / 0.92CUFT

Model No.	Output	Tol.	R&N	Effi.
NES-200-3.3	3.3V, 0~40A	±2%	150mV	75%
NES-200-5	5V, 0~40A	±2%	150mV	79%
NES-200-7.5	7.5V, 0~27A	±2%	150mV	82%
NES-200-12	12V, 0~17A	±1%	150mV	83%
NES-200-15	15V, 0~14A	±1%	150mV	85%
NES-200-24	24V, 0~8.8A	±1%	150mV	87%
NES-200-27	27V, 0~7.8A	±1%	200mV	87%
NES-200-36	36V, 0~5.9A	±1%	240mV	87%
NES-200-48	48V, 0~4.4A	±1%	240mV	88%

## 350W Single Output Switching Power Supply



CASE: 912C 215x 115x 50 mm

- AC input selectable by switch
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Overload Over voltage / Over temp.
- Forced air cooling by built-in DC fan
- Built-in fan ON/OFF control
- Built-in constant current limiting circuit
- 100% full load burn-in test
- LED indicator for power on
- Low cost, high reliability
- 2 years warranty

AC input voltage range ..... 90~132VAC / 180~264VAC selectable by switch  
 DC adjustment range ..... ±10% rated output range  
 Overload protection ..... 105%~135% constant current limiting, auto-recovery  
 Over voltage protection ..... 115%~145% rated output voltage  
 Setup, rise, hold up time ..... 1000ms, 50ms, 20ms at full load and 230VAC  
 Withstand voltage ..... I/P - O/P: 3kVAC, I/P-FG: 1.5kVAC, O/P-FG: 0.5kVAC  
 Working temperature ..... -20°C~60°C (refer to output derating curve)  
 Safety standards ..... UL60950-1 approved  
 CE marking ..... Low voltage directive  
 Packing ..... 1.07kg ; 12pcs / 13.5kg / 0.92CUFT

Model No.	Output	Tol.	R&N	Effi.
NES-350-3.3	3.3V, 0~60A	±2%	150mV	75.0%
NES-350-5	5V, 0~60A	±2%	150mV	79.0%
NES-350-7.5	7.5V, 0~46A	±2%	150mV	82.0%
NES-350-12	12V, 0~29A	±1%	150mV	83.0%
NES-350-15	15V, 0~23.2A	±1%	150mV	85.0%
NES-350-24	24V, 0~14.6A	±1%	150mV	87.0%
NES-350-27	27V, 0~13A	±1%	200mV	87.5%
NES-350-36	36V, 0~9.7A	±1%	240mV	87.5%
NES-350-48	48V, 0~7.3A	±1%	240mV	87.5%

# Enclosed-SE Series 210~450W Single Output



## ■ Features

- AC input selectable by switch
- Withstand 300VAC surge input for 5 seconds (except for SE-450)
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC fan (SE-350/450)
- Built-in fan ON-OFF control (SE-350)
- Built-in constant current limiting circuit (SE-200/350)
- Built-in remote sense function (SE-450)
- 100% full load burn-in test
- LED indicator for power on
- 2 years warranty

## ■ General Specification (Please refer to [www.meanwell.com](http://www.meanwell.com) for detail spec.)

Model No.	SE-200 <b>NEW</b>	SE-350 <b>NEW</b>	SE-450	
AC input voltage range	90~132VAC / 180~264VAC selected by switch			
AC inrush current (max.)	Cold start, 55A at 230VAC	Cold start, 60A at 230VAC	Cold start, 55A at 230VAC	
DC adjustment range	±10% rated Output voltage			
Overload	Range	105%~150%	105%~135%	105%~150%
Protection	Type	Constant current limiting, auto-recovery		Shut down o/p voltage, re-power on to recover
Over voltage protection	115%~145%			
Withstand voltage	I/P - O/P: 3kVAC, I/P - FG: 1.5kVAC, O/P-FG: 0.5kVAC			
Working temperature	-20~+50°C	-20~+60°C	-10~+60°C (refer to output derating curve)	
Safety standards	UL60950-1 approved			
CE marking	Low voltage directive		-----	
Connection	9P/9.5mm pitch terminal block with cover		9P/11mm pitch terminal block with cover	
Dimension (LxWxH)(mm)	215x 115x 50		225x 124x 50	
Case No.	912E	912C	986	
Packing	12pcs / 12kg	12pcs / 13.5kg	12pcs / 16kg	

## ■ SE-200 Series



Model No.	Output	Tol.	R&N	Effi.
SE-200-3.3	3.3V, 0~40A	±2%	150mV	75%
SE-200-5	5V, 0~40A	±2%	150mV	79%
SE-200-7.5	7.5V, 0~27A	±2%	150mV	82%
SE-200-12	12V, 0~17A	±1%	150mV	83%
SE-200-15	15V, 0~14A	±1%	150mV	85%
SE-200-24	24V, 0~8.8A	±1%	150mV	87%
SE-200-27	27V, 0~7.8A	±1%	200mV	87%
SE-200-36	36V, 0~5.9A	±1%	240mV	87%
SE-200-48	48V, 0~4.4A	±1%	240mV	88%

## ■ SE-450 Series



Model No.	Output	Tol.	R&N	Effi.
SE-450-3.3	3.3V, 0~75A	±3%	200mV	74%
SE-450-5	5V, 0~75A	±3%	200mV	78%
SE-450-12	12V, 0~37.5A	±1%	200mV	83%
SE-450-15	15V, 0~30A	±1%	200mV	84%
SE-450-24	24V, 0~18.8A	±1.5%	200mV	86%
SE-450-36	36V, 0~12.5A	±1%	200mV	86%
SE-450-48	48V, 0~9.4A	±1%	200mV	88%

## ■ SE-350 Series



Model No.	Output	Tol.	R&N	Effi.
SE-350-3.3	3.3V, 0~60A	±2%	150mV	75.0%
SE-350-5	5V, 0~60A	±2%	150mV	79.0%
SE-350-7.5	7.5V, 0~46A	±2%	150mV	82.0%
SE-350-12	12V, 0~29A	±1%	150mV	83.0%
SE-350-15	15V, 0~23.2A	±1%	150mV	85.0%
SE-350-24	24V, 0~14.6A	±1%	150mV	87.0%
SE-350-27	27V, 0~13A	±1%	200mV	87.5%
SE-350-36	36V, 0~9.7A	±1%	240mV	87.5%
SE-350-48	48V, 0~7.3A	±1%	240mV	87.5%



We provide specification, drawing, test report and more information, please visit our website —

<http://www.meanwell.com>



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- High Quality
- Low Cost
- Prompt Delivery
- Best Service

# Enclosed-SE Series 600~1500W Single Output



## Features

- AC input selectable by switch (600~1000W)
- AC input 180~264VAC only (SE-1500)
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC fan
- Built-in remote sense function
- DC OK, remote ON/OFF control (SE-1000/1500)
- 100% full load burn-in test
- LED indicator for power on
- 2 years warranty

## General Specification (Please refer to [www.meanwell.com](http://www.meanwell.com) for detail spec.)



Model No.	SE-600	SE-1000	SE-1500
AC input voltage range	90~132VAC / 180~264VAC selected by switch		180~264VAC
AC inrush current (max.)	Cold start, 60A at 230VAC	Cold start, 55A at 230VAC	Cold start, 60A at 230VAC
DC adjustment range	±10% rated Output voltage		
Overload Protection	Range	105%~125%	
	Type	Shut down o/p voltage, re-power on to recover	
Over voltage protection	115%~140%		
Withstand voltage	I/P - O/P: 3kVAC, I/P - FG: 1.5kVAC, 1 minute		
Working temperature	-20~+60°C (refer to output derating curve)		-20~+70°C (refer to output derating curve)
Safety standards	UL60950-1 approved		
EMC standards	Design refer to EN55022 class B		
Connection	Terminal block with cover for input and output (SE-1000/1500: copper pillars for output)		
Dimension (LxWxH)(mm)	247x 127x 63.5	278x 127x 63.5	278x 177.8x 63.5
Case No.	926A	935B	982A
Packing	6pcs / 13.4kg	6pcs / 16kg	4pcs / 14.2kg

## 600W SE-600

Model No.	Output	Tol.	R&N	Effi.
SE-600-5	5V, 0~100A	±2%	150mV	78%
SE-600-12	12V, 0~50A	±1%	150mV	83%
SE-600-15	15V, 0~40A	±1%	150mV	84%
SE-600-24	24V, 0~25A	±1%	150mV	87%
SE-600-27	27V, 0~22.2A	±1%	150mV	87%
SE-600-36	36V, 0~16.6A	±1%	200mV	87%
SE-600-48	48V, 0~12.5A	±1%	200mV	88%

## 1000W SE-1000

Model No.	Output	Tol.	R&N	Effi.
SE-1000-5	5V, 0~150A	±1%	150mV	81%
SE-1000-9	9V, 0~100A	±1%	150mV	84%
SE-1000-12	12V, 0~83.3A	±1%	150mV	85%
SE-1000-15	15V, 0~66.7A	±1%	150mV	86%
SE-1000-24	24V, 0~41.7A	±1%	200mV	88%
SE-1000-48	48V, 0~20.8A	±1%	200mV	89%

## 1500W SE-1500

Model No.	Output	Tol.	R&N	Effi.
SE-1500-5	5V, 0~300A	±2%	150mV	81%
SE-1500-12	12V, 0~125A	±1%	150mV	85%
SE-1500-15	15V, 0~100A	±1%	150mV	85%
SE-1500-24	24V, 0~62.5A	±1%	150mV	87%
SE-1500-27	27V, 0~55.6A	±1%	150mV	88%
SE-1500-48	48V, 0~31.3A	±1%	150mV	89%

## 1000W Quad Output with PFC Function

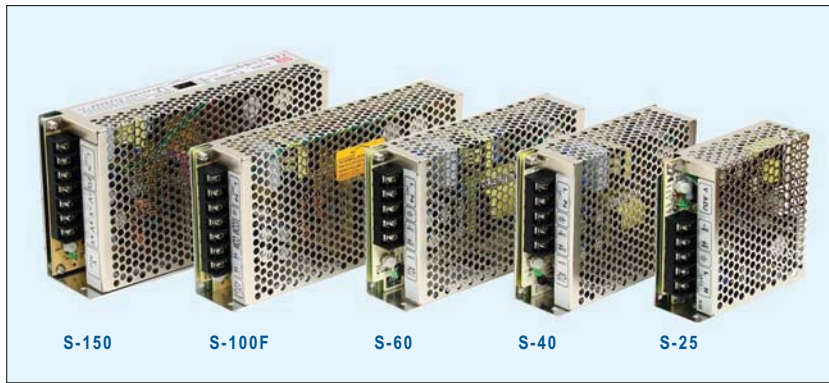
Low Cost Substitute of Modular Power

Available by Request

- Built-in external voltage control function 10~120% for CH3 & CH4
- Universal AC input / Full range
- Built-in active PFC function, PF > 0.95
- Protections: Short circuit / Overload / Over voltage / Over temp.
- Built-in remote ON/OFF control for CH3, CH4, and the whole unit
- Isolated outputs with independent PWM control, no minimum load required
- Built-in remote sense for CH3 & CH4
- Output current monitor signal for CH3 & CH4
- Cooling by built-in DC fan
- DC output: 12V@8A / 5V@6A / 24V@12.5A / 24V@25A
- Design refer to UL60950-1, TUV EN60950-1
- Dimension(LxWxH): 278 x 177.8 x 63.5mm
- 3 years warranty

# Enclosed-G2 Series

25~150W Single Output



## ■ Features

- Universal AC input / Full range (25~60W)  
AC input selectable by switch (100~150W)
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- 2 years warranty

## ■ General Specification (Please refer to [www.meanwell.com](http://www.meanwell.com) for detail spec.)

Model No.	S-25	S-40	S-60	S-100F	S-150
AC input voltage range	85~264VAC, 120~370VDC			88~132/176~264 VAC selectable by switch	
AC inrush current (max.)	Cold start, 25A at 230VAC	Cold start, 50A at 230VAC	Cold start, 40A at 230VAC	Cold start, 35A at 230VAC	
DC adjustment range	±10% rated output voltage				
Overload protection	Range	105%~150% rated output power			Shut off, AC recycle to re-start
	Type	Hiccup mode, auto-recovery			
Over voltage protection	Range	115%~135% rated output voltage			115%~145%
	Type	Hiccup mode, auto-recovery			Shut off, AC recycle to re-start
Withstand voltage	I/P - O/P: 3kVAC, I/P - FG: 1.5kVAC, O/P - FG: 0.5kVAC, 1 minute				
Working temperature	-10 ~ +60°C (refer to output derating curve)				
Safety standards	UL1012, TUV EN60950-1 approved	UL1012, UL60950-1 TUV EN60950-1 approved	UL1012, UL60950-1, TUV EN60950-1, GB4943 approved, CSA60950-1(S-100F-24 only)		
EMC standards	EN55022 class B, EN61000-3-2,3, ENV50204, EN61000-4-2,3,4,5,6,8,11 (S-25/40: EN61000-4-2,3,4,5 only), GB9254 (S-60 / S-100F / S-150 only)				
Connection	5P / 9.5mm pitch terminal block			7P / 9.5mm pitch terminal block	
Dimension (LxWxH)(mm)	99x 97x 36	129x 98x 38	159x 97x 38	199x 98x 38	199x 110x 50
Case No.	905	903	901	902	906
Packing	45pcs/18kg	30pcs/13.9kg	24pcs/13.1kg	20pcs/14.2kg	16pcs/13.8kg

### ■ S-25 Series



Model No.	Output	Tol.	R&N	Effi.
S-25-5	5V, 0~5A	±2%	50mV	72%
S-25-12	12V, 0~2.1A	±1%	100mV	76%
S-25-15	15V, 0~1.7A	±1%	100mV	77%
S-25-24	24V, 0~1.1A	±1%	100mV	80%

### ■ S-100F Series



Model No.	Output	Tol.	R&N	Effi.
S-100F-5	5V, 0~20A	±2%	100mV	76%
S-100F-7.5	7.5V, 0~13.5A	±1%	125mV	78%
S-100F-12	12V, 0~8.5A	±1%	125mV	80%
S-100F-15	15V, 0~6.7A	±1%	125mV	81%
S-100F-24	24V, 0~4.5A	±1%	150mV	83%
S-100F-48	48V, 0~2.2A	±1%	150mV	84%

### ■ S-40 Series



Model No.	Output	Tol.	R&N	Effi.
S-40-5	5V, 0~8A	±2%	75mV	72%
S-40-12	12V, 0~3.5A	±1%	100mV	76%
S-40-15	15V, 0~2.8A	±1%	100mV	76%
S-40-24	24V, 0~1.8A	±1%	100mV	78%

### ■ S-60 Series



Model No.	Output	Tol.	R&N	Effi.
S-60-5	5V, 0~12A	±2%	120mV	73%
S-60-12	12V, 0~5.0A	±1%	120mV	76%
S-60-15	15V, 0~4.0A	±1%	150mV	77%
S-60-24	24V, 0~2.5A	±1%	150mV	79%

### ■ S-150 Series



Model No.	Output	Tol.	R&N	Effi.
S-150-5	5V, 0~30A	±2%	150mV	78%
S-150-7.5	7.5V, 0~20A	±1%	150mV	80%
S-150-9	9V, 0~16.7A	±1%	180mV	80%
S-150-12	12V, 0~12.5A	±1%	180mV	82%
S-150-13.5	13.5V, 0~11.2A	±1%	180mV	83%
S-150-15	15V, 0~10A	±1%	180mV	84%
S-150-24	24V, 0~6.5A	±1%	240mV	85%
S-150-27	27V, 0~5.6A	±1%	240mV	86%
S-150-48	48V, 0~3.2A	±1%	240mV	87%

✦ Another SC model with constant current limiting & temperature compensation circuit.

# Enclosed-G2 Series 210~320W Single Output



## ■ Features

- AC input selectable by switch
- Protections: Short circuit / Overload / Over voltage / Over temperature (S-250: Short circuit / Over voltage / Over temperature)
- Forced air cooling by built-in DC fan (except for S-210)
- Cooling fan ON/OFF auto control (S-320)
- 100% full load burn-in test
- LED indicator for power on
- 2 years warranty

## ■ General Specification (Please refer to [www.meanwell.com](http://www.meanwell.com) for detail spec.)



Model No.	S-210	S-250	S-320
AC input voltage range	90~132VAC / 180~264VAC selectable by switch		
AC inrush current (max.)	Cold start, 50A at 230VAC	Cold start, 45A at 230VAC	Cold start, 36A at 230VAC
DC adjustment range	±10% rated Output voltage		
Overload protection	Range	105%~150%	105%~135%
	Type	Hiccup mode, auto-recovery	
Over voltage protection	115%~145% rated output voltage	115%~135% rated output voltage	115%~145% rated output voltage
Withstand voltage	I/P - O/P: 3kVAC, I/P - FG: 1.5kVAC, 1 minute		
Working temperature	-20~+50°C	-10~+60°C	
Safety standards	UL60950-1 approved		
EMC standards	Design refer to EN55022 class B		
Connection	Terminal block with cover for input and output		
Dimension (LxWxH)(mm)	215x 115x 50	150x 140x 86	215x 115x 50
Case No.	912E	907	912
Packing	12pcs / 12.4kg	8pcs / 11.0kg	12pcs / 13.8kg

## ■ 210W S-210

Model No.	Output	Tol.	R&N	Effi.
S-210-5	5V, 0~40A	±2%	80mV	79%
S-210-7.5	7.5V, 0~27A	±2%	100mV	82%
S-210-12	12V, 0~17A	±1%	120mV	83%
S-210-13.5	13.5V, 0~15A	±1%	120mV	84%
S-210-15	15V, 0~14A	±1%	120mV	85%
S-210-24	24V, 0~8.8A	±1%	200mV	87%
S-210-27	27V, 0~7.8A	±1%	200mV	87%
S-210-48	48V, 0~4.4A	±1%	200mV	87%

## ■ 250W S-250

Model No.	Output	Tol.	R&N	Effi.
S-250-5	5V, 0~40A	±2%	80mV	74.0%
S-250-12	12V, 0~18A	±1%	120mV	79.0%
S-250-15	15V, 0~15A	±1%	120mV	80.0%
S-250-24	24V, 0~10A	±1%	120mV	81.5%
S-250-27	27V, 0~9.0A	±1%	150mV	82.0%
S-250-48	48V, 0~5.2A	±1%	200mV	82.0%

## ■ 320W S-320

Model No.	Output	Tol.	R&N	Effi.
S-320-5	5V, 0~50A	±2%	150mV	77%
S-320-7.5	7.5V, 0~36A	±2%	150mV	80%
S-320-12	12V, 0~25A	±1%	150mV	82%
S-320-13.5	13.5V, 0~22A	±1%	150mV	83%
S-320-15	15V, 0~20A	±1%	150mV	84%
S-320-24	24V, 0~12.5A	±1%	150mV	86%
S-320-27	27V, 0~11A	±1%	200mV	86%
S-320-48	48V, 0~6.5A	±1%	240mV	87%

400W

Single Output  
with PFC Function

Available by Request

- Universal AC input / Full Range
- Built-in active PFC function
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in constant current limiting circuit
- Forced air cooling by built-in DC fan
- Output models: 3.3V / 5V / 12V / 15V / 24V / 36V / 48V
- Dimension(LxWxH): 225x 124x 50mm
- 3 years warranty



### Best products also need best service.

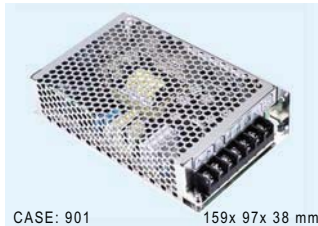
We have authorized distributors all over the world. They have sufficient stock for your prompt delivery. Also they can offer you technical support & RMA services. Please contact your local distributors for more product information. You can also contact us at [info@meanwell.com](mailto:info@meanwell.com) for information of your local distributors.

# Enclosed-G2 Series

60W 2~4 Output



## 60W Dual and Triple Output Switching Power Supply



- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Fixed switching frequency at 54kHz (D-60)
- Fixed switching frequency at 50kHz (T-60)
- Cooling by free air convection
- 100% full load burn-in test
- 2 years warranty

AC input voltage range ..... 85~264VAC; 120~370VDC  
 AC inrush current ..... Cold start, 25A at 115VAC, 45A at 230VAC  
 DC adjustment range ..... CH1: -5~+10% rated output voltage  
 Overload protection ..... 105%~150% hiccup mode, auto-recovery  
 Over voltage protection .... CH1: 115%~135% rated output voltage  
 Setup, rise, hold up time ... 300ms, 50ms, 80ms at full load and 230VAC  
 Withstand voltage ..... I/P-O/P:3.0kVAC, I/P-FG:1.5kVAC, 1minute  
 Working temperature ..... 0~45°C@100%, -10°C@80%, 60°C@60% load  
 Safety standards ..... UL1012, UL60950-1, TUV EN60950-1 approved  
 EMC standards ..... EN55022 class B, EN61000-3-2,3  
 EN61000-4-2,3,4,5,6,8,11, ENV50204  
 Connection ..... 7P/ 9.5mm pitch terminal block  
 10P/ 7.62mm pitch terminal block (IT-60)  
 Packing ..... 0.54kg ; 24pcs / 13.8kg / 0.75CUFT (D-60)  
 0.55kg ; 24pcs / 13.9kg / 0.75CUFT (ID-60)  
 0.55kg ; 24pcs / 14.1kg / 0.75CUFT (T-60)  
 0.51kg ; 24pcs / 13.2kg / 0.75CUFT (IT-60)

### ❖ Dual output

Model No.	Output	Tol.	R&N	Effi.	Max.
D-60A	5V, 0.3~6.0A	±2%	75mV	73%	56W
	12V, 0.2~4.0A	±6%	150mV		
D-60B	5V, 0.3~6.0A	±2%	75mV	76%	58W
	24V, 0.2~2.2A	±5%	150mV		

### ❖ Dual output (Note: 5V output is isolated from 24V)

Model No.	Output	Tol.	R&N	Effi.	Max.
ID-60B	5V, 0.3~6.0A	±2%	100mV	76%	58W
	24V, 0.2~2.2A	±8%	240mV		

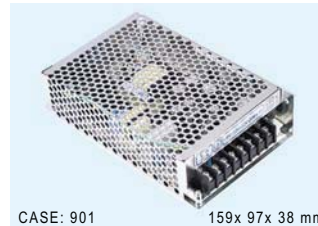
### ❖ Triple output

Model No.	Output	Tol.	R&N	Effi.	Max.
T-60A	5V, 0.5~7.0A	±2%	100mV	72%	58W
	12V, 0.2~3.5A	±6%	100mV		
	-5V, 0.0~1.0A	±6%	100mV		
T-60B	5V, 0.5~7.0A	±2%	100mV	72%	61W
	12V, 0.2~3.5A	±6%	100mV		
	-12V, 0.0~1.0A	±6%	100mV		
T-60C	5V, 0.5~7.0A	±2%	100mV	72%	63W
	15V, 0.2~3.0A	±6%	100mV		
	-15V, 0.0~1.0A	±6%	100mV		

### ❖ Triple output (Note: All outputs are isolated)

Model No.	Output	Tol.	R&N	Effi.	Max.
IT-60D	5V, 0.5~3.0A	±3%	80mV	76%	58W
	12V, 0.1~1.0A	±8%	120mV		
	24V, 0.2~2.0A	±8%	240mV		
IT-60F	5V, 0.5~3.0A	±3%	80mV	76%	58W
	15V, 0.1~1.0A	±8%	150mV		
	24V, 0.2~2.0A	±8%	240mV		

## 60W Quad Output Switching Power Supply



- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Approvals: UL / CUL / CE (TUV / CB also for Q-60)
- Cooling by free air convection
- 100% full load burn-in test
- 2 years warranty

AC input voltage range .....90~264VAC; 127~370VDC  
 DC adjustment range ..... CH1: -5~+10% rated output voltage  
 Overload protection ..... 105%~150% hiccup mode, auto-recovery  
 Over voltage protection ..... CH1: 115%~135% rated output voltage  
 Setup, rise, hold up time ..... 800ms, 20ms, 70ms at full load and 230VAC (Q-60)  
 300ms, 20ms, 80ms at full load and 230VAC (IQ-60)  
 Withstand voltage ..... I/P-O/P:3.0kVAC, I/P-FG:1.5kVAC, 1minute  
 Working temperature ..... -10~60°C (refer to output derating curve)  
 Safety standards ..... UL60950-1 approved for Q-60  
 UL60950-1, TUV EN60950-1 approved for IQ-60  
 EMC standards ..... EN55022 class B, EN61000-3-2,3  
 EN61000-4-2,3,4,5,6,8,11, ENV50204  
 Connection ..... 8P/ 8.25mm pitch terminal block for Q-60  
 10P/ 7.62mm pitch terminal block for IQ-60  
 Packing ..... 0.56kg ; 24pcs / 14.4kg / 0.75CUFT (Q-60)  
 0.55kg ; 24pcs / 14.2kg / 0.75CUFT (IQ-60)

### ❖ Quad output and UL / CUL / CE approved

Model No.	Output	Tol.	R&N	Effi.	Max.
Q-60B	5V, 0.5~8.0A	±2%	100mV	70%	60W
	12V, 0.1~3.0A	±6%	120mV		
	-5V, 0.0~1.0A	±5%	100mV		
Q-60C	-12V, 0.0~1.0A	±5%	120mV		
	5V, 0.5~8.0A	±2%	100mV	72%	60W
	15V, 0.1~3.0A	+8%,-4%	120mV		
Q-60D	-5V, 0.0~1.0A	±5%	100mV		
	-15V, 0.0~1.0A	±5%	120mV		
	5V, 0.5~8.0A	±2%	100mV	75%	62W
Q-60D	12V, 0.1~3.0A	±6%	120mV		
	24V, 0.1~1.5A	+8%,-4%	150mV		
	-12V, 0.0~1.0A	±5%	120mV		

### ❖ 5V, 24V are isolated from CH2 & CH3 and UL / CUL / TUV / CB / CE approved

Model No.	Output	Tol.	R&N	Effi.	Max.
IQ-60D	5V, 0.5~3.0A	±3%	80mV	76%	58W
	12V, 0.1~1.0A	±8%	120mV		
	-12V, 0.1~1.0A	±8%	120mV		
IQ-60F	24V, 0.2~2.0A	±8%	240mV		
	5V, 0.5~3.0A	±3%	80mV	76%	60W
	15V, 0.1~1.0A	±8%	150mV		
IQ-60F	-15V, 0.1~1.0A	±8%	150mV		
	24V, 0.2~2.0A	±8%	240mV		

► Note: Output isolated models can reduce noise interference from the system.

# Enclosed-G2 Series

40~250W 2~4 Output



## 120W 2~4 Output Switching Power Supply



CASE: 906 199x 110x 50 mm

- AC input range selectable by switch
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- 2 years warranty

AC input voltage range ..... 88~132VAC / 176~264VAC selectable by switch  
 DC adjustment range ..... CH1: -5~+10% rated output voltage  
 Overload protection ..... 105%~135% shut off, AC recycle to re-start  
 Over voltage protection ..... CH1: 115%~135% rated output voltage  
 Setup, rise, hold up time ... 200ms, 50ms, 20ms at full load and 230VAC (D-120, Q-120); 800ms, 20ms, 20ms at full load and 230VAC(T-120)  
 Withstand voltage ..... I/P-O/P:3.0kVAC, I/P-FG:1.5kVAC, 1minute  
 Working temperature ..... 0~50°C@100%, -10°C@80%, 60°C@40% load (D-120) / 60% load (T-120, Q-120)  
 Safety standards ..... UL60950-1, TUV EN60950-1, GB4943 approved  
 EMC standards ..... EN55022 class B, EN61000-3-2,3, GB9254, EN61000-4-2,3,4,5,6,8,11, ENV50204  
 Connection ..... 8P/ 9.5mm pitch terminal block  
 Packing ..... 0.82kg ; 16pcs / 14.2kg / 0.95CUFT (D-120)  
 0.83kg ; 16pcs / 14.2kg / 0.95CUFT (T-120)  
 0.86kg ; 16pcs / 14.7kg / 0.95CUFT (Q-120)

### ♦ Dual output

Model No.	Output	Tol.	R&N	Effi.	Max.
D-120A	5V, 2.0~12A	±2%	60mV	78%	120W
	12V, 0.5~5.0A	±6%	120mV		
D-120B	5V, 2.0~10A	±2%	60mV	80%	126W
	24V, 0.4~4.0A	±7%	150mV		

### ♦ Triple output

Model No.	Output	Tol.	R&N	Effi.	Max.
T-120A	5V, 2.0~12A	±2%	80mV	77%	120W
	12V, 0.5~5.0A	±6%	120mV		
	-5V, 0.2~1.0A	±6%	80mV		
T-120B	5V, 2.0~12A	±2%	80mV	77%	121W
	12V, 0.5~5.0A	±6%	120mV		
T-120C	-12V, 0.2~1.0A	±6%	120mV		
	5V, 2.0~12A	±2%	80mV	76%	118W
	15V, 0.5~5.0A	+10%, -5%	150mV		
T-120D	-15V, 0.2~1.0A	+10%, -5%	150mV		
	5V, 2.0~12A	±2%	80mV	80%	118W
	12V, 0.2~5.0A	±6%	120mV		
	24V, 0.2~2.0A	±6%	180mV		

### ♦ Quad output

Model No.	Output	Tol.	R&N	Effi.	Max.
Q-120B	5V, 2.0~12A	±2%	80mV	77%	120W
	12V, 0.5~5.0A	±6%	120mV		
	-5V, 0.2~1.0A	±6%	80mV		
	-12V, 0.2~1.0A	±6%	120mV		
Q-120C	5V, 2.0~12A	±2%	80mV	76%	123W
	15V, 0.5~5.0A	+10%, -5%	150mV		
	-5V, 0.2~1.0A	±6%	80mV		
	-15V, 0.2~1.0A	+10%, -5%	150mV		
Q-120D	5V, 2.0~12A	±2%	80mV	80%	124W
	12V, 0.2~5.0A	±6%	120mV		
	24V, 0.2~2.0A	±6%	180mV		
	-12V, 0.2~1.0A	±6%	120mV		

## 250W Quad Output Switching Power Supply



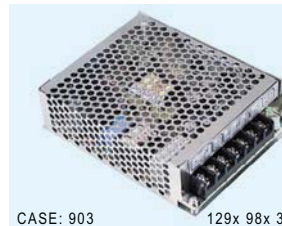
CASE: 907 150x 140x 86 mm

- AC input range selectable by switch
- Protections: Short circuit / Overload / Over voltage
- Fixed switching frequency at 75kHz
- Forced air cooling by built-in DC fan
- 100% full load burn-in test
- Low cost, high reliability
- 2 years warranty

AC input voltage range ..... 90~132VAC / 176~264VAC selectable by switch  
 DC adjustment range ..... CH1: -5~+10% rated output voltage  
 Overload protection ..... 105%~150% hiccup mode, auto-recovery  
 Over voltage protection ..... CH1: 115%~135% rated output voltage  
 Setup, rise, hold up time ... 800ms, 50ms, 20ms at full load and 230VAC  
 Working temperature ..... -10~50°C@100%, 60°C@60% load  
 Safety standards ..... UL60950-1 approved  
 Connection ..... 9P/ 9.5mm pitch terminal block with cover  
 Packing ..... 1.4kg ; 8pcs / 11.5kg / 0.97CUFT

Model No.	Output	Tol.	R&N	Effi.	Max.
Q-250B	5V, 2.0~20A	±2%	80mV	73%	201W
	12V, 0.5~7.0A	+8%, -10%	120mV		
	-12V, 0.5~1.0A	±10%	120mV		
Q-250C	-5V, 0.0~1.0A	±6%	50mV		
	5V, 2.0~20A	±2%	80mV	74%	195W
	15V, 0.5~5.0A	±10%	150mV		
Q-250D	-15V, 0.5~1.0A	±10%	150mV		
	-5V, 0.0~1.0A	±6%	50mV		
	5V, 2.0~15A	±2%	80mV	78%	242W
Q-250F	12V, 0.5~6.0A	+6%, -10%	120mV		
	24V, 0.5~5.0A	±8%	240mV		
	-12V, 0.0~1.0A	±6%	120mV		
	5V, 2.0~15A	±2%	80mV	78%	245W
	15V, 0.5~5.0A	+6%, -10%	150mV		
	24V, 0.5~5.0A	±8%	240mV		
	-15V, 0.0~1.0A	±6%	150mV		

## 40W Triple Output Switching Power Supply



CASE: 903 129x 98x 38 mm

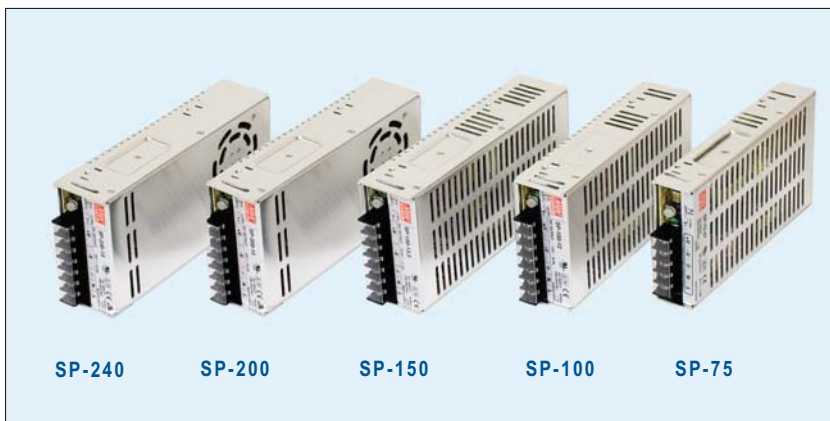
- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Fixed switching frequency at 40kHz
- Cooling by free air convection
- 100% full load burn-in test
- 2 years warranty

AC input voltage range ..... 85~264VAC; 120~370VDC  
 DC adjustment range ..... CH1: -5~+10% rated output voltage  
 Overload protection ..... 105%~150% hiccup mode, auto-recovery  
 Over voltage protection ..... CH1: 115%~135% rated output voltage  
 Withstand voltage ..... I/P-O/P:3kVAC, I/P-FG:1.5kVAC, 1minute  
 Working temperature ..... 0~50°C@100%, -10°C@80%, 60°C@60% load  
 Safety standards ..... CSA60950-1 approved  
 EMC standards ..... EN55022 class B, EN61000-3-2,3, EN61000-4-2,3,4,5,6,8,11, ENV50204  
 Connection ..... 7P/ 9.5mm pitch terminal block with cover  
 Packing ..... 0.44kg ; 30pcs / 14.7kg / 0.86CUFT

Model No.	Output	Tol.	R&N	Effi.	Max.
T-40A	5V, 0.6~5.0A	±2%	100mV	72%	42W
	12V, 0.2~3.0A	±6%	120mV		
	-5V, 0.1~1.0A	±8%	100mV		
T-40B	5V, 0.6~5.0A	±2%	100mV	72%	45W
	12V, 0.2~3.0A	±6%	120mV		
	-12V, 0.1~1.0A	±8%	120mV		
T-40C	5V, 0.6~5.0A	±2%	100mV	72%	45W
	15V, 0.2~2.0A	±6%	120mV		
	-15V, 0.1~1.0A	±6%	120mV		

# Enclosed-PFC

## 75~240W Single Output



### Features

- Universal AC input / Full range
- Built-in active PFC function, PF>0.93 (SP-240, PF>0.95)
- Protections: Short circuit / Overload / Over voltage / Over temp.(SP-150 / 200 / 240)
- Cooling by free air convection (SP-75 / 100 / 150)
- Forced air cooling by built-in DC fan (SP-200 / 240)
- Optional remote ON/OFF control (SP-75~200)
- Built-in fan speed control (SP-200)
- Built-in fan ON/OFF control (SP-240)
- 100% full load burn-in test
- 3 years warranty



### General Specification (Please refer to www.meanwell.com for detail spec.)

Model No.	SP-75	SP-100	SP-150	SP-200	SP-240
AC input voltage range	85~264VAC, 120~370VDC				88~264VAC, 124~370VDC
AC inrush current (max.)	Cold start, 30A at 230VAC		Cold start, 40A at 230VAC		
DC adjustment range	-5~+10% rated output voltage				±15% rated output voltage
Overload protection	Range	105%~150%			105%~135%
	Type	Constant current, auto-recovery			Hiccup mode, auto-recovery
Over voltage protection	Range	115%~135%	110%~135%		120%~150%
	Type	Shut off, AC recycle to re-start			
Withstand voltage	I/P-O/P: 3kVAC, I/P-FG: 1.5kVAC, O/P-FG: 0.5kVAC, 1 minute				
Working temperature	-10~+60°C		-10~+50°C	-10~+60°C	-20~+70°C
Safety standards	UL60950-1, TUV EN60950-1, GB4943(SP-200 only) approved				
EMC standards	EN55022 class B, EN61000-4-2,3,4,5,6,8,11, EN61000-3-2,3, ENV50204, GB9254(SP-200 only)				
Connection	5P / 9.5mm pitch		7P / 9.5mm pitch terminal block with cover		
Dimension (LxWxH)(mm)	179x99x33	179x99x45	199x99x50	199x99x50	190x93x50
Case No.	920A	915A	916A	916B	987A
Packing	20pcs/12.0kg	20pcs/14.3kg	20pcs/16.4kg	20pcs/17.9kg	18pcs/15.4kg

### 75W SP-75

Model No.	Output	Tol.	R&N	Effi.
SP-75-3.3	3.3V, 0~15A	±2%	80mV	68%
SP-75-5	5V, 0~15A	±2%	80mV	72%
SP-75-7.5	7.5V, 0~10A	±2%	80mV	74%
SP-75-12	12V, 0~6.3A	±2%	80mV	77%
SP-75-13.5	13.5V, 0~5.6A	±2%	80mV	78%
SP-75-15	15V, 0~5.0A	±2%	80mV	79%
SP-75-24	24V, 0~3.2A	±1%	100mV	80%
SP-75-27	27V, 0~2.8A	±1%	100mV	80%
SP-75-48	48V, 0~1.6A	±1%	100mV	80%

### 150W SP-150

Model No.	Output	Tol.	R&N	Effi.
SP-150-3.3	3.3V, 0~30.0A	±2%	100mV	67%
SP-150-5	5V, 0~30.0A	±2%	100mV	75%
SP-150-7.5	7.5V, 0~20.0A	±2%	100mV	79%
SP-150-12	12V, 0~12.5A	±2%	100mV	80%
SP-150-13.5	13.5V, 0~11.2A	±2%	100mV	80%
SP-150-15	15V, 0~10.0A	±2%	100mV	81%
SP-150-24	24V, 0~6.30A	±1%	150mV	83%
SP-150-27	27V, 0~5.60A	±1%	150mV	84%
SP-150-48	48V, 0~3.20A	±1%	250mV	84%

### 100W SP-100

Model No.	Output	Tol.	R&N	Effi.
SP-100-3.3	3.3V, 0~20.0A	±2%	100mV	70%
SP-100-5	5V, 0~20.0A	±2%	100mV	76%
SP-100-7.5	7.5V, 0~13.5A	±2%	100mV	78%
SP-100-12	12V, 0~8.50A	±2%	100mV	80%
SP-100-13.5	13.5V, 0~7.50A	±2%	100mV	80%
SP-100-15	15V, 0~6.70A	±2%	100mV	82%
SP-100-24	24V, 0~4.20A	±1%	150mV	84%
SP-100-27	27V, 0~3.80A	±1%	150mV	83%
SP-100-48	48V, 0~2.10A	±1%	250mV	82%

### 200W SP-200

Model No.	Output	Tol.	R&N	Effi.
SP-200-3.3	3.3V, 0~40.0A	±2%	100mV	65%
SP-200-5	5V, 0~40.0A	±2%	100mV	71%
SP-200-7.5	7.5V, 0~26.7A	±2%	100mV	76%
SP-200-12	12V, 0~16.7A	±2%	100mV	79%
SP-200-13.5	13.5V, 0~14.9A	±2%	100mV	80%
SP-200-15	15V, 0~13.4A	±2%	100mV	81%
SP-200-24	24V, 0~8.40A	±1%	150mV	83%
SP-200-27	27V, 0~7.50A	±1%	150mV	83%
SP-200-48	48V, 0~4.20A	±1%	250mV	84%

### 240W SP-240

Model No.	Output	Tol.	R&N	Effi.
SP-240-5	5V, 0~45A	±2%	150mV	79%
SP-240-7.5	7.5V, 0~32A	±2%	150mV	83%
SP-240-12	12V, 0~20A	±1%	150mV	86%
SP-240-15	15V, 0~16A	±1%	150mV	86%
SP-240-24	24V, 0~10A	±1%	150mV	87%
SP-240-30	30V, 0~8.0A	±1%	150mV	88%
SP-240-48	48V, 0~5.0A	±1%	150mV	89%



#### 48hrs delivery—

We keep enough stock for 95% of standard models at our 2400m<sup>2</sup> warehouse. We can arrange prompt delivery within 48hrs.

# Enclosed-PFC

## 320~750W Single Output



### Features

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC fan
- Built-in remote sense function and ON/OFF control (SP-480/500/750)
- Built-in fan speed control (SP-320)
- Built-in fan ON/OFF control (SP-500)
- With PG/PF signal output (SP-750)
- 100% full load burn-in test
- 3 years warranty

### General Specification (Please refer to www.meanwell.com for detail spec.)

Model No.	SP-320	SP-480	SP-500	SP-750
AC input voltage range	88~264VAC	85~264VAC	88~264VAC	90~264VAC
AC inrush current (max.)	Cold start, 40A at 230VAC		Cold Start, 36A at 230VAC	Cold Start, 45A at 230VAC
DC adjustment range	±10% rated output voltage			
Overload protection	Range	105%~135%	105%~145%	105%~135%
	Type	Hiccup mode, auto-recovery	Constant current limiting, auto-recovery	Fold back current limiting, auto-recovery
Over voltage protection	115%~145%	115%~140%		
Withstand voltage	I/P - O/P: 3kVAC, I/P - FG: 1.5kVAC, O/P - FG: 0.5kVAC, 1 minute			
Working temperature	-20~+65°C	-20~+60°C	-10~+50°C	-20~+60°C
Safety standards	UL60950-1, TUV EN65950-1 approved, GB4943 approved also for SP-320			
EMC standards	EN55022 class B, EN61000-4-2,3,4,5,6,8,11, EN61000-3-2,3, ENV50204, EN61000-6-2(SP-320 / 480 / 750), GB9254 (SP-320 only)			
Connection	9P / 9.5mm pitch terminal block with cover	9P / 11mm pitch terminal block with cover	7+8P / 9.5mm pitch terminal block with cover	5P / 10mm pitch terminal block with cover for input; copper pillars for output
Dimension (LxWxH)(mm)	215x115x50	278x127x43	170x120x93	278x127x63.5
Case No.	912G	929	910	919A
Packing	12pcs / 14.0kg	6pcs / 11.3kg	8pcs / 15.5kg	6pcs / 18.4kg

### SP-320 Series



Model No.	Output	Tol.	R&N	Effi.
SP-320-3.3	3.3V, 0~60.0A	±1%	150mV	74%
SP-320-5	5V, 0~55.0A	±2%	150mV	79%
SP-320-5PNC	5V, 0~55.0A	±2%	150mV	80%
SP-320-7.5	7.5V, 0~40.0A	±2%	150mV	83%
SP-320-12	12V, 0~25.0A	±1%	150mV	86%
SP-320-13.5	13.5V, 0~22.0A	±1%	150mV	86%
SP-320-15	15V, 0~20.0A	±1%	150mV	86%
SP-320-24	24V, 0~13.0A	±1%	150mV	87%
SP-320-27	27V, 0~11.7A	±1%	200mV	88%
SP-320-36	36V, 0~8.80A	±1%	220mV	87%
SP-320-48	48V, 0~6.70A	±1%	240mV	89%

※SP-320-5PNC with conformal coating and high ambient temperature operation ability is suitable for LED moving sign applications

### SP-480 Series



Model No.	Output	Tol.	R&N	Effi.
SP-480-3.3	3.3V, 0~85A	±2.0%	80mV	73%
SP-480-5	5V, 0~85A	±2.0%	80mV	79%
SP-480-12	12V, 0~43A	±1.5%	120mV	85%
SP-480-15	15V, 0~35A	±1.5%	150mV	85%
SP-480-24	24V, 0~22A	±1.0%	150mV	87%
SP-480-48	48V, 0~11A	±1.0%	240mV	89%

### SP-500 Series



Model No.	Output	Tol.	R&N	Effi.
SP-500-12	12V, 0~40A	±1%	240mV	84.0%
SP-500-13.5	13.5V, 0~36A	±1%	240mV	84.0%
SP-500-15	15V, 0~32A	±1%	240mV	83.0%
SP-500-24	24V, 0~20A	±1%	240mV	85.5%
SP-500-27	27V, 0~18A	±1%	200mV	86.5%
SP-500-48	48V, 0~10A	±1%	300mV	87.0%

### SP-750 Series



Model No.	Output	Tol.	R&N	Effi.
SP-750-5	5V, 0~120A	±2%	120mV	81%
SP-750-12	12V, 0~62.5A	±1%	120mV	85%
SP-750-15	15V, 0~50.0A	±1%	120mV	87%
SP-750-24	24V, 0~31.3A	±1%	120mV	89%
SP-750-27	27V, 0~27.8A	±1%	120mV	89%
SP-750-48	48V, 0~15.7A	±1%	120mV	90%



Who can provide you better services and be a trustworthy partner in the power industry?

— "MEAN WELL" tries to be —

# Enclosed-PFC

## 600~2000W Single Output



### 600W with PFC and Parallel Function



CASE: 910A 170x 120x 93 mm

- Universal AC input / Full range
- PF>0.99@115VAC; >0.95@230VAC
- Protections: Short circuit / Overload / Over voltage / Over temp.
- Forced air cooling by built-in DC fan
- Built-in remote sense and ON/OFF control
- With DC OK signal output
- Current sharing up to 2400W (3+1)
- 3 years warranty

AC input voltage range ..... 88~264VAC; 124~370VDC  
 AC inrush current ..... Cold start, 20A at 115VAC, 40A at 230VAC  
 DC adjustment range ..... ±10% rated output voltage  
 Overload protection ..... 105%~135% constant current, auto-recovery  
 Over voltage protection ..... 115%~140% rated output voltage  
 Withstand voltage ..... I/P-O/P:3kVAC, I/P-FG:1.5kVAC, 1 minute  
 Working temperature ..... -20~60°C (refer to output derating curve)  
 Safety standards ..... UL60950-1, TUV EN60950-1 approved  
 EMC standards ..... EN55022 class B, EN61000-3-2,3, EN61000-4-2,3,4,5,6,8,11, ENV50204  
 Connection ..... 7+8P/ 9.5mm pitch terminal block with cover  
 Packing ..... 1.9kg ; 8pcs / 15.5kg / 1.06CUFT

Model No.	Output	Tol.	R&N	Effi.
PSP-600-5	5V, 0~80.0A	±2%	180mV	79%
PSP-600-12	12V, 0~50.0A	±1%	240mV	84%
PSP-600-13.5	13.5V, 0~44.5A	±1%	240mV	85%
PSP-600-15	15V, 0~40.0A	±1%	240mV	85%
PSP-600-24	24V, 0~25.0A	±1%	240mV	86%
PSP-600-27	27V, 0~22.2A	±1%	240mV	86%
PSP-600-48	48V, 0~12.5A	±1%	300mV	87%

### 1000W with PFC and Parallel Function



CASE: 952B 295x 127x 41 mm

- 1U low profile
- Universal AC input / Full range
- PF>0.98@115VAC; >0.95@230VAC
- Protections: Short circuit / Overload / Over voltage / Over temp.
- High power density 10.7W/in<sup>3</sup>
- Output voltage can be trimmed between 40~110% of the rated output voltage
- Current sharing up to 4000W (3+1)
- DC OK signal
- Built-in remote sense and ON/OFF control
- Built-in 5V/0.5A auxiliary power
- 3 years warranty

AC input voltage range ..... 90~264VAC; 127~370VDC  
 DC adjustment range ..... ±10% rated output voltage  
 Overload protection ..... 105%~125% constant current, auto-recovery  
 Over voltage protection ..... 115%~135% rated output voltage  
 Setup, rise, hold up time ..... 300ms, 50ms, 16ms at full load and 230VAC  
 Withstand voltage ..... I/P-O/P:3kVAC, I/P-FG:1.5kVAC, 1 minute  
 Working temperature ..... -20~50°C@100%, 60°C@60% load  
 Safety standards ..... UL60950-1, TUV EN60950-1 approved  
 EMC standards ..... EN55022 Class B conducted, EN61000-3-2,3, ENV50204, EN61000-4-2,3,4,5,6,8,11, EN61000-6-2  
 Packing ..... 1.95kg ; 6pcs / 12.7kg / 0.99CUFT

Model No.	Output	Tol.	R&N	Effi.
RSP-1000-12	12V, 0~60A	±1%	150mV	83%
RSP-1000-15	15V, 0~50A	±1%	150mV	85%
RSP-1000-24	24V, 0~40A	±1%	150mV	88%
RSP-1000-27	27V, 0~37A	±1%	150mV	88%
RSP-1000-48	48V, 0~21A	±1%	150mV	90%

### 1500W with PFC and Parallel Function



CASE: 943 278x 127x 83.5 mm

- Universal AC input / Full range
- PF>0.98@115VAC; >0.95@230VAC
- Protections: Short circuit / Overload / Over voltage / Over temp.
- Using ZVS technology to reduce power dissipation
- High power density 8.3W/in<sup>3</sup>
- Built-in 12V / 0.1A auxiliary output
- Alarm signal output
- DC output voltage adjustment 70~100% by external resistor
- Active current sharing up to 6000W (3+1)
- Built-in remote sense function
- Built-in remote ON/OFF control
- Forced air cooling by built-in DC fan
- 3 years warranty

AC input voltage range ..... 90~264VAC; 127~370VDC  
 DC adjustment range ..... -30~+10% rated output voltage  
 Overload protection ..... 105%~135% constant current limiting, shut off after 5 sec.  
 Over voltage protection ..... 115%~140% rated output voltage  
 Setup, rise, hold up time ..... 1500ms, 100ms, 10ms at full load and 230VAC  
 Withstand voltage ..... I/P-O/P:3kVAC, I/P-FG:1.5kVAC, 1 minute  
 Working temperature ..... -20~70°C (refer to output derating curve)  
 Safety standards ..... UL60950-1, TUV EN60950-1 approved  
 EMC standards ..... EN55022 class B conducted, EN61000-3-2,3, EN61000-4-2,3,4,5,6,8,11, ENV50204  
 Packing ..... 3.0kg ; 6pcs / 20.5kg / 1.54CUFT

Model No.	Output	Tol.	R&N	Effi.
RSP-1500-5	5V, 0~240A	±2%	150mV	80%
RSP-1500-12	12V, 0~125A	±1%	150mV	87%
RSP-1500-15	15V, 0~100A	±1%	150mV	87%
RSP-1500-24	24V, 0~63A	±1%	150mV	90%
RSP-1500-27	27V, 0~56A	±1%	150mV	90%
RSP-1500-48	48V, 0~32A	±1%	200mV	91%

### 2000W with PFC and Parallel Function



CASE: 952B 295x 127x 41 mm

- Universal AC input / Full range
- Built-in active PFC function, PF>0.98
- Protections: Short circuit / Overload / Over voltage / Over temp. / Fan alarm
- Forced air cooling by built-in DC fan
- Output voltage can be trimmed between 20~110% of the rated output voltage
- High power density 21.4W/inch<sup>3</sup>
- Built-in 12V/0.8A & 5V/0.3A auxiliary output
- Current sharing up to 3 units
- Alarm signal output
- Built-in remote ON-OFF control
- Built-in remote sense function
- 3 years warranty

AC input voltage range ..... 90~264VAC; 127~370VDC  
 DC adjustment range ..... ±10% rated output voltage  
 Overload protection ..... 105%~125% constant current limiting, auto-recovery  
 Over voltage protection ..... 120%~140% rated output voltage  
 Setup, rise, hold up time ..... 1500ms, 60ms, 16ms at full load and 230VAC  
 Withstand voltage ..... I/P-O/P:3kVAC, I/P-FG:1.5kVAC, 1 minute  
 Working temperature ..... -25~70°C (refer to output derating curve)  
 Safety standards ..... Design refer to UL60950-1, TUV EN60950-1  
 EMC standards ..... EN55022 class B, EN61000-3-2,3, EN61000-4-2,3,4,5,6,8,11, ENV50204

Model No.	Output	Tol.	R&N	Effi.
RSP-2000-12	12V, 0~100A	±1%	150mV	86.0%
RSP-2000-24	24V, 0~80A	±1%	200mV	90.5%
RSP-2000-48	48V, 0~42A	±1%	300mV	92.0%

# Enclosed-PFC

## 150~3000W Single Output



### 2400W with PFC and Parallel Function



CASE: 982B 278x 177.8x 63.5 mm

- AC input 180~264VAC only
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage / Over temp. / Fan alarm
- Forced air cooling by built-in DC with fan speed control function
- Output voltage can be trimmed between 20~110% of the rated output voltage
- High power density 12.5W/inch<sup>3</sup>
- Current sharing up to 3 units
- Alarm signal output (TTL signal & relay contact)
- Built-in 12V/0.1A auxiliary output for remote control
- Built-in remote ON-OFF control
- Built-in remote sense function
- 3 years warranty

AC input voltage range ..... 180~264VAC; 254~370VDC  
 DC adjustment range ..... ±10% rated output voltage  
 Overload protection ..... 100%~112% constant current limiting, shut off after 5 sec., re-power on to recover (can adjust to continuous constant current limiting)  
 Over voltage protection ..... 115%~140% rated output voltage  
 Setup, rise, hold up time .... 1000ms, 80ms, 10ms at full load and 230VAC  
 Withstand voltage ..... I/P-O/P:3kVAC, I/P-FG:1.5kVAC, 1 minute  
 Working temperature ..... -20~70°C (refer to output derating curve)  
 Safety standards ..... UL60950-1, TUV EN60950-1 approved  
 EMC standards ..... EN55022 class B, EN61000-3-2,3, EN61000-4-2,3,4,5,6,8,11, ENV50204  
 Packing ..... 3.3kg ; 4pcs / 14.2kg / 1.89CUFT

Model No.	Output	Tol.	R&N	Effi.
RSP-2400-12	12V, 0~166.7A	±1%	150mV	87.0%
RSP-2400-24	24V, 0~100A	±1%	150mV	90.0%
RSP-2400-48	48V, 0~50A	±1%	200mV	91.5%

### 3000W with PFC and Parallel Function



CASE: 982B 278x 177.8x 63.5 mm

- AC input 180~264VAC only
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage / Over temp. / Fan alarm
- Forced air cooling by built-in DC with fan speed control function
- Output voltage can be trimmed between 20~110% of the rated output voltage
- High power density 15.6W/inch<sup>3</sup>
- Current sharing up to 3 units
- Alarm signal output (TTL signal & relay contact)
- Built-in 12V/0.1A auxiliary output for remote control
- Built-in remote ON-OFF control
- Built-in remote sense function
- 3 years warranty

AC input voltage range ..... 180~264VAC; 254~370VDC  
 DC adjustment range ..... ±10% rated output voltage  
 Overload protection ..... 100%~112% constant current limiting, shut off after 5 sec., re-power on to recover (can adjust to continuous constant current limiting)  
 Over voltage protection ..... 115%~140% rated output voltage  
 Setup, rise, hold up time .... 1000ms, 80ms, 10ms at full load and 230VAC  
 Withstand voltage ..... I/P-O/P:3kVAC, I/P-FG:1.5kVAC, 1 minute  
 Working temperature ..... -20~70°C (refer to output derating curve)  
 Safety standards ..... UL60950-1, TUV EN60950-1 approved  
 EMC standards ..... EN55022 class B, EN61000-3-2,3, EN61000-4-2,3,4,5,6,8,11, ENV50204  
 Packing ..... 4kg ; 4pcs / 16kg / 1.89CUFT

Model No.	Output	Tol.	R&N	Effi.
RSP-3000-12	12V, 0~200A	±1%	150mV	86.0%
RSP-3000-24	24V, 0~125A	±1%	150mV	90.0%
RSP-3000-48	48V, 0~62.5A	±1%	200mV	90.5%

### 150W Single Output with PFC



220x 62.5x 32 mm

- Universal AC input / Full range
- Withstand 300VAC surge input for 5 seconds
- Built-in active PFC function
- High efficiency up to 90%
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- 1U low profile: 32mm
- Built-in remote sense function
- LED indicator for power on
- Conformal coating
- Suitable for moving sign application
- 3 years warranty

AC input voltage range ..... 90~264VAC; 127~370VDC  
 AC inrush current ..... Cold start, 65A at 230VAC  
 DC adjustment range ..... ±10% rated output voltage  
 Overload protection ..... 105%~150% hiccup mode, auto-recovery  
 Over voltage protection ..... 115%~135% hiccup mode, auto-recovery  
 Setup, rise, hold up time ..... 2000ms, 100ms, 16ms at full load and 230VAC  
 Withstand voltage ..... I/P - O/P: 3.75kVAC, I/P-FG: 1.88kVAC, O/P-FG: 0.5kVAC  
 Working temperature ..... -30°C~+70°C (refer to output derating curve)  
 Safety standards ..... Design refer to UL60950-1, EN60950-1  
 EMC standards ..... Design refer to EN55022 class B, EN61000-3-2 class C, EN61000-3-3, EN61547, ENV50204, EN61000-4-2,3,4,5,6,8,11

Model No.	Output	Tol.	R&N	Effi.
HSP-150-2.5	2.5V, 0~30A	±2%	50mV	80%
HSP-150-3.8	3.8V, 0~30A	±2%	50mV	86%
HSP-150-5	5V, 0~30A	±2%	50mV	90%

### 250W Single Output with PFC



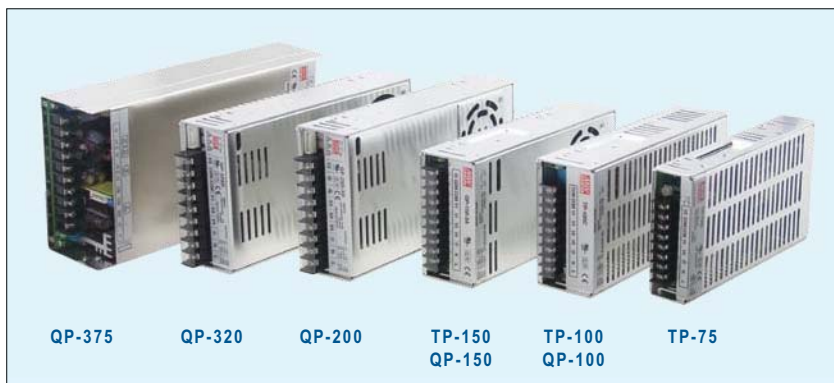
199x 105x 41 mm

- Universal AC input / Full range
- Built-in active PFC function
- Conformal coating
- High efficiency up to 87%
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC fan
- 1U low profile: 41mm
- Built-in remote sense function
- LED indicator for power on
- Suitable for moving sign application
- 3 years warranty

AC input voltage range ..... 85~264VAC; 120~370VDC  
 DC adjustment range ..... ±10% rated output voltage  
 AC inrush current ..... Cold start, 70A at 230VAC  
 Overload protection ..... 105%~135% hiccup mode, auto-recovery  
 Over voltage protection ..... 115%~135% shut down O/P voltage, re-power on to recover  
 Setup, rise, hold up time ..... 3000ms, 50ms, 16ms at full load and 230VAC  
 Withstand voltage ..... I/P - O/P: 3kVAC, I/P-FG: 1.5kVAC, O/P-FG: 0.5kVAC  
 Working temperature ..... -40°C~+70°C (refer to output derating curve)  
 Safety standards ..... UL60950-1, TUV EN60950-1 approved  
 EMC standards ..... EN55022 Class B, EN61000-3-2,3, EN55024, ENV50204, EN61000-4-2,3,4,5,6,8,11, EN61000-6-2

Model No.	Output	Tol.	R&N	Effi.
HSP-250-2.5	2.5V, 0~50A	±2%	100mV	79%
HSP-250-3.6	3.6V, 0~50A	±2%	100mV	83%
HSP-250-5	5V, 0~50A	±2%	100mV	87%

# Enclosed-PFC Series 75~375W 3~4 Output



## ■ Features

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Over temperature protection (200~375W built-in, option for 100W and 150W)
- PF>0.98@115VAC; >0.95@230VAC
- Cooling by free air convection (75W / 100W)
- Forced air cooling by built-in DC fan (150W / 200W / 320W / 375W)
- 100% full load burn-in test
- 3 years warranty

## ■ General Specification (Please refer to www.meanwell.com for detail spec.)



Model No.	TP-75	TP-100 QP-100	TP-150 QP-150	QP-200	QP-320	QP-375
<b>AC input voltage range</b>	90~264VAC; 127~370VDC					85~264VAC; 120~370VDC
<b>AC inrush current (max.)</b>	Cold start, 20A at 230VAC	Cold start, 40A at 230VAC		Cold start, 30A at 230VAC	Cold start, 45A at 230VAC	
<b>DC adjustment range</b>	CH1: -5%~+10% rated output voltage	CH1: -5%~+10% rated output voltage (CH1&2 for QP-100/150-3x, QP-100/150-D/F)			CH1&2: -5%~+10% rated output voltage	
<b>Overload protection</b>	<b>Range</b>	105%~150% rated output voltage				105%~135%
	<b>Type</b>	Hiccup mode, auto-recovery			Constant current limiting, auto-recovery	Fold back current limiting, auto-recovery
<b>Over voltage protection</b>	CH1: 115%~135%	115%~135% for CH1 or CH1&2				CH1: 115%~135% rated output voltage
<b>Withstand voltage</b>	I/P - O/P: 3kVAC, I/P - FG: 1.5kVAC, 1 minute					
<b>Working temperature</b>	-10°C~+60°C (refer to output derating curve)				-10°C~+70°C	-10°C~+60°C
<b>Setup, rise, hold up time</b>	800ms, 60ms, 36ms at full load and 230VAC	800ms, 60ms, 24ms at full load and 230VAC		800ms, 50ms, 24ms at full load and 230VAC	800ms, 50ms, 16ms at full load and 230VAC	800ms, 50ms, 36ms at full load and 230VAC
<b>Safety standards</b>	UL60950-1, TUV EN60950-1 approved					
<b>EMC standards</b>	EN55022 class B, EN61000-3-2,3, EN61000-4-2,3,4,5,6,8,11, ENV50204					
<b>Connection</b>	8P / 7.62mm pitch terminal block	9P / 7.62mm pitch terminal block with cover		9P / 9.5mm pitch terminal block with cover		3P / 9.5mm pitch terminal block for input; 10P / 9.5mm pitch terminal block for output
<b>Dimension (LxWxH)(mm)</b>	179x 99x 33	199x 99x 50		215x 115x 50		280x 127x 63.5
<b>Case No.</b>	920A	916A	916B	912	912I	927

## ■ 75W — Triple Output

Model No.	Output	Tol.	R&N	Effi.	Max.
TP-75A	5V, 1.5~10A	±3%	100mV	70%	74W
	12V, 0.2~4.0A	±4%	120mV		
	-5V, 0.0~0.6A	±8%	100mV		
TP-75B	5V, 1.5~10A	±3%	100mV	70%	76W
	12V, 0.2~4.0A	±4%	120mV		
	-12V, 0.0~0.6A	±8%	120mV		
TP-75C	5V, 1.5~10A	±3%	100mV	70%	75W
	15V, 0.2~3.0A	±4%	120mV		
	-15V, 0.0~0.6A	±8%	120mV		
TP-75D	5V, 1.5~10A	±3%	100mV	70%	76W
	24V, 0.2~2.5A	±4%	120mV		
	12V, 0.0~0.6A	±8%	120mV		
TP-7503	5V, 1.5~10A	±3%	100mV	70%	75W
	3.3V, 0.2~8.0A	±4%	50mV		
	12V, 0.0~0.6A	±8%	120mV		

## ■ 100W — Triple Output

Model No.	Output	Tol.	R&N	Effi.	Max.
TP-100A	5V, 3.0~15A	±3%	100mV	75%	101W
	12V, 0.4~5.0A	±7%	120mV		
	-5V, 0.0~1.0A	±6%	100mV		

Model No.	Output	Tol.	R&N	Effi.	Max.
TP-100B	5V, 3.0~15A	±3%	100mV	78%	105W
	12V, 0.4~5.0A	±6%	120mV		
	-12V, 0.0~1.0A	±6%	100mV		
TP-100C	5V, 3.0~15A	±3%	100mV	77%	104W
	15V, 0.4~4.0A	+10%,-6%	150mV		
	-15V, 0.0~1.0A	±6%	100mV		
TP-100D	5V, 3.0~15A	±3%	100mV	78%	105W
	24V, 0.4~3.0A	±8%	150mV		
	12V, 0.0~1.0A	±6%	100mV		

## ■ 150W — Triple Output

Model No.	Output	Tol.	R&N	Effi.	Max.
TP-150A	5V, 2.0~20A	±3%	100mV	75%	150W
	12V, 0.4~7.0A	±8%	120mV		
	-5V, 0.0~1.0A	±6%	100mV		
TP-150B	5V, 2.0~20A	±3%	100mV	77%	148W
	12V, 0.4~7.0A	±8%	120mV		
	-12V, 0.0~1.0A	±6%	100mV		
TP-150C	5V, 2.0~20A	±3%	100mV	77%	152W
	15V, 0.4~6.0A	+10%,-6%	150mV		
	-15V, 0.0~1.0A	±6%	100mV		
TP-150D	5V, 2.0~20A	±3%	100mV	78%	154W
	24V, 0.4~4.0A	±8%	150mV		
	12V, 0.0~1.0A	±6%	100mV		



# Enclosed-PFC Series

## 100W — Quad Output

Model No.	Output	Tol.	R&N	Effi.	Max.
QP-100B	5V, 2.0~10A	±3%	100mV	76%	101W
	12V, 0.3~4.0A	±6%	150mV		
	-12V, 0.15~1.0A	+10%, -6%	150mV		
QP-100C	-5V, 0.0~1.0A	±5%	100mV	77%	101W
	5V, 2.0~10A	±3%	100mV		
	15V, 0.3~3.0A	+6%, -10%	150mV		
	-15V, 0.15~1.0A	±8%	150mV		
QP-100D	-5V, 0.0~1.0A	±5%	100mV	78%	100W
	5V, 2.0~10A	±3%	120mV		
	12V, 0.0~3.0A	±3%	150mV		
	24V, 0.3~2.0A	±6%	200mV		
QP-100F	-12V, 0.0~1.0A	±5%	150mV	78%	103W
	5V, 2.0~10A	±3%	120mV		
	15V, 0.0~3.0A	±3%	180mV		
	24V, 0.3~2.0A	±6%	200mV		
QP-100-3A	-15V, 0.0~1.0A	±5%	150mV	74%	99W
	5V, 2.0~10A	±3%	100mV		
	3.3V, 0.0~10A	±3%	100mV		
	12V, 0.3~3.0A	±6%	150mV		
QP-100-3B	-5V, 0.0~1.0A	±5%	150mV	74%	100W
	5V, 2.0~10A	±3%	100mV		
	3.3V, 0.0~10A	±3%	100mV		
	12V, 0.3~3.0A	±6%	150mV		
QP-100-3C	-12V, 0.0~1.0A	±5%	150mV	75%	101W
	5V, 2.0~10A	±3%	100mV		
	3.3V, 0.0~10A	±3%	100mV		
	15V, 0.3~2.0A	+8%, -6%	150mV		
QP-100-3D	-15V, 0.0~1.0A	±5%	150mV	75%	105W
	5V, 2.0~10A	±3%	100mV		
	3.3V, 0.0~10A	±3%	100mV		
	24V, 0.3~2.0A	±6%	150mV		
	-12V, 0.0~1.0A	±5%	150mV		

## 150W — Quad Output

Model No.	Output	Tol.	R&N	Effi.	Max.
QP-150B	5V, 3.0~15A	±3%	100mV	76%	150W
	12V, 0.4~5.0A	±6%	150mV		
	-12V, 0.3~2.0A	+10%, -6%	150mV		
	-5V, 0.0~1.0A	±5%	100mV		
QP-150C	5V, 3.0~15A	±3%	100mV	77%	153W
	15V, 0.4~4.0A	+6%, -10%	150mV		
	-15V, 0.3~2.0A	±8%	150mV		
	-5V, 0.0~1.0A	±5%	100mV		
QP-150D	5V, 3.0~15A	±3%	120mV	78%	150W
	12V, 0.0~5.0A	±3%	150mV		
	24V, 0.4~3.0A	±6%	200mV		
	-12V, 0.0~1.0A	±5%	150mV		
QP-150F	5V, 3.0~15A	±3%	120mV	78%	152W
	15V, 0.0~5.0A	±3%	150mV		
	24V, 0.4~3.0A	±6%	200mV		
	-15V, 0.0~1.0A	±5%	150mV		
QP-150-3A	-15V, 0.0~1.0A	±5%	150mV	73%	146W
	5V, 3.0~15A	±3%	100mV		
	3.3V, 0.0~15A	±3%	100mV		
	12V, 0.4~5.0A	±6%	150mV		
QP-150-3B	-5V, 0.0~1.0A	±5%	150mV	75%	150W
	5V, 3.0~15A	±3%	100mV		
	3.3V, 0.0~15A	±3%	100mV		
	12V, 0.4~5.0A	±6%	150mV		
QP-150-3C	-12V, 0.0~1.0A	±5%	150mV	74%	152W
	5V, 3.0~15A	±3%	100mV		
	3.3V, 0.0~15A	±3%	100mV		
	15V, 0.4~5.0A	+8%, -6%	150mV		
QP-150-3D	-15V, 0.0~1.0A	±5%	150mV	76%	150W
	5V, 3.0~15A	±3%	100mV		
	3.3V, 0.0~15A	±3%	100mV		
	24V, 0.3~3.0A	±6%	150mV		
	-12V, 0.0~1.0A	±5%	150mV		

## 200W — Quad Output

Model No.	Output	Tol.	R&N	Effi.	Max.
QP-200D	5V, 3.0~20A	±3%	100mV	75%	203W
	12V, 0.0~7.0A	±3%	150mV		
	24V, 0.4~6.0A	+10%, -6%	150mV		
	-12V, 0.0~1.0A	±6%	150mV		
QP-200F	5V, 3.0~20A	±3%	100mV	75%	203W
	15V, 0.0~6.0A	±3%	150mV		
	24V, 0.4~6.0A	+10%, -6%	150mV		
	-15V, 0.0~1.0A	±6%	150mV		
QP-200-3A	-5V, 0.0~1.0A	±5%	100mV	72%	200W
	5V, 3.0~20A	±3%	100mV		
	3.3V, 0.0~20A	±3%	100mV		
	12V, 0.5~8.0A	+8%, -10%	150mV		
QP-200-3B	-5V, 0.0~1.0A	±5%	100mV	72%	205W
	5V, 3.0~20A	±3%	100mV		
	3.3V, 0.0~20A	±3%	100mV		
	12V, 0.5~8.0A	+8%, -10%	150mV		
QP-200-3C	-12V, 0.0~1.0A	±6%	150mV	72%	210W
	5V, 3.0~20A	±3%	100mV		
	3.3V, 0.0~20A	±3%	100mV		
	15V, 0.5~7.0A	+10%, -6%	150mV		
QP-200-3D	-15V, 0.0~1.0A	±6%	150mV	74%	204W
	5V, 3.0~20A	±3%	100mV		
	3.3V, 0.0~20A	±3%	100mV		
	24V, 0.4~6.0A	+10%, -6%	150mV		
QP-200-3E	-12V, 0.0~1.0A	±6%	150mV	74%	206W
	5V, 3.0~20A	±3%	100mV		
	3.3V, 0.0~20A	±3%	100mV		
	24V, 0.4~6.0A	+10%, -6%	150mV		
	-15V, 0.0~1.0A	±6%	150mV		

## 320W — Quad Output

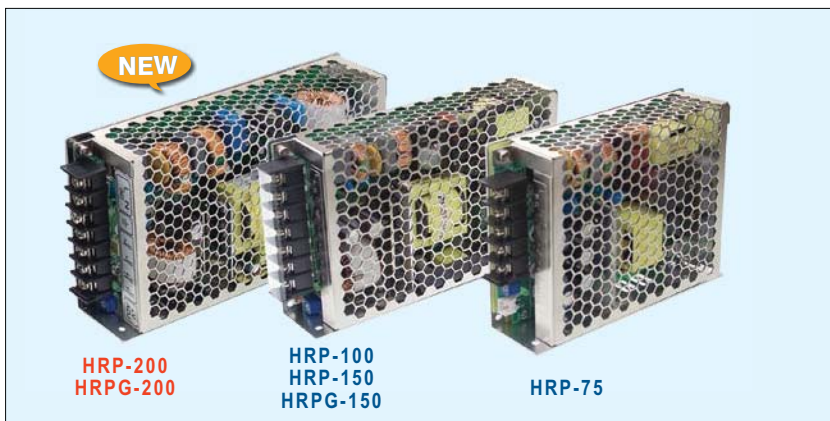
Model No.	Output	Tol.	R&N	Effi.	Max.
QP-320D	5V, 2.5~20A	±3%	100mV	83%	316W
	12V, 0.0~10A	±3%	150mV		
	24V, 0.2~5.0A	+10%, -6%	150mV		
	-12V, 0.2~2.0A	±10%	150mV		
QP-320F	5V, 2.5~20A	±3%	100mV	83%	316W
	15V, 0.0~10A	±3%	150mV		
	24V, 0.2~5.0A	+10%, -6%	150mV		
	-15V, 0.2~1.6A	±10%	150mV		

## 375W — Quad Output

Model No.	Output	Tol.	R&N	Effi.	Max.
QP-375-5A	5V, 3.5~40A	±1%	100mV	77%	378W
	12V, 0.0~16A	±1%	150mV		
	±12V, 0.0~6.0A	±1%	150mV		
	±12V, 0.0~3.0A	±1%	50mV		
QP-375-5B	5V, 3.5~40A	±1%	100mV	77%	357W
	12V, 0.0~16A	±1%	120mV		
	±12V, 0.0~6.0A	±1%	120mV		
	±5V, 0.0~3.0A	±1%	50mV		
QP-375-5C	5V, 3.5~40A	±1%	100mV	77%	378W
	12V, 0.0~16A	±1%	150mV		
	±15V, 0.0~4.0A	±1%	150mV		
	±15V, 0.0~4.0A	±1%	240mV		
QP-375-5D	5V, 3.5~40A	±1%	100mV	78%	378W
	12V, 0.0~16A	±1%	120mV		
	±12V, 0.0~6.0A	±1%	120mV		
	±24V, 0.0~3.0A	±1%	240mV		
QP-375-5E	5V, 3.5~40A	±1%	100mV	78%	378W
	12V, 0.0~16A	±1%	120mV		
	±24V, 0.0~4.0A	±1%	120mV		
	±24V, 0.0~3.0A	±1%	240mV		
QP-375-24B	24V, 1.0~10A	±1%	240mV	78%	386W
	5V, 0.0~16A	±1%	50mV		
	±12V, 0.0~4.0A	±1%	120mV		
	±12V, 0.0~4.0A	±1%	120mV		
QP-375-24C	24V, 1.0~10A	±1%	240mV	80%	410W
	5V, 0.0~10A	±1%	50mV		
	±15V, 0.0~4.0A	±1%	150mV		
	±15V, 0.0~4.0A	±1%	150mV		

# Enclosed-PFC

## 75~200W Single Output



### Features

- Universal AC input / Full range
- Withstand 300VAC surge input for 5 seconds
- Built-in active PFC function
- Protections:  
Short circuit / Overload / Over voltage / Over temp. (optional for HRP-75 / HRP-100)
- Built-in constant current limiting circuit
- Built-in remote sense function (HRP□-150 / 200)
- No load power consumption < 0.5W (except for HRP-150/200)
- Built-in remote ON/OFF control (except for HRP-150 / 200)
- Built-in 5V / 0.3A standby output (HRPG-150 / 200)
- Cooling by free air convection
- 1U low profile
- LED indicator for power on
- 100% full load burn-in test
- 5 years warranty

### General Specification (Please refer to [www.meanwell.com](http://www.meanwell.com) for detail spec.)



Model No.	HRP-75	HRP-100	HRP□-150	HRP□-200 <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">NEW</span>
AC input voltage range	85~264VAC, 120~370VDC			
AC inrush current (max.)	Cold start, 65A at 230VAC		Cold start, 70A at 230VAC	
DC adjustment range	-5%~+10% rated output voltage		±15% rated output voltage	
Overload protection	Range	105%~135%		
	Type	Constant current limiting, auto-recovery		
Over voltage protection	115%~145%			
Withstand voltage	I/P - O/P: 3kVAC, I/P - FG: 1.5kVAC, O/P - FG: 0.5kVAC			
Working temperature	-20~+70°C (refer to output derating curve)	-30~+60°C	-30~+70°C	
Safety standards	UL60950-1, TUV EN60950-1 approved			
EMC standards	EN55022 class B, EN61000-4-2,3,4,5,6,8,11, EN61000-3-2,3, ENV50204, EN61000-6-2 heavy industry level			
Connection	5P / 9.5mm pitch terminal block with cover		7P / 9.5mm pitch terminal block with cover	
Dimension (LxWxH)(mm)	129x98x38	159x97x38	199x 98x 38	
Case No.	903D	901I	902E	

### 75W HRP-75

Model No.	Output	Tol.	R&N	Effi.
HRP-75-3.3	3.3V, 0~15A	±2.5%	80mV	77.0%
HRP-75-5	5V, 0~15A	±2.5%	80mV	82.5%
HRP-75-7.5	7.5V, 0~10A	±2.5%	100mV	84.0%
HRP-75-12	12V, 0~6.3A	±1.5%	120mV	87.0%
HRP-75-15	15V, 0~5A	±1.5%	150mV	88.0%
HRP-75-24	24V, 0~3.2A	±1.5%	150mV	88.5%
HRP-75-36	36V, 0~2.1A	±1.5%	200mV	89.0%
HRP-75-48	48V, 0~1.6A	±1.5%	240mV	89.0%

### 150W HRP□-150

Model No.	Output	Tol.	R&N	Effi.
HRP□-150-3.3	3.3V, 0~30A	±2.5%	80mV	78.5%
HRP□-150-5	5V, 0~26A	±2.5%	80mV	85.0%
HRP□-150-7.5	7.5V, 0~20A	±2.5%	100mV	87.0%
HRP□-150-12	12V, 0~13A	±1.5%	120mV	88.0%
HRP□-150-15	15V, 0~10A	±1.5%	150mV	88.0%
HRP□-150-24	24V, 0~6.5A	±1.5%	150mV	88.0%
HRP□-150-36	36V, 0~4.3A	±1.5%	200mV	89.0%
HRP□-150-48	48V, 0~3.3A	±1.5%	240mV	89.0%

□=blank, G; blank: basic function, G: with 5Vsb & no load < 0.5W

### 100W HRP-100

Model No.	Output	Tol.	R&N	Effi.
HRP-100-3.3	3.3V, 0~20A	+2.5, -3.5%	80mV	78.0%
HRP-100-5	5V, 0~17A	±2.5%	80mV	83.0%
HRP-100-7.5	7.5V, 0~13.5A	±2.5%	100mV	84.0%
HRP-100-12	12V, 0~8.5A	±1.5%	120mV	87.5%
HRP-100-15	15V, 0~7A	±1.5%	150mV	88.0%
HRP-100-24	24V, 0~4.5A	±1.5%	150mV	88.5%
HRP-100-36	36V, 0~2.9A	±1.5%	200mV	89.0%
HRP-100-48	48V, 0~2.2A	±1.5%	240mV	90.0%

### 200W NEW HRP□-200

Model No.	Output	Tol.	R&N	Effi.
HRP□-200-3.3	3.3V, 0~40A	±2%	80mV	80.0%
HRP□-200-5	5V, 0~35A	±2%	90mV	84.0%
HRP□-200-7.5	7.5V, 0~26.7A	±2%	100mV	86.0%
HRP□-200-12	12V, 0~16.7A	±1%	120mV	88.0%
HRP□-200-15	15V, 0~13.4A	±1%	150mV	88.0%
HRP□-200-24	24V, 0~8.4A	±1%	150mV	88.0%
HRP□-200-36	36V, 0~5.7A	±1%	250mV	89.0%
HRP□-200-48	48V, 0~4.3A	±1%	250mV	89.0%

□=blank, G; blank: basic function, G: with 5Vsb & no load < 0.5W

# Enclosed-PFC

300~600W Single Output



## Features

- Universal AC input / Full range
- Withstand 300VAC surge input for 5 seconds
- Built-in active PFC function
- Protections: Short circuit / Overload / Over voltage / Over temp.
- Built-in constant current limiting circuit
- Built-in remote sense function
- Built-in DC OK signal
- No load power consumption < 0.5W (HRPG-300 / 450)
- No load power consumption < 0.75W (HRPG-600)
- Built-in remote ON/OFF control & 5V / 0.3A standby output (HRPG series)
- Built-in current sharing (HRPG-600-24 / 36 / 48)
- Forced air cooling by built-in DC fan
- 1U low profile (HRP□-300 / 450)
- 100% full load burn-in test
- 5 years warranty

## General Specification (Please refer to [www.meanwell.com](http://www.meanwell.com) for detail spec.)



Model No.	HRP□-300	HRP□-450 <b>NEW</b>	HRP□-600
AC input voltage range	85~264VAC, 120~370VDC		
AC inrush current (max.)	Cold start, 70A at 230VAC		
DC adjustment range	±15% rated output voltage		
Overload Protection	Range: 105%~135% Type: Constant current limiting, auto-recovery		
Over voltage protection	115%~145%		
Withstand voltage	I/P - O/P: 3kVAC, I/P - FG: 1.5kVAC, O/P - FG: 0.5kVAC, 1 minute		
Working temperature	-30~+70°C (refer to output derating curve)		
Safety standards	UL60950-1, TUV EN60950-1 approved		
EMC standards	EN55022 class B, EN61000-4-2,3,4,5,6,8,11, EN61000-3-2,3, ENV50204, EN61000-6-2 heavy industry level		
Connection	7P / 11mm pitch terminal block with cover	3+6P / 10&11mm pitch terminal block with cover	
Dimension (LxWxH)(mm)	199x 105x 41	218x 105x 41	218x 105x 63.5
Case No.	980A	995A	977A

### 300W HRP□-300

Model No.	Output	Tol.	R&N	Effi.
HRP□-300-3.3	3.3V, 0~60A	±2.5%	80mV	80.0%
HRP□-300-5	5V, 0~60A	±2.0%	90mV	82.0%
HRP□-300-7.5	7.5V, 0~40A	±2.0%	100mV	86.0%
HRP□-300-12	12V, 0~27A	±1.0%	120mV	88.0%
HRP□-300-15	15V, 0~22A	±1.0%	150mV	88.0%
HRP□-300-24	24V, 0~14A	±1.0%	150mV	87.0%
HRP□-300-36	36V, 0~9A	±1.0%	250mV	88.0%
HRP□-300-48	48V, 0~7A	±1.0%	250mV	89.0%

□ = blank, G; blank: basic function, G: with 5Vsb & no load < 0.5W

### 600W HRP□-600

Model No.	Output	Tol.	R&N	Effi.
HRP□-600-3.3	3.3V, 0~120A	±2%	100mV	78.5%
HRP□-600-5	5V, 0~120A	±2%	100mV	82.0%
HRP□-600-7.5	7.5V, 0~80A	±2%	100mV	86.0%
HRP□-600-12	12V, 0~53A	±1%	120mV	88.0%
HRP□-600-15	15V, 0~43A	±1%	150mV	88.0%
HRP□-600-24	24V, 0~27A	±1%	150mV	88.0%
HRP□-600-36	36V, 0~17.5A	±1%	200mV	89.0%
HRP□-600-48	48V, 0~13A	±1%	240mV	89.0%

□ = blank, G; blank: basic function, G: with 5Vsb & no load < 0.75W

### 450W **NEW** HRP□-450

Model No.	Output	Tol.	R&N	Effi.
HRP□-450-3.3	3.3V, 0~90A	±2%	80mV	80.0%
HRP□-450-5	5V, 0~90A	±2%	80mV	83.0%
HRP□-450-7.5	7.5V, 0~60A	±2%	100mV	86.5%
HRP□-450-12	12V, 0~37.5A	±1%	120mV	88.0%
HRP□-450-15	15V, 0~30A	±1%	150mV	89.0%
HRP□-450-24	24V, 0~18.8A	±1%	150mV	88.0%
HRP□-450-36	36V, 0~12.5A	±1%	240mV	89.0%
HRP□-450-48	48V, 0~9.5A	±1%	240mV	89.5%

□ = blank, G; blank: basic function, G: with 5Vsb & no load < 0.5W



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# Enclosed-PFC

## Programmable Single Output



### Features

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Output voltage programmable from 20~110% by 1~5.5VDC external control signal
- Forced air cooling by built-in DC fan with fan speed control (except for SPV-150)
- Cooling by free air convection (SPV-150)
- Built-in remote sense and ON/OFF control (SPV-600/1500)
- Built-in 12V/0.1A auxiliary output and current sharing up to 4500W (SPV-1500)
- 3 years warranty

### General Specification (Please refer to [www.meanwell.com](http://www.meanwell.com) for detail spec.)

Model No.	SPV-150	SPV-300	SPV-600 <b>NEW</b>	SPV-1500
AC input voltage range	88~264VAC, 124~370VDC			90~264VAC, 127~370VDC
AC inrush current (max.)	Cold start, 40A at 230VAC			Cold Start, 60A at 230VAC
DC adjustment range	-15%~+10% rated output voltage		±5% rated output voltage	
Overload protection	Range	105%~150%	105%~135%	
	Type	Constant current limiting, auto-recovery		
Over voltage protection	115%~140%		120%~140%	
Withstand voltage	I/P - O/P: 3kVAC, I/P - FG: 1.5kVAC, O/P - FG: 0.5kVAC, 1 minute			
Working temperature	-20~+65°C (refer to output derating curve)		-20~+60°C	-20~+70°C
Safety standards	UL60950-1, TUV EN60950-1 approved			
EMC standards	EN55022 class B, EN61000-4-2,3,4,5,6,8,11, EN61000-3-2,3, ENV50204, EN55024, light industry level, criteria A			
Connection	9P / 9.5mm pitch terminal block with cover		15P / 9.5mm pitch terminal block with cover	3P / 13mm pitch terminal block with cover for input; copper pillars for output
Dimension (LxWxH)(mm)	215x115x50		170x120x93	278x127x83.5
Case No.	912L		910A	943A
Packing	12pcs / 14.0kg		8pcs / 15.5kg	6pcs / 16.6kg

### 150W



Model No.	Output	Tol.	R&N	Effi.
SPV-150-12	12V, 0~12.5A	±1%	150mV	82%
SPV-150-24	24V, 0~6.25A	±1%	150mV	83%
SPV-150-48	48V, 0~3.125A	±1%	240mV	83%

### 600W



Model No.	Output	Tol.	R&N	Effi.
SPV-600-12	12V, 0~50A	±1%	240mV	84%
SPV-600-24	24V, 0~25A	±1%	240mV	86%
SPV-600-48	48V, 0~12.5A	±1%	300mV	87%

### 300W



Model No.	Output	Tol.	R&N	Effi.
SPV-300-12	12V, 0~25A	±1%	150mV	83.5%
SPV-300-24	24V, 0~12.5A	±1%	150mV	85.0%
SPV-300-48	48V, 0~6.25A	±1%	240mV	86.5%

### 1500W



Model No.	Output	Tol.	R&N	Effi.
SPV-1500-12	12V, 0~125A	±1%	150mV	86.5%
SPV-1500-24	24V, 0~63A	±1%	150mV	90.0%
SPV-1500-48	48V, 0~32A	±1%	200mV	90.0%



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#### Customer Satisfaction —

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#### 48hrs delivery—

We keep enough stock for 95% of standard models at our 2400m<sup>2</sup> warehouse. We can arrange prompt delivery within 48hrs.

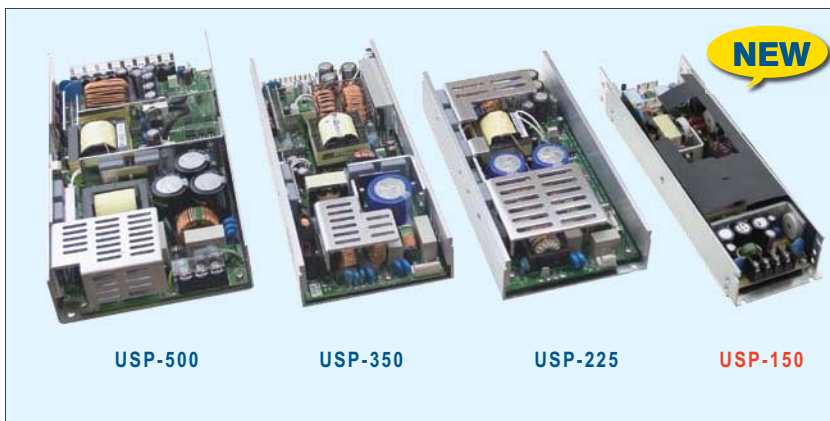


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# U-bracket-PFC

150~500W Single Output



## Features

- Universal AC input / Full range
- Built-in active PFC
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Output wattage:
  - USP-150: 150W convection
  - USP-225: 150W convection, 225W with 18CFM forced air
  - USP-350: 300W convection, 350W with 23.5CFM forced air
  - USP-500: 400W convection, 500W with 23.5CFM forced air
- High power density: 5.5W/in<sup>3</sup> (USP-150); 4.7W/in<sup>3</sup> (USP-225); 6.32W/in<sup>3</sup> (USP-350); 6.2W/in<sup>3</sup> (USP-500)
- U-bracket low profile: 33mm(USP-150); 38mm(USP-225/300); 41mm(USP-500)
- Built-in remote ON/OFF control, remote sense, DC OK signal (USP-500)
- **Optional current sharing(1+1) for USP-500-24/48**
- 3 years warranty

## General Specification (Please refer to www.meanwell.com for detail spec.)

Model No.	USP-150 <b>NEW</b>	USP-225	USP-350	USP-500
AC input voltage range	90~295VAC, 127~417VDC		90~264VAC, 127~370VDC	
AC inrush current (max.)	Cold start, 65A at 230VAC		15A at 115VAC, 30A at 230VAC	22A at 115VAC, 44A at 230VAC
DC adjustment range	±10% rated output voltage			
Overload protection	Range	145%~185%	105%~150%	105%~130%
	Type	Hiccup mode, auto-recovery	Constant current limiting, auto-recovery	
Over voltage protection	Range	110%~135%	110%~135%	110%~140%
	Type	Shut off, AC recycle to re-start		Hiccup mode, auto-recovery
Withstand voltage	I/P - O/P: 3.75kVAC, I/P - FG:1.88kVAC, O/P - FG: 0.5kVAC, 1 minute		I/P - O/P: 3kVAC, I/P - FG: 1.5kVAC, O/P - FG: 0.5kVAC, 1 minute	
Working temperature	-30~+65°C		-20~+65°C	-10~+65°C
Vibration	10~500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes		10~500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes	
Safety standards	Design refer to UL60950-1, TUV EN60950-1		UL60950-1, TUV EN60950-1 approved	
EMC standards	EN55022 class B, EN61000-3-2,3, EN61000-4-2,3,4,5,6,8,11, ENV50204			
Connection	JST: B5P-VH, 4P/7.62mm pitch terminal	20P/2.54mm pitch, Molex 39-29-9206	5+9Px2/3.96mm pitch, JST: B5P/B9Px2-VH	3+8P/8.5mm pitch terminal block with cover
Dimension (LxWxH)(mm)	215x 67.4x 33	202x 101.5x 38	235.2x 101.5x 38	254x 127x 41

### 150W



Model No.	Output	Tol.	R&N	Effi.
USP-150-12	12V, 0~12.5A	±2%	100mV	91.5%
USP-150-15	15V, 0~10.0A	±2%	150mV	91.5%
USP-150-24	24V, 0~6.30A	±2%	150mV	93.0%
USP-150-36	36V, 0~4.20A	±2%	250mV	93.0%
USP-150-48	48V, 0~3.20A	±2%	250mV	93.0%

### 350W



Model No.	Output	Tol.	R&N	Effi.
USP-350-3.3	3.3V, 0~70.0A	±2%	80mV	78%
USP-350-5	5V, 0~70.0A	±2%	80mV	84%
USP-350-12	12V, 0~29.2A	±2%	100mV	88%
USP-350-15	15V, 0~23.4A	±2%	100mV	88%
USP-350-24	24V, 0~14.6A	±2%	150mV	88%
USP-350-48	48V, 0~7.30A	±2%	150mV	89%

### 225W



Model No.	Output	Tol.	R&N	Effi.
USP-225-3.3	3.3V, 0~40.0A	±2%	100mV	72%
USP-225-5	5V, 0~40.0A	±2%	100mV	77%
USP-225-12	12V, 0~18.7A	±2%	100mV	83%
USP-225-15	15V, 0~15.0A	±2%	100mV	84%
USP-225-24	24V, 0~9.40A	±2%	150mV	85%
USP-225-48	48V, 0~4.70A	±2%	250mV	86%

### 500W



Model No.	Output	Tol.	R&N	Effi.
USP-500-5	5V, 0~80.0A	±2%	80mV	85%
USP-500-12	12V, 0~42.0A	±2%	100mV	90%
USP-500-15	15V, 0~33.5A	±2%	100mV	90%
USP-500-24	24V, 0~21.0A	±2%	150mV	89%
USP-500-48	48V, 0~10.5A	±2%	150mV	90%

# DIN Series

## 10~96W Miniature Single Output



### Features

- Universal AC input / Full range
- Installed on DIN rail TS35 / 7.5 or 15
- Protections: Short circuit / Overload / Over voltage
- No load power consumption <0.75W (<1W for MDR-100)
- LED indicator for power on
- NEC class 2 / LPS compliant (selected models)
- Built-in active PFC and over temp. protection (MDR-100)
- DC OK signal output (MDR-10/20)
- DC OK relay contact (MDR-40/60/100)
- Cooling by free air convection
- 100% full load burn-in test
- 3 years warranty

### General Specification (Please refer to [www.meanwell.com](http://www.meanwell.com) for detail spec.)

Model No.	MDR-10	MDR-20	MDR-40	MDR-60	MDR-100
AC input voltage range	85~264VAC, 120~370VDC				
AC inrush current	Cold start, 35A at 115VAC, 70A at 230VAC	Cold start, 20A at 115VAC, 40A at 230VAC	Cold start, 30A at 115VAC, 60A at 230VAC		
DC adjustment range	Fixed	±10% rated output voltage	0~+20% rated output voltage		
Overload protection	>105% hiccup mode, auto-recovery	105%~160% constant current limiting, auto-recovery	105%~150% constant current limiting, auto-recovery		
Over voltage protection	115%~135% rated output voltage		125%~150% rated output voltage		
Setup, rise, hold up time	500ms, 30ms, 50ms at full load and 230VAC				3000ms, 50ms, 50ms
Withstand voltage	I/P-O/P:3kVAC, I/P-FG:1.5kVAC, 1minute				
Working temperature	-20~+70°C (refer to output derating curve)				-10~+60°C
DC OK signal	Open collector	Open collector	Relay contact		
Safety standards	UL508, TUV EN60950-1, UL60950-1(MDR-40/60) approved, NEC class 2 compliant (MDR-10/20, MDR-40-12/24/48, MDR-60-12/24/48, MDR-100-24/48)				
EMC standards	EN55022 class B, EN61000-3-2,-3, ENV50204, EN61000-4-2,3,4,5,6,8,11, EN61204-3, EN61000-6-2 heavy industry level (MDR-40/60/100)				
Connection	I/P: 3 poles, O/P: 3 poles screw DIN terminal		IP: 3 poles, O/P: 6 poles screw DIN terminal		
Dimension (WxHxD)(mm)	22.5x 90x 100		40x 90x 100		55x 90x 100
Packing	72pcs / 13.2kg	72pcs / 14.7kg	42pcs / 13.6kg	42pcs / 14.8kg	30pcs / 13.6kg

### MDR-10 Series



Model No.	Output	Tol.	R&N	Effi.
MDR-10-5	5V, 0~2.0A	±5%	80mV	77%
MDR-10-12	12V, 0~0.84A	±3%	120mV	81%
MDR-10-15	15V, 0~0.67A	±3%	120mV	81%
MDR-10-24	24V, 0~0.42A	±2%	150mV	84%

### MDR-20 Series



Model No.	Output	Tol.	R&N	Effi.
MDR-20-5	5V, 0~3.0A	±2%	80mV	76%
MDR-20-12	12V, 0~1.67A	±1%	120mV	80%
MDR-20-15	15V, 0~1.34A	±1%	120mV	81%
MDR-20-24	24V, 0~1.00A	±1%	150mV	84%

### MDR-40 Series



Model No.	Output	Tol.	R&N	Effi.
MDR-40-5	5V, 0~6.00A	±2%	80mV	78%
MDR-40-12	12V, 0~3.33A	±1%	120mV	86%
MDR-40-24	24V, 0~1.70A	±1%	150mV	88%
MDR-40-48	48V, 0~0.83A	±1%	200mV	88%

### MDR-60 Series



Model No.	Output	Tol.	R&N	Effi.
MDR-60-5	5V, 0~10.0A	±2%	80mV	78%
MDR-60-12	12V, 0~5.00A	±1%	120mV	86%
MDR-60-24	24V, 0~2.50A	±1%	150mV	88%
MDR-60-48	48V, 0~1.25A	±1%	200mV	87%

### MDR-100 Series



Model No.	Output	Tol.	R&N	Effi.
MDR-100-12	12V, 0~7.5A	±1%	120mV	85%
MDR-100-24	24V, 0~4.0A	±1%	150mV	86%
MDR-100-48	48V, 0~2.0A	±1%	200mV	88%



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#### To satisfy our customers is our goal —

- High Quality
- Low Cost
- Prompt Delivery
- Best Service

# DIN Series

## 15~100W Class II Single Output



### Features

- Isolation Class II
- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Over temperature protection (DR-100)
- No load power consumption < 1W (DR-100)
- No load power consumption < 0.5W (DR-15)
- Installed on DIN rail TS35 / 7.5 or 15
- Cooling by free air convection
- LED indicator for power on
- 100% full load burn-in test
- 3 years warranty
- Suitable for building automation and control of household appliance

### General Specification (Please refer to [www.meanwell.com](http://www.meanwell.com) for detail spec.)



Model No.	DR-15	DR-30	DR-60	DR-100
AC input voltage range	85~264VAC, 120~370VDC		88~264VAC, 124~370VDC	
AC inrush current (max.)	Cold start, 65A at 230VAC	Cold start, 30A at 230VAC	Cold start, 36A at 230VAC	Cold start, 45A at 230VAC
DC adjustment range	±10% rated output voltage			12V: 12~15V, 15V: 15~18V, 24V: 24~29V
Overload Protection	Range	105%~160%		105%~135%
	Type	constant current limiting, auto-recovery		
Over Voltage Protection	Range	115%~135% rated output voltage		125%~155% rated output voltage
	Type	Shut off, clamp by zener diode	Shut down, re-power on to recover	
Withstand voltage	I/P-O/P: 3kVAC			
Working temperature	-20°C~+60°C (refer to output load derating curve)			
Vibration	10~500Hz, 2G 10 min./1 cycle, period for 60 min. each along X, Y, Z axes			
Safety standards	UL60950-1, TUV60950-1 approved			
EMC standards	EN55022 class B, EN61000-3-2,3, EN61000-6-2, EN61000-4-2,3,4,5,6,8,11, ENV50204, EN61204-3			
Connection	I/P and O/P: 2 poles screw DIN terminal	I/P: 2 poles, O/P: 4 poles screw DIN terminal		
Dimension (WxHxD)(mm)	25x 93x 56	78x 93x 56	78x 93x 56	100x 93x 56
Case No.	985A	918B	918B	970A
Packing	140pcs / 15.0kg	48pcs / 14.0kg	48pcs / 15.4kg	36pcs / 13.6kg

### 15W DR-15

Model No.	Output	Tol.	R&N	Effi.
DR-15-5	5V, 0~2.40A	±2%	80mV	77.0%
DR-15-12	12V, 0~1.25A	±1%	120mV	84.0%
DR-15-15	15V, 0~1.00A	±1%	120mV	83.5%
DR-15-24	24V, 0~0.63A	±1%	150mV	85.0%

### 60W DR-60

Model No.	Output	Tol.	R&N	Effi.
DR-60-5	5V, 0~6.5A	±2%	80mV	76%
DR-60-12	12V, 0~4.5A	±1%	120mV	82%
DR-60-15	15V, 0~4.0A	±1%	120mV	83%
DR-60-24	24V, 0~2.5A	±1%	150mV	84%

### 30W DR-30

Model No.	Output	Tol.	R&N	Effi.
DR-30-5	5V, 0~3.0A	±2%	80mV	74%
DR-30-12	12V, 0~2.0A	±1%	120mV	81%
DR-30-15	15V, 0~2.0A	±1%	120mV	82%
DR-30-24	24V, 0~1.5A	±1%	150mV	83%

### 100W DR-100

Model No.	Output	Tol.	R&N	Effi.
DR-100-12	12V, 0~7.5A	±2%	120mV	87%
DR-100-15	15V, 0~6.5A	±1%	120mV	87%
DR-100-24	24V, 0~4.2A	±1%	150mV	89%



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# DIN Series

## 45~480W Single Output



### Features

- Universal AC input / Full range (DR-45/75, DRP-240)  
AC input selectable by switch (DR-120, DRP-480S)  
AC input 180~264VAC only (DRP-480)
- Built-in active PFC function, PF>0.95(DRP-240)
- Built-in passive PFC function compliance to EN61000-3-2 (480W models)
- Protections: Short circuit / Overload /  
Over voltage / Over temperature
- Cooling by free air convection
- Can be installed on DIN rail TS35 / 7.5 or 15
- UL508 (industrial control equipment) listed
- 100% full load burn-in test
- LED indicator for power on
- 3 years warranty

### General Specification (Please refer to www.meanwell.com for detail spec.)

Model No.	DR-45	DR-75	DR-120	DRP-240	DRP-480	DRP-480S
AC input voltage range	85~264VAC(DR-45/75, DRP-240); 90~132/180~264VAC selectable by switch (DR-120, DRP-480S); 180~264VAC only (DRP-480)					
AC inrush current (230VAC)	56A	Cold start, 40A at 230VAC		45A	40A	45A
DC adjustment range	±10%					
Overload protection	105%~150% constant current limiting, auto-recovery					
Over voltage protection	Range	115%~142% rated output voltage			30~36V for 24V model, 54~60V for 48V model	
	Type	Shut off, AC recycle to re-start				
Over temp. protection	Shut down output voltage, recovers automatically after temperature goes down					
Withstand voltage	I/P-O/P: 3kVAC, I/P-FG: 1.5kVAC, O/P-FG: 0.5kVAC, 1 minute					
Working temperature	-10°C~+50°C	-10°C~+60°C		-10°C~+70°C	-20°C~+70°C	
Safety standards	UL508, TUV EN60950-1 approved (UL60950-1 also for DR-120, DRP-240, DRP-480, DRP-480S)					
EMC standards	EN55022 class B, EN61000-3-2,3, ENV50204, EN61000-4-2,3,4,5,6,8,11, EN61000-6-2 heavy industry level					
Connection	I/P: 3 poles, O/P: 4 poles screw DIN terminal					
Dimension (WxHxD)(mm)	78x 93x 67	55.5x 125.2x 100		65.5x 125.2x 100	125.5x 125.2x 100	227x 125.2x 100
Case No.	918A	923	921A	922A	930	
Packing	48pcs / 16.1kg	20pcs / 13.0kg		20pcs / 16.5kg	12pcs / 15.5kg	6pcs / 15.0kg 6pcs / 16.6kg

### DR-45 Series



Model No.	Output	Tol.	R&N	Effi.
DR-4505	5V, 0~5.0A	±2%	100mV	72%
DR-4512	12V, 0~3.5A	±1%	200mV	77%
DR-4515	15V, 0~2.8A	±1%	240mV	77%
DR-4524	24V, 0~2.0A	±1%	480mV	80%

### DR-75 Series



Model No.	Output	Tol.	R&N	Effi.
DR-75-12	12V, 0~6.3A	±2%	100mV	76%
DR-75-24	24V, 0~3.2A	±1%	150mV	80%
DR-75-48	48V, 0~1.6A	±1%	240mV	81%

### DR-120 Series



Model No.	Output	Tol.	R&N	Effi.
DR-120-12	12V, 0~10A	±2%	80mV	80%
DR-120-24	24V, 0~5.0A	±1%	80mV	84%
DR-120-48	48V, 0~2.5A	±1%	100mV	85%

### DRP-240 Series



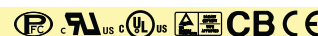
Model No.	Output	Tol.	R&N	Effi.
DRP-240-24	24V, 0~10A	±1%	80mV	84%
DRP-240-48	48V, 0~5.0A	±1%	150mV	85%

### DRP-480 Series



Model No.	Output	Tol.	R&N	Effi.
DRP-480-24	24V, 0~20A	±1%	120mV	89%
DRP-480-48	48V, 0~10A	±1%	120mV	89%

### DRP-480S Series



Model No.	Output	Tol.	R&N	Effi.
DRP-480S-24	24V, 0~20A	±1%	120mV	89%
DRP-480S-48	48V, 0~10A	±1%	120mV	89%



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### To satisfy our customers is our goal —

- High Quality
- Low Cost
- Prompt Delivery
- Best Service



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# DIN Series

120~960W High Input Voltage



## Features

- Input 340~550VAC, 3-phase (two phase for DRH-120)
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in constant current limiting circuit
- Cooling by free air convection
- Can be installed on DIN rail TS35 / 7.5 or 15
- UL508 (industrial control equipment) listed (240~960W)
- EN61000-6-2 industrial immunity level
- Optional parallel function (1+1) (960W only)
- 100% full load burn-in test
- LED indicator for power on
- 3 years warranty

## General Specification (Please refer to [www.meanwell.com](http://www.meanwell.com) for detail spec.)

Model No.	DRH-120	DRT-240	DRT-480	DRT-960
AC input voltage range	340~550VAC, two phase	340~550VAC, 3-phase (two phase operation possible)		
AC inrush current (max.)	Cold start, 50A at 400VAC			
DC adjustment range	24V: 24~28V, 48V: 48~55V			
Overload protection	Range	105%~160%	105%~150%	105%~125%
	Type	Constant current limiting, auto-recovery		
Over voltage protection	Range	24V: 30~36V, 48V: 59~66V		
	Type	Shut off, AC recycle to re-start		
Over temperature protection	Shut down output voltage, recovers automatically after temperature goes down			
Withstand voltage	I/P - O/P: 3kVAC, I/P - FG: 1.5kVAC, O/P - FG: 0.5kVAC, 1 minute			
Working temperature	-20~+60°C	-20~+70°C		-20~+60°C
Safety standards	UL60950-1 approved	UL508, UL60950-1, TUV EN60950-1 approved		
EMC standards	EN55022 class B, EN61000-3-2,3, ENV50204, EN61000-4-2,3,4,5,6,8,11, EN61204-3, EN61000-6-2 heavy industry level			
Connection (screw DIN terminal)	I/P: 3 poles, O/P: 4 poles	I/P: 4 poles, O/P: 4 poles		I/P: 4 poles, O/P: 6 poles
Dimension (WxHxD)(mm)	65.5x 125.2x 100	125.5x 125.2x 100	227x 125.2x 100	276x 125.2x 100
Case No.	921	922A	930A	934
Packing	20pcs / 16.0kg	12pcs / 16.6kg	6pcs / 16.0kg	4pcs / 14.2kg

### DRH-120 (Two Phase)



Model No.	Output	Tol.	R&N	Effi.
DRH-120-24	24V, 0~5.0A	±1%	80mV	85%
DRH-120-48	48V, 0~2.5A	±1%	80mV	86%

### DRT-480 (Three Phase)



Model No.	Output	Tol.	R&N	Effi.
DRT-480-24	24V, 0~20A	±1%	80mV	89%
DRT-480-48	48V, 0~10A	±1%	80mV	90%

### DRT-240 (Three Phase)



Model No.	Output	Tol.	R&N	Effi.
DRT-240-24	24V, 0~10A	±1%	80mV	89%
DRT-240-48	48V, 0~5.0A	±1%	80mV	89%

### DRT-960 (Three Phase)



Model No.	Output	Tol.	R&N	Effi.
DRT-960-24	24V, 0~40A	±1%	80mV	91%
DRT-960-48	48V, 0~20A	±1%	80mV	92%



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# DIN Series

120~480W Wide Input Range



## Features

- Single and two phase wide input range 180~550VAC
- Built-in active PFC (WDR-240/480)
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Built-in constant current limiting circuit
- Can be installed on DIN rail TS-35/7.5 or 15
- UL508(industrial control equipment) approved
- EN61000-6-2(EN50082-2) industrial immunity level
- Built-in DC OK relay contact
- 100% full load burn-in test
- 3 years warranty

## General Specification (Please refer to [www.meanwell.com](http://www.meanwell.com) for detail spec.)



Model No.	WDR-120 <b>NEW</b>	WDR-240 <b>NEW</b>	WDR-480 <b>NEW</b>
AC input voltage range	180~550VAC(single and two phase); 254~780VDC		
AC input current	0.55A / 400VAC, 1.2A / 230VAC	1A / 400VAC, 2A / 230VAC	1.6A / 400VAC, 4A / 230VAC
AC inrush current (max.)	Cold start, 50A at 400VAC		
DC adjustment range	12V: 12~15V, 24V: 24~29V, 48V: 48~58V	24V: 24~28V, 48V: 48~55V	
Overload protection	105%~130% rated output voltage, constant current limiting, auto-recovery		
Over voltage protection	Range	16~18V for 12V model (only for WDR-120), 31~37V for 24V model, 60~67V for 48V model	
	Type	Shut down o/p voltage, auto-recovery	
Setup, rise, hold up time	2000ms, 70ms, 10ms at full load and 230VAC	2000ms, 150ms, 16ms at full load and 230VAC	
Over temperature protection	Range	100°C±5°C (TSW1 : detect on heatsink of power switch)	95°C±5°C
	Type	Shut down output voltage, recovers automatically after temperature goes down	
Withstand voltage	I/P-O/P:3kVAC I/P-FG:1.5kVAC O/P-FG:0.5kVAC		
Isolation resistance	100MΩ(min.)@500VDC		
Working temperature	-25~+70°C (Refer to output derating curve)	-30°C~+70°C (Refer to output derating curve)	
DC OK signal	Relay Contact		
Leakage current	<3.5mA at 530VAC		
Vibration	10~500Hz, 2G, 10 minutes / 1 cycle, period of 60 minutes each along X, Y, Z axes		
Safety standards	UL508 approved (240W pending)		
EMC standards	Compliance to EN55011(CISPR11), EN55022 Class B, EN61000-4-2,3,4,5,6,8,11, ENV50204, EN61000-6-2 (EN50082-2), EN61204-3, heavy industry level		
Connection	I/P: 3 poles, O/P: 4 poles screw DIN terminal	I/P: 3 poles, O/P: 6 poles screw DIN terminal	
Dimension (WxHxD)(mm)	40x 125.2x 113.5	63x 125.2x 113.5	85.5x 125.2x 128.5
Packing	20pcs / 14kg	12pcs / 13.4kg	8pcs / 14.6kg

### 120W **NEW** WDR-120

Model No.	Output	Tol.	R&N	Effi.
WDR-120-12	12V, 0~10A	±1.5%	120mV	89.5%
WDR-120-24	24V, 0~5A	±1.0%	120mV	91.0%
WDR-120-48	48V, 0~2.5A	±1.0%	150mV	92.0%

### 240W **NEW** WDR-240

Model No.	Output	Tol.	R&N	Effi.
WDR-240-24	24V, 0~10A	±1.0%	100mV	91%
WDR-240-48	48V, 0~5A	±1.0%	120mV	91%

### 480W **NEW** WDR-480

Model No.	Output	Tol.	R&N	Effi.
WDR-480-24	24V, 0~20A	±1.0%	100mV	92%
WDR-480-48	48V, 0~10A	±1.0%	150mV	93%



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- High Quality
- Low Cost
- Prompt Delivery
- Best Service

# DIN Series

120~480W Slim and High Efficiency



## Features

- High efficiency up to 94% (SDR-240/480)
- Universal AC input / Full range
- Built-in active PFC function, PF>0.93
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or 15
- UL508(industrial control equipment) approved
- EN61000-6-2(EN50082-2) industrial immunity level
- Built-in DC OK relay contact
- 150% peak load capability
- Comply with GL and SEMI F47
- **Current sharing (7+1) for SDR-480P**
- 3 years warranty

## General Specification (Please refer to www.meanwell.com for detail spec.)



Model No.	SDR-120	SDR-240	SDR-480
AC input voltage range	88~264VAC; 124~370VDC		90~264VAC; 127~370VDC
AC inrush current (max.)	Cold start, 70A at 230VAC	Cold start, 65A at 230VAC	Cold start, 80A at 230VAC
DC adjustment range	12V: 12~14V (only for SDR-120), 24V: 24~28V, 48V: 48~55V		
Overload protection	Normally works within 110 ~ 150% rated output power for 3 seconds and then shut down output voltage with auto-recovery >150% rated power or short circuit, constant current limiting with auto-recovery within 2 seconds and may cause to shut down if over 2 seconds		
Over voltage protection	Range	14~17V for 12V model(SDR-120 only), 29~33V for 24V model, 56~65V for 48V model	
	Type	Shut down o/p voltage, re-power on to recover	Shut down o/p voltage with auto-recovery
Over temperature protection	Range	95°C±5°C (TSW : detect on heatsink of power switch)	105°C±5°C (TSW : detect on heatsink of power switch)
	Type	Shut down output voltage, recovers automatically after temperature goes down	
Withstand voltage	I/P-O/P:3kVAC I/P-FG:1.5kVAC O/P-FG:0.5kVAC O/P-DC OK:0.5kVAC		
Working temperature	-25~+70°C (Refer to output derating curve)		
Safety standards	UL508, TUV EN60950-1, GL approved		
EMC standards	Compliance to EN55022 Class B, EN61000-4-2,3,4,5,6,8,11, ENV50204, EN61000-6-2 (EN50082-2), EN61204-3, heavy industry level, SEMI F47, GL		
Connection	I/P: 3 poles, O/P: 4 poles screw DIN terminal	I/P: 3 poles, O/P: 6 poles screw DIN terminal	I/P: 3 poles, O/P: 8 poles screw DIN terminal
Dimension (WxHxD)(mm)	40x 125.2x 113.5	63x 125.2x 113.5	85.5x 125.2x 128.5

### 120W SDR-120

Model No.	Output	Tol.	R&N	Effi.
SDR-120-12	12V, 0~10A	±1.0%	100mV	89.0%
SDR-120-24	24V, 0~ 5A	±1.0%	100mV	91.0%
SDR-120-48	48V, 0~2.5A	±1.0%	120mV	90.5%

### 240W SDR-240

Model No.	Output	Tol.	R&N	Effi.
SDR-240-24	24V, 0~10A	±1.0%	100mV	94.0%
SDR-240-48	48V, 0~5A	±1.0%	120mV	94.0%

### 480W SDR-480

Model No.	Output	Tol.	R&N	Effi.
SDR-480 □-24	24V, 0~20A	±1.2%	100mV	94.0%
SDR-480 □-48	48V, 0~10A	±1.0%	120mV	94.0%

□ =blank, P ; Blank: basic function, P: with parallel function

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## Feature Description

SDR family is our new slim DIN rail product series targeting at the growing demand of high performance DIN rail power supply in the market. Featuring up to 94% of extreme high efficiency, they can provide 120W, 240W, or 480W continuously and 150% peak power for 3 seconds up to 60°C by only free air convection. The slim design of 40mm(SDR-120) / 63mm(SDR-240) / 85.5mm(SDR-480) in width helps save the precious space on the rail and also makes it 30.7%, 43% and 51.6% smaller in size compare to its predecessor model. To fulfill the requirements of marine and semi-conductor related usage, the SDR family complies with GL and SEMI F47 norms in addition to UL, CUL, TUV, and CE certificates.

# DIN Series

## Peripheral Module



### 20A Power Supply Redundant Module



- Suitable for redundant operation of 24V system
- Installed on DIN rail TS35 / 7.5 or 15
- Relay contact signal output and LED indicator for input failure alarm
- Cooling by free air convection
- 3 years warranty

CASE: 923C 55.5x 125.2x 100 mm

DC input voltage range ..... 21~28V, 20A max. x 2 channels  
 Reverse voltage ..... 30V  
 DC output current ..... 20A max.  
 DC output voltage drop ..... 0.5V max.  
 Input voltage alarm ..... When input is > 20V(±5%) or <30V(±5%),  
 relay contacts  
 Relay contact rating ..... 30VDC, 1A  
 Working temperature ..... -20~+70°C  
 EMC standards ..... EN55022 class B, EN61000-4-2,3,4,5,6,8,  
 ENV50204  
 Connection ..... I/P: 4 poles, O/P: 2 poles screw DIN terminal,  
 Single output: 4 poles  
 Packing ..... 0.5Kg ; 20pcs / 11Kg / 1.29CUFT

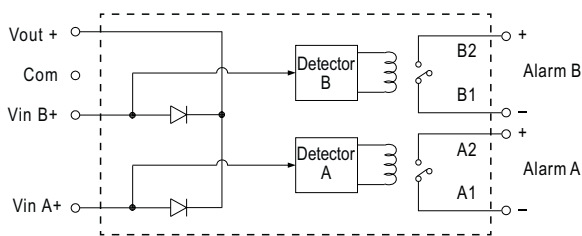
Model No.	Output	Reverse Voltage	Current
DR-RDN20	24V, 20A	30V max.	20A max.

#### ► Feature Description

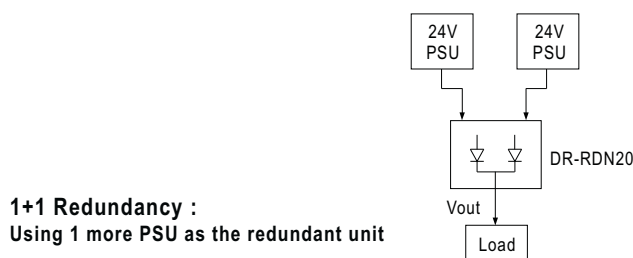
**DR-RDN-20** is a 20A redundancy (decoupling) module for the 24Vdc power system. Containing 2 sets of 20A Or-ing diodes with wonderful heat dissipation deployment, DR-RDN20 offers a safe option of 1+1 redundant set-up. Not only perfectly decouple power sources from each other as well as from the load, DR-RDN-20 also provides users monitoring signals for both input channels through the built-in relays.

**DR-UPS40** is a 40A max. DC UPS (battery control) module for the 24Vdc power system. Accompany with external batteries, it can back-up up to 40A of current to critical loads for certain period of time depending on the capacity of batteries. With complete monitoring signals / LED indicators for DC BUS OK, Battery Fail, Battery Discharge, and the repeated Battery Test function to check the situation of external batteries, users can customize their own DC UPS system to back up critical loads and capture the status of the whole system easily.

#### Block Diagram



#### Example of Application



### 40A DC UPS Module



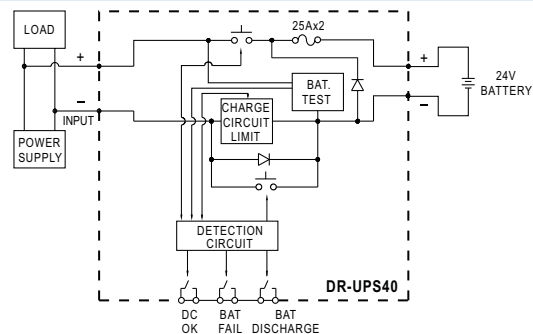
- Battery controller for DIN rail UPS system
- Parallel connected to DC BUS
- Suitable for 24V system up to 40A
- Installed on DIN Rail TS35 / 7.5 or 15
- Built-in battery test function
- Battery polarity protection
- Relay contact signal output and LED indicator for DC BUS OK, Battery Fail, and Battery Discharge
- Cooling by free air convection
- 3 years warranty

CASE: 923D 55.5x 125.2x 100 mm

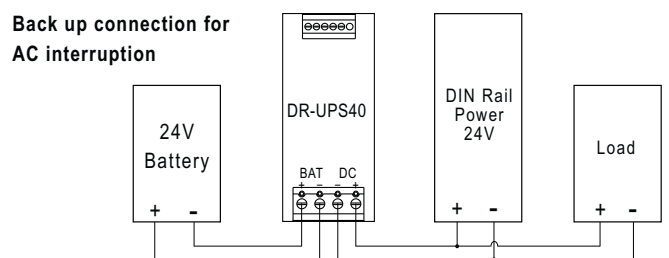
DC input / DC bus ..... 24~29V, 40A max.  
 Battery input voltage ..... 21~29V  
 Battery input Current ..... 0~40A  
 Charge current (typ.) ..... 2A  
 External battery (typ.) ..... 24V, 4AH / 7AH / 12AH  
 DC bus ok ..... Relay status : Short when DC voltage between  
 21~29V(±3%), relay contacts  
 LED(Green) : DC bus OK : light;  
 DC bus fail : dark  
 Battery fail ..... Relay status : Short when battery failure is  
 observed through the battery  
 test function, relay contacts  
 LED(Red) : Battery over-discharge warning or  
 battery broken: light;  
 Battery OK: dark  
 Battery discharge ..... Relay status : Short when battery in discharge  
 condition, relay contacts  
 LED(Yellow) : Battery discharging: light;  
 Battery is not discharging or  
 discharging current <2A: dark  
 Working temperature ..... -20~+70°C  
 EMC standards ..... EN55022 class B, EN61000-4-2,3,4,5,6,8,  
 ENV50204  
 Connection ..... I/P: 2 poles, O/P: 2 poles screw DIN terminal,  
 Single output: 6 poles  
 Packing ..... 0.55Kg ; 20pcs / 12Kg / 1.29CUFT

Model No.	DC BUS Voltage	DC BUS Current
DR-UPS40	24~29V	40A max.

#### Block Diagram

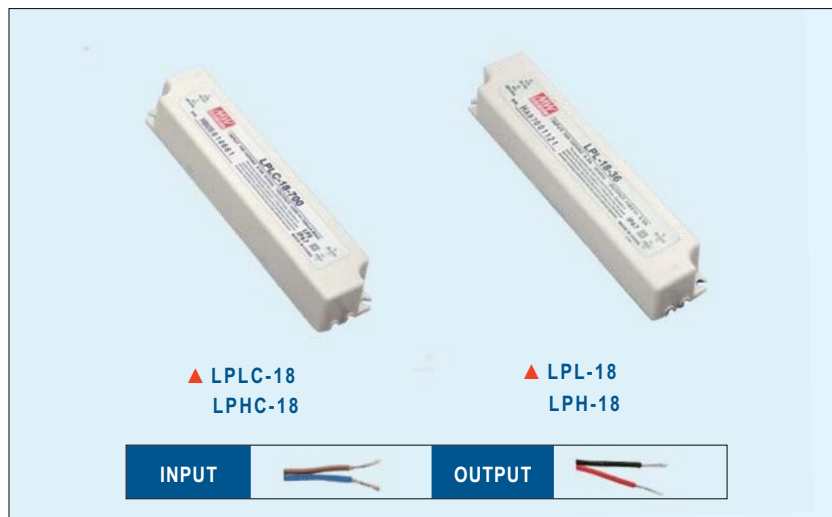


#### Example of Application



# LED Series

## 18W Single Output Class 2 Power Unit



### Features

- 180~264VAC input only (LPH-18 / LPHC-18)
- 90~132VAC input only (LPL-18 / LPLC-18)
- Fully encapsulated with IP67 level
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Constant voltage design (LPL-18 / LPH-18)
- Constant current design (LPLC-18 / LPHC-18)
- Isolation class II, no F.G.
- Cooling by free air convection
- Pass LPS
- 100% full load burn-in test
- Low cost, high reliability
- Suitable for LED-based decorative / architectural lighting, LED stage and theater lighting
- 2 years warranty

### General Specification (Please refer to www.meanwell.com for detail spec.)

Model No.	LPLC-18	LPHC-18	LPL-18	LPH-18
AC input voltage range	90~132VAC	180~264VAC	90~132VAC	180~264VAC
AC inrush current (max.)	Cold start, 40A at 115VAC	Cold start, 50A at 230VAC	Cold start, 40A at 115VAC	Cold start, 50A at 230VAC
Overload Protection	Range	±5% rated output current		>105% rated output current
	Type	Constant current limiting, auto-recovery		Hiccup mode, auto-recovery
Over voltage protection	105%~135% rated output voltage		115%~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 class 2, CAN/CSA-C22.2 No. 223-M91, EN61347-2-13; TUV EN60950-1 approved (LPH-18)			
EMC standards	FCC part15 class A (LPLC-18 only), EN55022 class A, EN61000-3-2 class A, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, ENV50204		FCC part15 class B (LPL-18 only), EN55022 class B, EN61000-3-2 class A, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, ENV50204	
	Connection	UL rated, 18AWGx2C (30cm)		
Dimension (LxWxH)(mm)	140x 30x 22			
Packing	0.175kg; 70pcs / 13.3kg			

### LPLC-18 Series (C.C. mode) FCC CE (LVD)

Model No.	Output	Tol.	R&N	Effi.
LPLC-18-350	6~48V, 350mA	±5%	300mV	82%
LPLC-18-700	6~25V, 700mA	±5%	250mV	80%

### LPHC-18 Series (C.C. mode) CE

Model No.	Output	Tol.	R&N	Effi.
LPHC-18-350	6~48V, 350mA	±5%	300mV	80%
LPHC-18-700	6~25V, 700mA	±5%	250mV	80%

### LPL-18 Series (C.V. mode) FCC CE (LVD)

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

### LPH-18 Series (C.V. mode) CE

Model No.	Output	Tol.	R&N	Effi.
LPH-18-12	12V, 0~1.5A	±3%	120mV	78%
LPH-18-24	24V, 0~0.75A	±3%	150mV	82%
LPH-18-36	36V, 0~0.5A	±3%	200mV	83%

## 12W Single Output LED Power Supply

Under Development

- Universal AC input / Full range
- Constant voltage design (APV-12)
- Constant current design (APC-12)
- Fully isolated plastic case
- Cooling by free air convection
- Small and compact size
- Low cost
- Output models: 350mA / 700mA (LPC-12)  
5V / 12V / 15V / 24V (LPV-12)
- Dimension(LxWxH): 77x 40x 27mm
- 2 years warranty

# LED Series

## 20~100W Single Output Class 2 Power Unit



### Features

- Universal AC input / Full range
- Fully encapsulated with IP67 level
- Protections: Short circuit / Overload / Over voltage
- **Constant voltage design**
- Withstand 300VAC surge input for 5 seconds
- Isolation class II, no F.G.
- Cooling by free air convection
- UL1310 Class 2 power unit (except for LPV-100)
- Pass LPS (except for LPV-100)
- 100% full load burn-in test
- Low cost, high reliability
- Suitable for LED-based decorative / architectural lighting, LED stage and theater lighting
- 2 years warranty

### General Specification (Please refer to [www.meanwell.com](http://www.meanwell.com) for detail spec.)

Model No.	LPV-20	LPV-35	LPV-60	LPV-100 <b>NEW</b>
AC input voltage range	90~264VAC			
AC inrush current (max.)	Cold start, 70A at 230VAC		Cold start, 60A at 230VAC	
Overload	Range: 110%~150%			
Protection	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~+75°C	-30~+70°C	-25~+70°C
Vibration	10~500Hz, 2G 10 minutes /1 cycle, period for 60 minutes each along X, Y, Z axes			
Safety standards	UL1310 class 2 (except for LPV-60-5 & LPV-100), CAN/CSA-C22.2 No. 223-M91 (except for LPV-60-5. LPV-60-48 & LPV-100), UL879 (LPV-20 only) approved; Design refer to TUV EN60950-1, EN61347-2-13			
EMC standards	EN55022 class B, EN61000-3-2 class A, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, ENV50204			
Connection	Input	UL rated, 18AWGx2C (60cm)		18AWGx2C (30cm)
	Output	UL rated, 16AWGx2C (60cm)		14AWGx2C (30cm)
Dimension (LxWxH)(mm)	118x 35x 26	148x 40x 30	162.5x 42.5x 32	190x 52x 37

### LPV-20 Series (C.V. mode)



Model No.	Output	Tol.	R&N	Effi.
LPV-20-5	5V, 0~3.0A	±5%	80mV	77%
LPV-20-12	12V, 0~1.67A	±5%	120mV	81%
LPV-20-15	15V, 0~1.33A	±5%	120mV	83%
LPV-20-24	24V, 0~0.84A	±5%	150mV	83%

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



Model No.	Output	Tol.	R&N	Effi.
LPV-60-5	5V, 0~8.00A	±8%	80mV	76%
LPV-60-12	12V, 0~5.00A	±5%	120mV	83%
LPV-60-15	15V, 0~4.00A	±5%	120mV	83%
LPV-60-24	24V, 0~2.50A	±5%	150mV	86%
LPV-60-36	36V, 0~1.67A	±5%	150mV	86%
LPV-60-48	48V, 0~1.25A	±5%	150mV	86%

### LPV-35 Series (C.V. mode)



Model No.	Output	Tol.	R&N	Effi.
LPV-35-5	5V, 0~5.0A (Peak 6A)	±6%	80mV	77%
LPV-35-12	12V, 0~3.0A	±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, 0~1.0A	±5%	150mV	85%

### LPV-100 Series (C.V. mode)



Model No.	Output	Tol.	R&N	Effi.
LPV-100-5	5V, 0~12.0A	±8%	80mV	78%
LPV-100-12	12V, 0~8.5A	±5%	120mV	84%
LPV-100-15	15V, 0~6.7A	±5%	120mV	85%
LPV-100-24	24V, 0~4.2A	±5%	150mV	86%
LPV-100-36	36V, 0~2.8A	±5%	150mV	87%
LPV-100-48	48V, 0~2.1A	±5%	150mV	88%



We are a TQM (Total Quality Management) company and ISO-9001 certified since 1994.

# LED Series

## 20~60W Single Output Class 2 Power Unit



### Features

- Universal AC input / Full range
- Fully encapsulated with IP67 level
- Protections: Short circuit / Overload / Over voltage
- **Constant current design**
- Withstand 300VAC surge input for 5 seconds
- Isolation class II, no F.G.
- Cooling by free air convection
- UL1310 Class 2 Power Unit
- Pass LPS
- 100% full load burn-in test
- Low cost, high reliability
- Suitable for LED-based decorative / architectural lighting, LED stage and theater lighting, and LED electronic displays
- 2 years warranty

### General Specification (Please refer to [www.meanwell.com](http://www.meanwell.com) for detail spec.)

Model No.	LPC-20	LPC-35	LPC-60
AC input voltage range	90~264VAC		
AC inrush current (max.)	Cold start, 70A at 230VAC	Cold start, 60A at 230VAC	
Overload	±5% rated output current		
Protection	Constant current limiting, auto-recovery		
Over voltage protection	115%~135% rated output voltage		
Withstand voltage	I/P-O/P: 3kVAC		
Working temperature	-30~+70°C	-30~+75°C	-30~+70°C
Vibration	10~500Hz, 2G 10 minutes /1 cycle, period for 60 minutes each along X, Y, Z axes		
Safety standards	UL1310 class 2, CAN/CSA-C22.2 NO. 223-M91(except for LPC-20-350, LPC-35-700, LPC-60-1050/1400), UL879 (LPC-20 only) approved; design refer to TUV EN60950-1, EN61347-2-13		
EMC standards	EN55022 class B, EN61000-3-2 class A, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, ENV50204		
Connection	Input	UL rated, 18AWGx2C (60cm)	
	Output	UL rated, 18AWGx2C (60cm)	UL rated, 16AWGx2C (60cm)
Dimension (LxWxH)(mm)	118x 35x 26	148x 40x 30	162.5x 42.5x 32
Packing	0.22kg ; 60pcs / 14.2kg	0.34kg ; 40pcs / 14.6kg	0.4kg ; 32pcs / 13.8kg

### LPC-20 Series (C.C. mode)



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

### LPC-35 Series (C.C. mode)



Model No.	Output	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%

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



Model No.	Output	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%



#### Products

- One Stop Shopping
- Total Solution

## 40W/60W Single Output AC Dimmable LED Power Supply

Under Development

- 115VAC(90~135VAC) or 230VAC(180~295VAC) input
- Built-in active PFC function
- Constant current design
- Work with leading edge and trailing edge dimmers
- Fully isolated plastic case
- Class II design, without FG
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Output models: 350mA / 700mA / 1050mA / 1400mA
- Dimension(LxWxH): 100x 60x 31.5mm
- 3 years warranty

# LED Series

## 16~60W Single Output



### 30W, 60W Single Output Class 2 Power Unit

- 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 / Overload / Over voltage
- Optional dimming function: 1.1~10VDC(D type) or PWM(P type) controlled
- UL1310 Class 2 power unit
- Pass LPS
- Cooling by free air convection
- Suitable for LED related and moving sign applications
- 2 years warranty



AC input voltage range ..... 90~264VAC, 127~370VDC  
 AC inrush current ..... Cold start, 60A at 230VAC  
 DC adjustment range .....  $\pm 10\%$  rated output voltage  
 Current adjustment range ..... 75%~103% rated output current adjustable by internal potential meter  
 Overload protection ..... 95% ~110% constant current, auto-recovery  
 Over voltage protection ..... 110%~150% shut off, re-power on to recovery  
 Setup, rise time ..... 500ms at full load and 230VAC  
 Withstand voltage ..... I/P - O/P: 3kVAC  
 Working temperature ..... -20°C~+60°C (refer to output derating curve)  
 Safety standards ..... UL1310 Class 2, CAN/CSA-C22.2 No. 223-M91 (except for 48V) approved; design refer to TUV EN60950-1, EN61347-2-13  
 EMC standards ..... EN55022 class B, EN61000-3-2 Class A, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, ENV50204  
 Packing ..... 0.26kg ; 60pcs / 16.6kg / 1.25CUFT(ELN-30)  
 0.4kg ; 24pcs / 11.0kg / 0.75CUFT (ELN-60)

#### ◆ ELN-30 series

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

#### ◆ ELN-60 series

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

### 16W, 25W Single Output AC Dimmable Power Unit

- 115VAC(90~135VAC) or 230VAC(180~295VAC) input
- Built-in active PFC function
- Constant current design
- Fully isolated plastic case
- Class II design, without FG
- Work with leading edge and trailing edge dimmers
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- 3 years warranty



AC input voltage range ..... 115VAC (90~135VAC) or 230VAC (180~295VAC)  
 AC inrush current ..... Cold start, 40A at 230VAC  
 DC adjustment range .....  $\pm 10\%$  rated output voltage  
 Overload protection ..... 95% ~110% constant current, auto-recovery  
 Over voltage protection ..... 105%~135% shut off, re-power on to recovery  
 Withstand voltage ..... I/P - O/P: 3.75kVAC  
 Working temperature ..... -30°C~+60°C (refer to output derating curve)  
 Safety standards ..... TUV EN61347-1, EN61347-2-13, UL8750 approved  
 EMC standards ..... A Type: FCC part 18  
 B Type: EN55015 class B, EN61000-3-2 Class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, ENV50204, EN61547

#### ◆ PCD-16 series

Model No.	Output	Tol.	R&N	Effi.
PCD-16-350 <input type="checkbox"/>	24~48V, 350mA	$\pm 10\%$	4.6V	82.0%
PCD-16-700 <input type="checkbox"/>	16~24V, 700mA	$\pm 10\%$	2.7V	81.0%
PCD-16-1050 <input type="checkbox"/>	12~16V, 1050mA	$\pm 10\%$	2.2V	80.5%
PCD-16-1400 <input type="checkbox"/>	8~12V, 1400mA	$\pm 10\%$	2.0V	80.0%

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

#### ◆ PCD-25 series

Model No.	Output	Tol.	R&N	Effi.
PCD-25-350 <input type="checkbox"/>	40~58V, 350mA	$\pm 10\%$	4.6V	82.0%
PCD-25-700 <input type="checkbox"/>	24~36V, 700mA	$\pm 10\%$	2.7V	81.0%
PCD-25-1050 <input type="checkbox"/>	16~24V, 1050mA	$\pm 10\%$	2.2V	80.5%
PCD-25-1400 <input type="checkbox"/>	12~18V, 1400mA	$\pm 10\%$	2.0V	80.0%

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

### 25W Single Output LED Power Supply

Under Development

- AC input range: 90~295VAC
- Built-in active PFC function
- Constant current design
- Fully isolated plastic case
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Output models: 350mA / 700mA / 1050mA / 1400mA
- Dimension(LxWxH): 84x 57x 29.5mm
- 3 years warranty

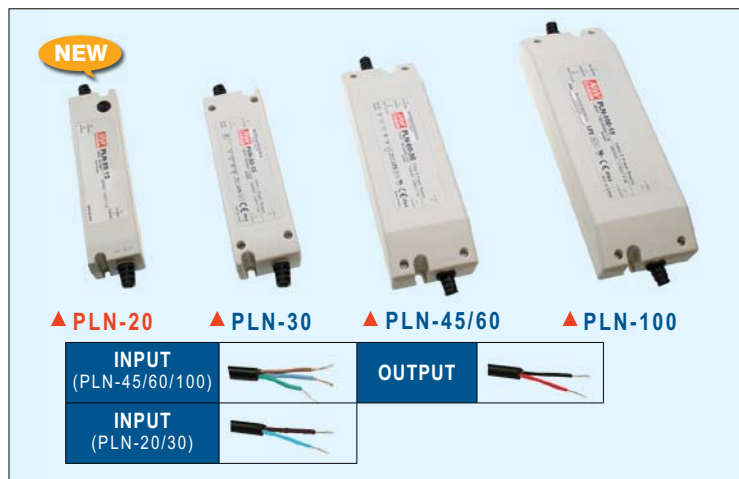


We provide specification, drawing, test report and more information, please visit our website —

<http://www.meanwell.com>

# LED Series

20~96W Single Output Class 2 with PFC



## Features

- Universal AC input (up to 295VAC) / Full range
- Fully isolated plastic case with IP64 level
- Built-in active PFC function, PF>0.9 for 75% of load or higher
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in constant current limiting circuit
- User adjustable output voltage (except for PLN-20) and constant current level
- UL1310 Class 2 power unit
- Pass LPS
- Cooling by free air convection
- 100% full load burn-in test
- Suitable for LED lighting and moving sign applications
- 2 years warranty

## General Specification (Please refer to www.meanwell.com for detail spec.)

Model No.	PLN-20 <span style="color:orange">NEW</span>	PLN-30	PLN-45	PLN-60	PLN-100
AC input voltage range	90~277VAC	90~295VAC; 127~417VDC			
AC inrush current (max.)	Cold start, 40A at 230VAC				
DC adjustment range	None	95%~108% rated output voltage adjustable by internal potential meter			85%~100% rated output voltage
Current adjustment range	75%~100%	75%~103% rated output current adjustable by internal potential meter			
Overload 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, rise, hold up time	2300ms(setup time) at full load and 230VAC, no hold up time	1500ms (setup time) at full load and 230VAC, no hold up time			1200ms, 80ms, 60ms at full load and 230VAC
Withstand voltage	I/P-O/P: 3.75kVAC				
Working temperature	-30~+60°C	-30~+50°C (refer to output derating curve)			
Safety standards	UL1310 Class 2, CAN/CSA-C22.2 No.223-M91 (except for 48V & PLN-20), EN61347-1, EN61347-2-13, UL879 (except for PLN-20) approved ; UL8750 approved(except for PLN-30); UL60950-1 and TUV EN60950-1 approved for PLN-100 only				
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, ENV50204, EN61547				
Connection	Input	UL rated, 18AWGx2C (32cm)		UL rated, 18AWGx3C (30cm)	UL rated, 18AWGx3C (31cm)
	Output			UL rated, 18AWGx2C (30cm)	UL rated, 18AWGx2C (31cm)
Dimension (LxWxH)(mm)	147x 37x 28	145x 47x 30	181x 61.5x 35		200x 70.5x 35
Packing	60pcs / 12.8kg	60pcs / 14.2kg	24pcs / 13.0kg		20pcs / 12.5kg

## PLN-20 Series NEW

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, 0~5.00A	±3%	150mV	84.5%
PLN-100-15	15V, 0~5.00A	±3%	150mV	86.5%
PLN-100-20	20V, 0~4.80A	±3%	150mV	90.0%
PLN-100-24	24V, 0~4.00A	±3%	150mV	90.0%
PLN-100-27	27V, 0~3.55A	±3%	150mV	90.0%
PLN-100-36	36V, 0~2.65A	±2%	150mV	90.0%
PLN-100-48	48V, 0~2.00A	±2%	200mV	89.0%

# LED Series

30~96W Single Output Class 2 with PFC



▲ PLC-30

▲ PLC-45/60

▲ PLC-100

## Features

- Universal AC input / Full range
- Fully isolated plastic case with screw terminal style of I/O
- Built-in constant current limiting circuit
- Adjustable output voltage and current level
- Built-in active PFC function, PF>0.9 for 75% of load or higher
- Cooling by free air convection
- UL1310 Class 2 power unit
- Pass LPS
- Protections: Short circuit / Overload / Over voltage / Over temperature
- 100% full load burn-in test
- Suitable for LED lighting and moving sign applications
- 2 years warranty

## General Specification (Please refer to [www.meanwell.com](http://www.meanwell.com) for detail spec.)



Model No.	PLC-30	PLC-45	PLC-60	PLC-100
AC input voltage range	90~264VAC; 127~370VDC			
AC inrush current (max.)	Cold start, 40A at 230VAC			
DC adjustment range	95%~108% rated output voltage adjustable by internal potential meter			85%~100% rated output voltage
Current adjustment range	75%~103% rated output current adjustable by internal potential meter			75%~100% rated output voltage
Overload 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	1500ms at full load and 230VAC			1200ms at full load and 230VAC
Withstand voltage	I/P-O/P: 3.75kVAC			
Working temperature	-30~+50°C (refer to output derating curve)			
Safety standards	UL1310 Class 2, CAN/CSA-C22.2 No.223-M91 (except for 48V), EN61347-1, EN61347-2-13 approved; UL60950-1, TUV EN60950-1 approved for PLC-100 only			
EMC standards	EN55015, EN55022 class B (PLC-45/60/100), EN61000-3-2 class C, EN61000-4-2,3,4,5,6,8,11, ENV50204, EN61547			
Connection (Input / Output)	2+2P screw terminal block		3+2P screw terminal block	
Dimension (LxWxH)(mm)	160x 46x 30		181.5x 62x 35	
Packing	0.2kg ; 70pcs / 15kg / 0.96CUFT		0.41kg ; 30pcs / 13.3kg / 0.67CUFT	
			0.52kg ; 25pcs / 14.0kg / 0.65CUFT	

### 30W PLC-30

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%

### 60W PLC-60

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%

### 45W PLC-45

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%

### 96W PLC-100

Model No.	Output	Tol.	R&N	Effi.
PLC-100-12	12V, 0~5.00A	±3%	150mV	84.5%
PLC-100-15	15V, 0~5.00A	±3%	150mV	86.5%
PLC-100-20	20V, 0~4.80A	±3%	150mV	90.0%
PLC-100-24	24V, 0~4.00A	±3%	150mV	90.0%
PLC-100-27	27V, 0~3.55A	±3%	150mV	90.0%
PLC-100-36	36V, 0~2.65A	±2%	150mV	90.0%
PLC-100-48	48V, 0~2.00A	±2%	200mV	89.0%

# LED Series

## 40~80W Single Output with PFC



### 40W, 60W Single Output Class 2 with PFC

- Universal AC input (up to 305VAC)
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in active PFC function
- High efficiency up to 91%
- Fully isolated plastic case
- Built-in 3 in 1 dimming function (1~10VDC, PWM signal or resistance) for LPF-40D/60D
- Fully encapsulated with IP67 level
- Cooling by free air convection
- Suitable for LED lighting and moving sign applications
- Suitable for dry, damp location
- 3 years warranty

UL / CUL / TUV / CB / CE pending



AC input voltage range ..... 90~305VAC; 127~431VDC  
 AC inrush current ..... Cold start, 75A at 230VAC  
 Overload protection ..... 95% ~108% constant current, auto-recovery  
 Over voltage protection ..... 110%~140% shut off, re-power on to recovery  
 Withstand voltage ..... I/P - O/P: 3kVAC  
 Working temperature ..... -30°C~+70°C (refer to output derating curve)  
 Setup, rise, hold up time .... 1000ms, 80ms, 12ms at full load and 230VAC  
 Safety standards ..... Design refer to UL8750, TUV EN61347-1, EN61347-2-13  
 EMC standards ..... Design refer to EN55015, EN61547, EN61000-3-2 Class C, EN61000-3-3, EN55022 Class B, EN61000-4-2,3,4,5,6,8,11, ENV50204

#### ◆ LPF-40 series

Model No.	Output	Tol.	R&N	Effi.
LPF-40□-12	12V, 0~3.34A	±2.5%	150mV	84%
LPF-40□-15	15V, 0~2.67A	±2.0%	150mV	85%
LPF-40□-20	20V, 0~2.00A	±1.0%	150mV	86%
LPF-40□-24	24V, 0~1.67A	±1.0%	150mV	87%
LPF-40□-30	30V, 0~1.34A	±1.0%	200mV	88%
LPF-40□-36	36V, 0~1.12A	±1.0%	250mV	88%
LPF-40□-42	42V, 0~0.96A	±1.0%	250mV	89%
LPF-40□-48	48V, 0~0.84A	±1.0%	250mV	90%
LPF-40□-54	54V, 0~0.76A	±1.0%	350mV	90%

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

#### ◆ LPF-60 series

Model No.	Output	Tol.	R&N	Effi.
LPF-60□-12	12V, 0~5.00A	±2.5%	150mV	86%
LPF-60□-15	15V, 0~4.00A	±2.0%	150mV	87%
LPF-60□-20	20V, 0~3.00A	±1.0%	150mV	88%
LPF-60□-24	24V, 0~2.50A	±1.0%	150mV	89%
LPF-60□-30	30V, 0~2.00A	±1.0%	200mV	90%
LPF-60□-36	36V, 0~1.67A	±1.0%	250mV	90%
LPF-60□-42	42V, 0~1.43A	±1.0%	250mV	91%
LPF-60□-48	48V, 0~1.25A	±1.0%	250mV	91%
LPF-60□-54	54V, 0~1.12A	±1.0%	350mV	91%

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

### 80W Single Output Class 2 with PFC

UL / CUL / TUV / CB / CE pending



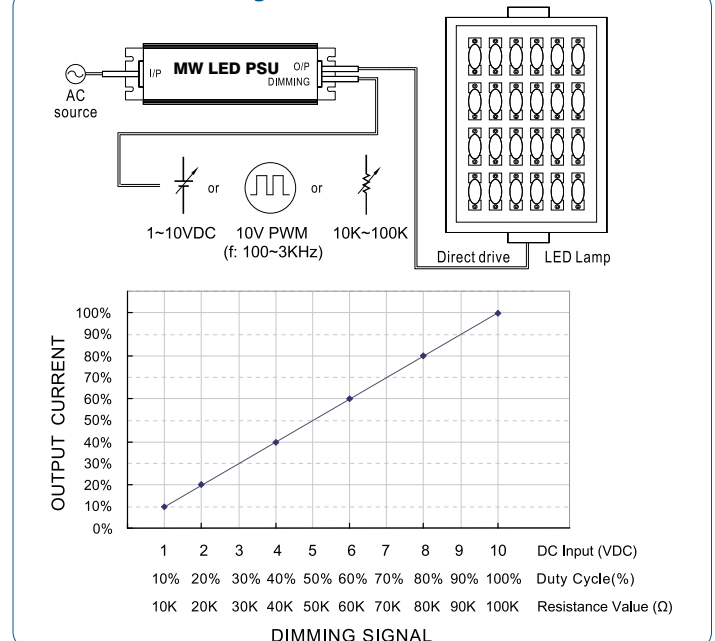
- Universal AC input (up to 305VAC)
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in active PFC function
- IP64 design
- Fully isolated plastic case
- Cooling by free air convection
- Suitable for LED lighting and moving sign applications
- Suitable for dry, damp location
- Multiple models for choice:
  - A-Type: Output and constant current level can be adjusted through internal potential meter
  - B-Type: Constant current level adjusted through output cable with 1~10VDC, PWM signal or resistance (3 in 1 dimming function)
- 3 years warranty

AC input voltage range ..... 90~305VAC; 127~431VDC  
 AC inrush current ..... Cold start, 70A at 230VAC  
 DC adjustment range ..... ±10% rated output voltage (type A only)  
 Current adjustment range.....50%~100% rated output current  
 Overload protection ..... 95%~108% constant current, auto-recovery  
 Over voltage protection ..... 115%~135% shut off, re-power on to recover  
 Setup, rise, hold up time ..... 1000ms, 80ms, 16ms at full load and 230VAC  
 Withstand voltage ..... I/P - O/P: 3.75kVAC, I/P-FG: 1.88kVAC, O/P-FG: 0.5kVAC  
 Working temperature ..... -30°C~+50°C (refer to output derating curve)  
 Safety standards ..... Design refer to TUV EN61347-2-13, UL8750  
 EMC standards ..... Design refer to EN55015, EN61000-3-2 Class C, EN61000-4-2,3,4,5,6,8,11, ENV50204, EN61547

Model No.	Output	Tol.	R&N	Effi.
HLN-80H-12 □	12V, 0~5.00A	±2.5%	150mV	88.0%
HLN-80H-15 □	15V, 0~5.00A	±2.0%	150mV	89.0%
HLN-80H-20 □	20V, 0~4.00A	±1.0%	150mV	90.5%
HLN-80H-24 □	24V, 0~3.40A	±1.0%	150mV	91.0%
HLN-80H-30 □	30V, 0~2.70A	±1.0%	200mV	91.0%
HLN-80H-36 □	36V, 0~2.30A	±1.0%	200mV	91.0%
HLN-80H-42 □	42V, 0~1.95A	±1.0%	200mV	91.0%
HLN-80H-48 □	48V, 0~1.70A	±1.0%	200mV	91.0%
HLN-80H-54 □	54V, 0~1.50A	±1.0%	200mV	91.0%

□ = A or B

#### ▶ 3 in 1 Dimming Control



To Satisfy our customers is our goal —

- High Quality
- Low Cost
- Prompt Delivery
- Best Service

# LED Series

60~150W Single Output with PFC



## Features

- Universal AC input (up to 295VAC) / Full range
- Protections: Short circuit / Overload / Over voltage / Over temp.
- Built-in active PFC function, PF>0.9 for 75% of load or higher
- IP67 / IP65 design for indoor or outdoor installations (except for C type)
- Output current adjustable through output cable or internal potential meter (CLG-150)
- UL1310 class 2 power unit (CLG-60&100)
- Cooling by free air convection
- Suitable for LED lighting and moving sign applications
- Multiple models for CLG-150
  - A-Type: IP65 rated. Output and constant current level can be adjusted through internal potential meter
  - B-Type: IP67 rated and constant current level adjustable through output cable by connecting a resistor
  - C-Type: Non IP. Terminal block for I/O connection
  - Blank-Type: IP67 rated, cable for I/O connection
- 3 years warranty



## General Specification (Please refer to www.meanwell.com for detail spec.)

Model No.	CLG-60	CLG-100	CLG-150
AC input voltage range	90~295VAC; 127~417VDC		
AC inrush current (max.)	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		A and C type can be adjusted by internal potential meter
Current adjustment range	Fixed. Can be modified between 75%~103% rated output current		Can be adjusted by internal potential meter (A and C type) or through output cable (B type)
Overload 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%	107%~135%	110%~142% rated output voltage
Setup, rise, hold up time	3000ms(setup time), no hold up time	1200ms, 80ms, 60ms at full load and 230VAC	3000ms, 80ms, 50ms at full load and 230VAC
Withstand voltage	I/P-O/P: 3.75kVAC, I/P-FG: 1.88kVAC, O/P-FG: 0.5kVAC		
Working temperature	-30~+70°C (refer to output derating curve)		
Safety standards	UL1310 Class 2, EN61347-1, EN61347-2-13; J61347-1, J61347-2-13 (option, CLG-60-20/24/27 only); CAN/CSA-C22.2 No.223-M91 (except for 48V), UL879 (SAM list), UL8750 approved; TUV EN60950-1 (CLG-100 only)		UL60950-1, UL1012, TUV EN60950-1, EN61347-1, EN61347-2-13; J61347-1, J61347-2-13(option, except for 20&24V) approved
EMC standards	EN55015, EN55022 class B, EN61000-3-2 class C, EN61000-4-2,3,4,5,6,8,11, ENV50204, EN61547		
Connection	Input	UL rated, 18AWGx3C (30cm)	
	Output	UL rated, 18AWGx2C (30cm)	UL rated, 18AWGx3C (30cm); Terminal block for C type option <input type="checkbox"/> = A & Blank type: 14AWGx2C (30cm) <input type="checkbox"/> = B type: 14AWGx2C (30cm)+18AWGx2C (30cm) <input type="checkbox"/> = 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

### 60W (Class 2) CLG-60

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%

Model No.	Output	Tol.	R&N	Effi.
★ CLG-100-24	24V, 0~4.00A	±3%	150mV	90.0%
CLG-100-27	27V, 0~3.55A	±3%	150mV	90.0%
CLG-100-36	36V, 0~2.65A	±2%	150mV	90.0%
★ CLG-100-48	48V, 0~2.00A	±2%	200mV	89.0%

### 96W (Class 2) CLG-100

Model No.	Output	Tol.	R&N	Effi.
★ CLG-100-12	12V, 0~5.00A	±3%	150mV	84.5%
CLG-100-15	15V, 0~5.00A	±3%	150mV	86.5%
CLG-100-20	20V, 0~4.80A	±3%	150mV	90.0%

### 150W CLG-150

Model No.	Output	Tol.	R&N	Effi.
★ CLG-150-12A	12V, 0~11.0A	±2%	150mV	88.0%
CLG-150-15A	15V, 0~9.50A	±2%	150mV	88.0%
CLG-150-20A	20V, 0~7.50A	±2%	150mV	90.0%
★ CLG-150-24A	24V, 0~6.30A	±1%	150mV	90.0%
CLG-150-30A	30V, 0~5.00A	±1%	150mV	91.0%
★ CLG-150-36A	36V, 0~4.20A	±1%	150mV	91.0%
★ CLG-150-48A	48V, 0~3.20A	±1%	200mV	92.0%

= A, B, C or blank

★ 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.

Connector Size	Pin Configuration (Female)			Connector Size	Pin Configuration (Female)
M12				M15	
	2-pin	4-pin	5-pin		2-pin
	5A/PIN	5A/PIN	5A/PIN		12A / PIN
Order No.	M12-02	M12-04	M12-05	Order No.	M15-02
Suitable Current	5A max.	10A max.	10A max.	Suitable Current	12A max.

▶ The output cable can be modified to include different waterproof connectors by MEAN WELL. Minimum order quantity may vary for different models.

# LED Series

60~96W Single Output with PFC



## Features

- Universal AC input (up to 295VAC)
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in active PFC function, PF>0.9 for 75% of load or higher
- IP66 design
- Cooling by free air convection
- Suitable for LED lighting and moving sign applications
- Suitable for dry, damp, wet location and outdoor applications
- 3 years warranty

## General Specification (Please refer to www.meanwell.com for detail spec.)



Model No.	CEN-60	CEN-75	CEN-100
AC input voltage range	90~295VAC; 127~417VDC		
AC inrush current (max.)	Cold start, 45A at 230VAC		Cold start, 60A at 230VAC
DC adjustment range	±10% rated output voltage		
Current adjustment range	75%~100% rated output current		
Overload protection	95%~110% constant current, auto-recovery		
Over voltage protection	110%~140%		110%~135% rated output voltage
Setup, rise, hold up time	1400ms(setup time) at full load and 230VAC, <b>no hold up time</b>		3000ms(setup time) at full load and 230VAC, <b>no hold up time</b>
Withstand voltage	I/P-O/P: 3.75kVAC, I/P-FG: 1.88kVAC, O/P-FG: 0.5kVAC		
Working temperature	-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, EN61000-4-2,3,4,5,6,8,11, ENV50204, EN61547		
Packing	0.56Kg ; 24pcs / 14.4Kg / 1.11CUFT		0.6Kg; 24pcs/15.4Kg/1.11CUFT

## 60W CEN-60

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%

## 96W CEN-100

Model No.	Output	Tol.	R&N	Effi.
CEN-100-20	20V, 0~4.8A	±10%	2.0V	88%
CEN-100-24	24V, 0~4.0A	±10%	2.7V	89%
CEN-100-30	30V, 0~3.2A	±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, 0~2.0A	±10%	4.6V	91%
CEN-100-54	54V, 0~1.77A	±10%	5.0V	91%

## 75W CEN-75

Model No.	Output	Tol.	R&N	Effi.
CEN-75-15	15V, 0~5.0A	±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-75-30	30V, 0~2.5A	±10%	3.0V	90%
CEN-75-36	36V, 0~2.1A	±10%	3.6V	90%
CEN-75-42	42V, 0~1.8A	±10%	4.0V	90%
CEN-75-48	48V, 0~1.57A	±10%	4.6V	91%
CEN-75-54	54V, 0~1.4A	±10%	5.0V	91%

### 96W 347VAC High input LED Power Supply

Under Development

- AC input range: 300~480VAC
- Built-in active PFC function
- High efficiency up to 93%
- Fully encapsulated with IP65 / IP67 level
- CV+CC design
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Output models: 15V / 20V / 24V / 30V / 36V / 42V / 48V / 54V
- Dimension(LxWxH): 240x 68x 38.8mm
- 3 years warranty

# LED Series

80~120W High Efficiency with PFC



## Features

- Universal AC input / Full range (up to 305VAC)
- Protections: Short circuit / Overload / Over voltage / Over temp.
- Built-in active PFC, PF>0.9 for 50% of load or higher
- IP67 / IP65 design for indoor or outdoor installations
- Output current adjustable through output cable or internal potential meter
- Cooling by free air convection
- Suitable for LED lighting and street lighting applications
- Multiple models for choice:
  - A-Type: IP65 rated. Output and constant current level can be adjusted through internal potential meter
  - B-Type: IP67 rated and equipped with 1~10VDC, PWM signal or resistance (3 in 1 dimming function)
  - Blank-Type: IP67 rated, cable for I/O connection
- 5 years warranty

## General Specification (Please refer to www.meanwell.com for detail spec.)



Model No.	HLG-80H <b>NEW</b>	HLG-100 <input type="checkbox"/> <b>NEW</b>	HLG-120 <input type="checkbox"/> <b>NEW</b>
AC input voltage range	<input type="checkbox"/> = Blank or H type ; Blank: 90~264VAC, 127~370VDC ; H type: 90~305VAC, 127~431VDC		
AC inrush current (max.)	Cold start, 70A at 230VAC	Cold start, 75A at 230VAC	
DC adjustment range	±10% rated output voltage		
Current adjustment range	50%~100% rated output current adjustable by internal potential meter or through output cable (62%~100% for HLG-100 <input type="checkbox"/> )		
Overload protection	95%~108% constant current limiting, auto-recovery	95%~102%	95%~108%
Over voltage protection	110%~140% rated output voltage		
Setup, rise, hold up time	1000ms, 80ms, 16ms at full load and 230VAC	2500ms, 50ms, 16ms at full load and 230VAC	
Withstand voltage	I/P-O/P: 3.75kVAC, I/P-FG: 1.88kVAC, O/P-FG:0.5kVAC		
Working temperature	-40~+70°C (refer to output derating curve)		
Safety standards	UL8750, TUV EN61347-1, EN61347-2-13 approved (80W pending); Design refer to UL60950-1, EN60950-1		
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, ENV50204, EN61547		
Connection	Input	UL rated, 18AWGx3C (30cm)	
	Output	A & Blank type: 14AWGx2C (30cm) ; B type: 14AWGx2C (30cm)+18AWGx2C (30cm)	
Dimension (LxWxH)(mm)	195.6x 61.5x 38.8	220x 68x 38.8	

## 80W **NEW** HLG-80

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	90.5%
HLG-80H-24(A)	24V, 0~3.4A	±1.0%	150mV	91.0%
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 or Blank

## 120W **NEW** HLG-120

Model No.	Output	Tol.	R&N	Effi.
HLG-120 <input type="checkbox"/> -12(A)	12V, 0~10A	±2.5%	150mV	92.0%
HLG-120 <input type="checkbox"/> -15(A)	15V, 0~8.0A	±2.0%	150mV	92.0%
HLG-120 <input type="checkbox"/> -20(A)	20V, 0~6.0A	±1.0%	150mV	93.5%
HLG-120 <input type="checkbox"/> -24(A)	24V, 0~5.0A	±1.0%	150mV	94.0%
HLG-120 <input type="checkbox"/> -30(A)	30V, 0~4.0A	±1.0%	200mV	94.0%
HLG-120 <input type="checkbox"/> -36(A)	36V, 0~3.4A	±1.0%	200mV	94.0%
HLG-120 <input type="checkbox"/> -42(A)	42V, 0~2.9A	±1.0%	200mV	94.0%
HLG-120 <input type="checkbox"/> -48(A)	48V, 0~2.5A	±1.0%	200mV	94.0%
HLG-120 <input type="checkbox"/> -54(A)	54V, 0~2.3A	±1.0%	200mV	94.0%

= Blank or H type;  = A, B or Blank

## 96W **NEW** HLG-100

Model No.	Output	Tol.	R&N	Effi.
HLG-100 <input type="checkbox"/> -20(A)	20V, 0~4.8A	±1.0%	150mV	93.5%
HLG-100 <input type="checkbox"/> -24(A)	24V, 0~4.0A	±1.0%	150mV	93.5%
HLG-100 <input type="checkbox"/> -30(A)	30V, 0~3.2A	±1.0%	200mV	93.5%
HLG-100 <input type="checkbox"/> -36(A)	36V, 0~2.65A	±1.0%	200mV	93.5%
HLG-100 <input type="checkbox"/> -42(A)	42V, 0~2.28A	±1.0%	200mV	93.5%
HLG-100 <input type="checkbox"/> -48(A)	48V, 0~2.0A	±1.0%	200mV	93.5%
HLG-100 <input type="checkbox"/> -54(A)	54V, 0~1.77A	±1.0%	200mV	93.5%

= Blank or H type;  = A, B or Blank

### ► Junction Box for HLG Series



Optional junction box available for HLG family. Please contact MEAN WELL for details.

# LED Series

150~320W High Efficiency with PFC



## Features

- Universal AC input / Full range (up to 305VAC)
- Protections: Short circuit / Overload / Over voltage / Over temp.
- Built-in active PFC, PF>0.9 for 65% of load or higher
- IP67 / IP65 design for indoor or outdoor installations (except for C type)
- Output current adjustable through output cable or internal potential meter
- Cooling by free air convection
- Suitable for LED lighting and street lighting applications
- Multiple models for choice:
  - A-Type: IP65 rated. Output and constant current level can be adjusted through internal potential meter
  - B-Type: IP67 rated and equipped with 1~10VDC, PWM signal or resistance (3 in 1 dimming function, 240W only have resistance dimming function)
  - C-Type: Terminal block for I/O connection(HLG-240□/320H)
  - Blank-Type: IP67 rated, cable for I/O connection
- 5 years warranty

## General Specification (Please refer to www.meanwell.com for detail spec.)



Model No.	HLG-150□ <b>NEW</b>	HLG-185□ <b>NEW</b>	HLG-240□	HLG-320H <b>Under Development</b>
AC input voltage range	□ = Blank or H type ; Blank: 90~264VAC, 127~370VDC ; H type: 90~305VAC, 127~431VDC			
AC inrush current (max.)	Cold start, 75A at 230VAC			
DC adjustment range	±10% rated output voltage		±6% rated output voltage	
Current adjustment range	50%~100% rated output current adjustable by internal potential meter or through output cable (62%~100% for HLG-150□)			
Overload protection	95%~108% constant current limiting, auto-recovery			
Over voltage protection	110%~140% rated output voltage			
Setup, rise, hold up time	2500ms,80ms,16ms at full load and 230VAC		2500ms,80ms,15ms at full load and 230VAC	
Withstand voltage	I/P-O/P: 3.75kVAC, I/P-FG: 1.88kVAC, O/P-FG: 0.5kVAC			
Working temperature	-40~+70°C (refer to output derating curve)			
Safety standards	UL8750, TUV EN61347-1, EN61347-2-13 approved for HLG-150□ / 185□ (HLG-320H pending); UL8750, UL1012, UL60950-1, TUV EN60950-1, EN61347-1, EN61347-2-13 approved for HLG-240□			
EMC standards	EN55015, EN55022 class B, EN61000-3-2 class C, EN61000-4-2,3,4,5,6,8,11, ENV50204, EN61547			
Connection	Input	UL rated, 18AWGx3C (30cm); Terminal block for C type (HLG-240□ / 320H only)		
	Output	A & Blank type: 14AWGx2C (30cm) ; B type: 14AWGx2C (30cm)+18AWGx2C (30cm); C type: Terminal block (HLG-240/320□)		
Dimension (LxWxH)(mm)	A / B / Blank-Type: 228x 68x 38.8		A / B / Blank-Type: 244.2x 68x 38.8 C-Type: 251x 68x 38.8	A / B / Blank-Type: 252x 90x 42 C-Type: 256x 90x 42

### 150W **NEW** HLG-150

Model No.	Output	Tol.	R&N	Effi.
HLG-150□-12(A)	12V, 0~12.5A	±2.5%	150mV	92.0%
HLG-150□-15(A)	15V, 0~10.0A	±2.0%	150mV	92.5%
HLG-150□-20(A)	20V, 0~7.50A	±1.0%	150mV	93.0%
HLG-150□-24(A)	24V, 0~6.30A	±1.0%	150mV	93.5%
HLG-150□-30(A)	30V, 0~5.00A	±1.0%	200mV	93.5%
HLG-150□-36(A)	36V, 0~4.20A	±1.0%	200mV	93.5%
HLG-150□-42(A)	42V, 0~3.60A	±1.0%	200mV	94.0%
HLG-150□-48(A)	48V, 0~3.20A	±1.0%	200mV	94.0%
HLG-150□-54(A)	54V, 0~2.80A	±1.0%	200mV	94.0%

□ = Blank or H type ; ○ = A, B or Blank

### 240W HLG-240

Model No.	Output	Tol.	R&N	Effi.
HLG-240□-12(A)	12V, 0~16.0A	±2.5%	150mV	90.0%
HLG-240□-15(A)	15V, 0~15.0A	±2.0%	150mV	90.0%
HLG-240□-20(A)	20V, 0~12.0A	±1.0%	150mV	92.0%
HLG-240□-24(A)	24V, 0~10.0A	±1.0%	150mV	93.0%
HLG-240□-30(A)	30V, 0~8.00A	±1.0%	200mV	93.0%
HLG-240□-36(A)	36V, 0~6.70A	±1.0%	250mV	93.5%
HLG-240□-42(A)	42V, 0~5.72A	±1.0%	250mV	94.0%
HLG-240□-48(A)	48V, 0~5.00A	±1.0%	250mV	94.0%
HLG-240□-54(A)	54V, 0~4.45A	±1.0%	350mV	94.0%

□ = Blank or H type ; ○ = A, B, C or Blank

### 185W **NEW** HLG-185

Model No.	Output	Tol.	R&N	Effi.
HLG-185□-12(A)	12V, 0~13.0A	±2.5%	150mV	92.0%
HLG-185□-15(A)	15V, 0~11.5A	±2.0%	150mV	93.0%
HLG-185□-20(A)	20V, 0~9.30A	±1.0%	150mV	93.5%
HLG-185□-24(A)	24V, 0~7.80A	±1.0%	150mV	94.0%
HLG-185□-30(A)	30V, 0~6.20A	±1.0%	200mV	94.0%
HLG-185□-36(A)	36V, 0~5.20A	±1.0%	200mV	94.0%
HLG-185□-42(A)	42V, 0~4.40A	±1.0%	200mV	94.0%
HLG-185□-48(A)	48V, 0~3.90A	±1.0%	200mV	94.0%
HLG-185□-54(A)	54V, 0~3.45A	±1.0%	200mV	94.0%

□ = Blank or H type ; ○ = A, B or Blank

### 320W **Under Development** HLG-320

Model No.	Output	Tol.	R&N	Effi.
HLG-320H -12(A)	12V, 0~22.0A	±2.5%	150mV	92.0%
HLG-320H -15(A)	15V, 0~19.0A	±2.0%	150mV	92.0%
HLG-320H -20(A)	20V, 0~15.0A	±1.0%	150mV	93.0%
HLG-320H -24(A)	24V, 0~13.3A	±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	94.0%
HLG-320H -42(A)	42V, 0~7.60A	±1.0%	250mV	94.5%
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%

○ = A, B, C or Blank

# LED Series

20~80W Single Output with PFC



## Features

- Universal AC input / Full range (up to 305VAC for HLP-80H)
- Protections: Short circuit / Overload / Over voltage / Over temperature (PLP-20 / HLP-80H)
- Built-in active PFC function, PF>0.9 for 75% of load or higher
- Cooling by free air convection
- Built-in constant current limiting circuit (C.C.+C.V. mode)
- Output constant current level adjustable
- Built-in 3 in 1 dimming function (1~10VDC, PWM signal or resistance) for HLP-80H
- 100% full load burn-in test
- Suitable for building in LED lighting systems
- 2 years warranty (PLP-20/30/45/60)
- 3 years warranty (HLP-80H)

## General Specification (Please refer to [www.meanwell.com](http://www.meanwell.com) for detail spec.)



Model No.	PLP-20 <b>NEW</b>	PLP-30	PLP-45	PLP-60	HLP-80H <b>Under Development</b>
AC input voltage range	90~277VAC; 127~392VDC	90~264VAC; 127~370VDC			90~305VAC; 127~431VDC
AC inrush current (max.)	Cold start, 40A at 230VAC			Cold start, 42A at 230VAC	Cold start, 70A at 230VAC
Current adjustment range	75%~100% rated output current				50% ~ 100% rated output current
Overload Protection	Range	95%~110%	100% ~ 110%		95% ~ 108%
	Type	Constant current limiting, auto-recovery			
Over voltage protection	115%~135% shut off, re-power on to recover				
Setup, rise, hold up time	2300ms, 200ms at full load and 230VAC, <b>no hold up time</b>	1000ms(setup time) at full load and 230VAC, <b>no hold up time</b>			1000ms, 80ms at full load and 230VAC
Withstand voltage	I/P-O/P: 3.75kVAC	I/P-O/P: 3.75kVAC, I/P-FG: 1.88kVAC, O/P-FG: 0.5kVAC			
Working temperature	-30~+60°C	-30~+70°C (refer to output derating curve)			-40~+70°C
Safety standards	TUV EN61347-1, EN61347-2-13, UL8750 (PLP-20 only) approved ( <b>HLP-80H pending</b> )				
EMC standards	EN55015, EN61000-3-2 Class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547, EN55022 Class B				
Connection	UL rated, 18AWGx2C (30cm)	3+2P / 3.96mm pitch, JST P/N: B3P / B2P-VH			5+6P / 3.96mm pitch, JST P/N: B5P/B6P-VH
Dimension (LxWxH)(mm)	140x 32x 22	101.6x 50.8x 26.6	101.6x 50.8x 29.6		162x 53x 28

### 20W **NEW** PLP-20

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%

### 60W PLP-60

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%

### 30W PLP-30

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%

### 80W **Under Development** HLP-80H

Model No.	Output	Tol.	R&N	Effi.
HLP-80H-12	12V, 0~5.00A	±2.5%	150mV	88.0%
HLP-80H-15	15V, 0~5.00A	±2.0%	150mV	89.0%
HLP-80H-20	20V, 0~4.00A	±1.0%	150mV	90.5%
HLP-80H-24	24V, 0~3.40A	±1.0%	150mV	91.0%
HLP-80H-30	30V, 0~2.70A	±1.0%	200mV	91.0%
HLP-80H-36	36V, 0~2.30A	±1.0%	200mV	91.0%
HLP-80H-42	42V, 0~1.95A	±1.0%	200mV	91.0%
HLP-80H-48	48V, 0~1.70A	±1.0%	200mV	91.0%
HLP-80H-54	54V, 0~1.50A	±1.0%	200mV	91.0%

### 45W PLP-45

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%

# LED Series

## 150W Single Output with PFC



### 150W U-Bracket Single Output LED Power Supply



215x 67.4x 33 mm

- Universal AC input / Full range (up to 295VAC)
- Built-in active PFC compliance to EN61000-3-2 class C
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- U-bracket low profile: 33mm
- 3 years warranty

AC input voltage range .... 90~295VAC; 127~417VDC  
 AC inrush current ..... Cold start, 65A at 230VAC  
 Overload protection ..... 145%~185% hiccup mode, auto-recovery  
 Over voltage protection .... 110%~135% hiccup mode, auto-recovery  
 Setup, rise, hold up time ... 2000ms, 100ms, 16ms at full load and 230VAC  
 Withstand voltage ..... I/P - O/P: 3.75kVAC, I/P-FG: 1.88kVAC, O/P-FG: 0.5kVAC  
 Working temperature ..... -30°C~+70°C (refer to output derating curve)  
 Safety standards ..... Design refer to UL8750, EN61347-1, EN61347-2-13  
 EMC standards ..... EN55015 class B, EN61000-3-2 Class C, EN61000-3-3, EN61547, ENV50204, 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, 0~10.0A	±2%	150mV	91.5%
ULP-150-24	24V, 0~6.30A	±2%	150mV	93.0%
ULP-150-36	36V, 0~4.20A	±2%	250mV	93.0%
ULP-150-48	48V, 0~3.20A	±2%	250mV	93.0%

### 185W AC/DC Multiple Channel Output LED Power Supply

**Under Development**

- AC input range: 180~305VAC
- 6CH / 700mA or 12CH / 350mA constant current output
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in active PFC function
- 4KV surge immunity level
- High efficiency up to 88.5%
- Fully encapsulated with IP67 level
- Cooling by free air convection
- Suitable for LED lighting and street lighting applications
- Dimension(LxWxH): 222.2x 90x 38.8 mm
- 5 years warranty

**Under Development**

### DC/DC 6~12 Channel Output LED Driver

- DC input range: 6.5~60VDC
- Output channel: 6 / 8 / 10 / 12
- Constant current design (350mA or 700mA)
- Output current accuracy: ±5%
- High efficiency up to 95%
- Fully encapsulated with IP67 level
- Cooling by free air convection
- Dimension(LxWxH): 126.8x 61.5x 38.8mm

### Suggested System Design

Design Suggestion	Installation Diagram
<p><b>Use HLG series:</b> C.C.+ C.V. mode LED power supply direct driving</p> <p><b>Advantage:</b></p> <ul style="list-style-type: none"> <li>• Simplest design, no need LED driver IC</li> <li>• Lowest price</li> <li>• Less EMI concern</li> </ul> <p><b>Disadvantage:</b></p> <ul style="list-style-type: none"> <li>• Unbalanced driving current and shorter LED life time</li> <li>• Uneven brightness for different LED strips</li> <li>• LED chips should be sorted for similar Vf</li> </ul>	
<p><b>Use LDV series:</b> Driver IC built-in LED power supply, multiple channel C.C. mode output</p> <p><b>Advantage:</b></p> <ul style="list-style-type: none"> <li>• Built-in driver ICs in the unit</li> <li>• Moderate price</li> <li>• Less EMI concern</li> </ul> <p><b>Disadvantage:</b></p> <ul style="list-style-type: none"> <li>• LED chips should be sorted for similar Vf</li> <li>• Lower system efficiency comparing to the direct drive method</li> </ul>	
<p><b>Two stage design HLG+LDH</b> Single output AC/DC LED power supply plus multiple channel DC/DC LED driver</p> <p><b>Advantage:</b></p> <ul style="list-style-type: none"> <li>• Independent output channels, the most balanced current for paralleled LED strips</li> <li>• No need to sort the Vf of LED chips</li> <li>• Longer LED lifetime</li> </ul> <p><b>Disadvantage:</b></p> <ul style="list-style-type: none"> <li>• Highest price</li> <li>• Complicated circuit design</li> <li>• Lowest efficiency</li> <li>• More EMI issues at system level</li> </ul>	



We are a TQM (Total Quality Management) company and ISO-9001 certified since 1994.

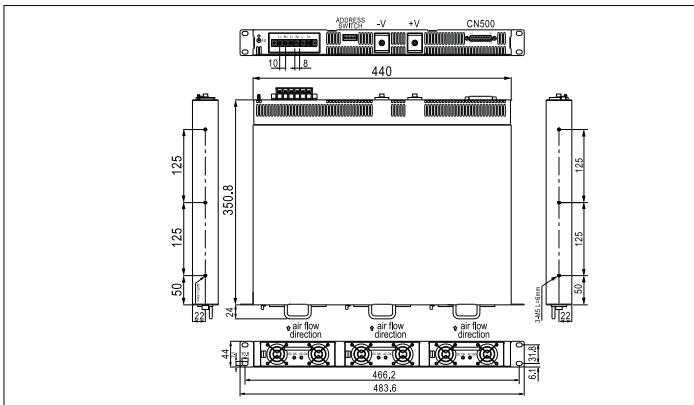
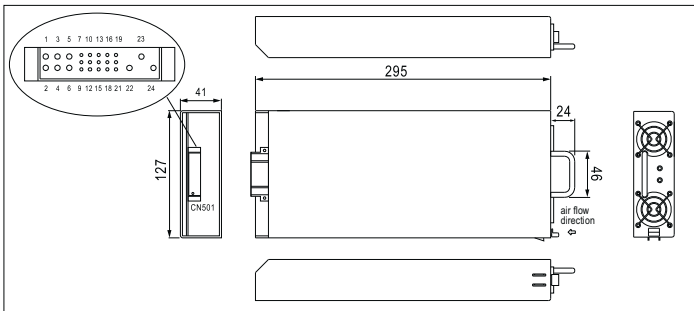
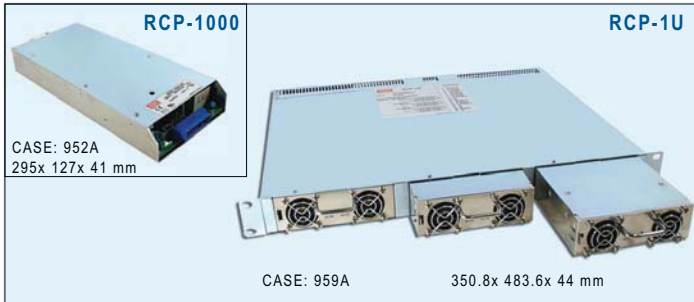
# 19" Rack Power

1000~2000W Single Output



## 1000W 1U Rack Power System

- Universal AC input / Full range
- Built-in 5V/0.3A standby power
- Built-in active PFC function, PF>0.96
- Protections: Short circuit / Overload / Over voltage / Over temp.
- Forced air cooling by built-in DC fan
- High power density 10.7W/in<sup>3</sup>
- 1U low profile
- Output voltage can be trimmed between 90 ~ 110% of the rated output voltage
- Active current sharing up to 3000W (3 units) in one 19" rack, 3 racks max. can be operated in parallel(up to 8 units)
- Remote control for single unit
- Built-in remote sense function
- Hot-swap operation
- Internal oring diode
- AC OK and DC OK signal output
- Optional I<sup>2</sup>C serial data bus
- 3 years warranty

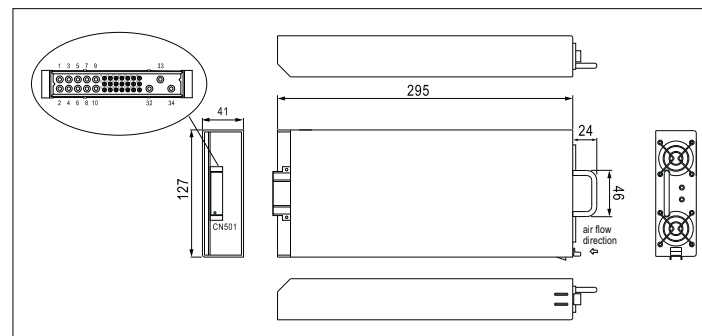


- AC input voltage range ..... 90~264VAC
- DC adjustment range ..... ±3% rated output voltage
- Overload protection ..... 105%~125% constant current limiting, auto-recovery
- Over voltage protection ..... 110%~135% rated output voltage
- Setup, rise, hold up time ..... 1000ms, 60ms, 16ms at full load and 230VAC
- Withstand voltage ..... I/P-O/P:3kVAC, I/P-FG:1.5kVAC, 1 minute
- Working temperature ..... -20~50°C@100%, 60°C@60%
- Safety standards ..... UL60950-1, TUV EN60950-1 approved
- EMC standards ..... EN55022 Class B, EN61204-3, EN61000-3-2,-3, EN61000-4-2,3,4,5,6,8,11, ENV50204, EN61000-6-2 heavy industry level
- Packing ..... 1.91kg (single unit) ; 11kg (rack with 3 units)

Model No.	Output	Tol.	R&N	Effi.
RCP-1000-12	12V, 0~60A	±1%	150mV	81%
RCP-1000-24	24V, 0~40A	±1%	200mV	87%
RCP-1000-48	48V, 0~21A	±1%	300mV	89%
RCP-1U□	19" 1U rack for RCP-1000 series □= I: AC inlet ; T: terminal block			

## 2000W 1U Rack Power System

- Universal AC input / Full range
- Built-in 5V/0.3A, 12V/0.8A auxiliary power
- Built-in active PFC function, PF>0.98
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC fan
- High power density 21.4W/in<sup>3</sup>
- 1U low profile
- Active current sharing up to 6000W (3 units) in one 19" rack, 3 racks max. can be operated in parallel(up to 8 units)
- Remote control for single unit
- Built-in remote sense function
- Hot-swap operation
- PMBus serial communication
- AC OK and DC OK signal, fan fail OTP alarm signal
- 3 years warranty



- AC input voltage range ..... 90~264VAC
- DC adjustment range ..... -12%~+15% rated output voltage
- Overload protection ..... 105%~125% constant current limiting, auto-recovery
- Over voltage protection ..... 120%~140% rated output voltage
- Setup, rise, hold up time ..... 1500ms, 60ms, 16ms at full load and 230VAC
- Withstand voltage ..... I/P-O/P:3kVAC, I/P-FG:1.5kVAC, 1 minute
- Working temperature ..... -25~+70°C(refer to output derating curve)
- Safety standards ..... Design refer to UL60950-1, TUV EN60950-1
- EMC standards ..... EN55022 Class B, EN61000-3-2,-3, EN61000-4-2,3,4,5,6,8,11, ENV50204, EN61000-6-2 heavy industry level

Model No.	Output	Tol.	R&N	Effi.
RCP-2000-12	12V, 0~100A	±1%	150mV	86.0%
RCP-2000-24	24V, 0~80A	±1%	200mV	90.5%
RCP-2000-48	48V, 0~42A	±1%	300mV	92.0%



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# 19" Rack Power

## Power Control and Monitor Unit

- 1U low profile
- 19-inch rack mounting
- **I<sup>2</sup>C decoder, control and monitor up to 3 RCP-1000-□-C units**
- Suitable for all kinds of RCP output (12V,24V,48V)
- Digital meters for output voltage, output current, and internal temperature on front panel
- Potential meter for adjusting output voltage of RCP-1000 unit on front panel
- Relay contacts and LED indicators for AC fail, DC fail, and over temperature warning
- Removable fixing accessory
- 3 years warranty



AC input voltage range ..... 90~264VAC  
 AC inrush current ..... Cold start, 30A at 115VAC, 50A at 230VAC  
 Relay contact rating ..... 30VDC, 1A  
 Working temperature ..... -20~60°C  
 Safety standards ..... Design refer to UL60950-1, TUV EN60950-1  
 Withstand voltage ..... I/P-O/P:3kVAC, I/P-FG:1.5kVAC, O/P-FG:0.5kVAC  
 Isolation resistance ..... I/P-O/P, I/P-FG, O/P-FG: 100M Ohms/500VDC  
 EMC standards ..... Compliance to EN55022, EN61000-3-2,-3, EN61000-4-2,3,4,5,6,8,11  
 Connection ..... Screw DIN terminal for AC input and relay contact output; D-Type right angle 25 positions for communication port

Model No.	Application
RCP-MU	Control and monitor RCP-1000 series

## 1U Rack Control and Monitoring Unit

- 1U low profile
- 19-inch rack mounting
- Control and monitor up to 32 RCP-2000 units
- Front panel LCD and buttons for on-site service without PC
- Alarm/event log with time and date
- Windows-based PC communication software
- USB, RS-232 or Ethernet interface for PC connection locally or remote monitoring and control via GSM modem
- Easy wire connections on rear side
- 4 user programmable relay outputs for traditional remote warning
- 3 years warranty

CE pending



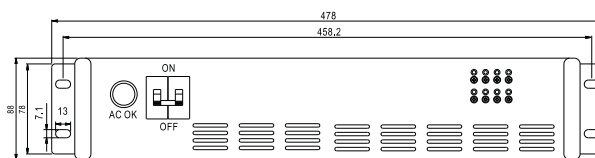
DC input voltage range ..... 10~60VDC  
 DC input current ..... 0.5A at 24VDC, 0.25A at 48VDC  
 Output relay contact ..... 4 user programmable relay  
 Working temperature ..... -25~+70°C  
 Safety standards ..... Design refer to UL60950-1, TUV EN60950-1  
 Withstand voltage ..... I/P-O/P:1.5kVAC, I/P-FG:1.5kVAC  
 Isolation resistance ..... I/P-O/P, I/P-FG: 100M Ohms / 500VDC / 25°C / 70%RH  
 EMC standards ..... Design refer to EN55022 Class B, EN61000-4-2,3,4,6,8

Model No.	Application
RCP-CMU-1	Control and monitor RCP-2000 series (single unit)
RCP-CMU-1-R	Control and monitor RCP-2000 series (with 19" rack)

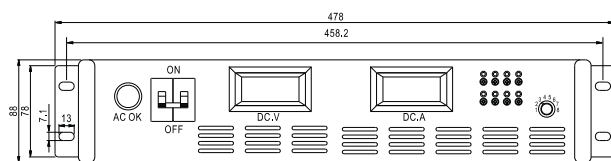
## Custom-Made 19" 2U Rack Power System

- Standard 19" 2U rack – 480 x 420 x 80mm
- Custom rack configurations available, 4500W max., up to 8 outputs
- LED indicators on front panel
- Meters for output voltage and current on front panel
- Front panel voltage adjustment
- Wide range of backplane connection option
- Choose from MEAN WELL's wide range of standard power supply
- Complete assembly and testing on your custom rack system
- Engineering support available to assist you in specifying your requirement
- 2 years warranty

### Panel Type A: with power switch, LED indicators, and output adjustment potentiometers.



### Panel Type B: with additional digital meters and selector switch.



## Example

### ❖ 12V, 4500W 2U Rack System

- RSP-1500-12 x 3pcs
- LED indicators and front panel voltage adjustment
- Output voltage and current digital meters
- I/O interface:
  - AC Input — Terminal block
  - DC Output — Copper pillars
  - Single Output — Terminal block



We provide specification, drawing, test report and more information, please visit our website — <http://www.meanwell.com>



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# Modular Series

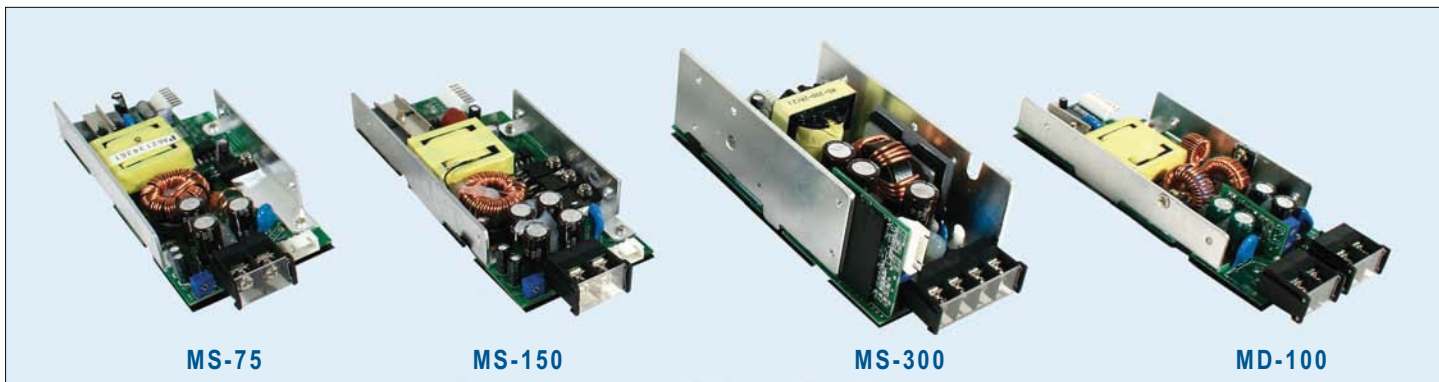
450W/650W/1000W Modular Power



MP450 (450W, 5 SLOT)

MP650 (650W, 5 SLOT)

MP1K0 (1000W, 7 SLOT)



MS-75

MS-150

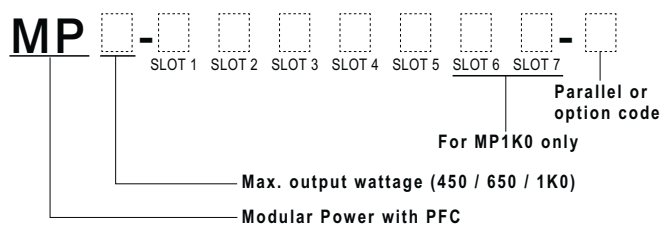
MS-300

MD-100

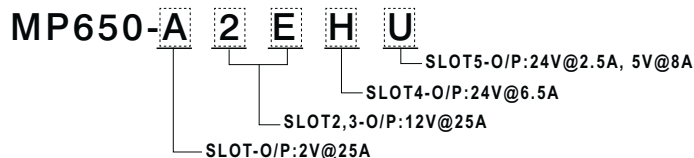
## Description

Modular series are switching power supplies with modular design that consist of two stages: front-end PFC and output modules. Using ZVS (Zero Voltage Switching) technology to realize the power factor correction, the line input is rectified into high DC voltage (around 390Vdc) by the front-end PFC stage, and then the DC output modules will transfer the operating voltage into all kinds of DC output voltages from 1.6V~53V. Right now we offer 75W, 150W, 300W single output modules and 100W dual output modules to fulfill all kinds of applications up to 14 isolated outputs. There are millions of combinations available for the Modular series. Users can configure the DC outputs they need and get the fastest solution for their own power requirement with safety and EMC certificates. No more NRE / safety application charges and long period of waiting for certificates! Providing standard products as usual, MEAN WELL offer you a revolutionary standard power solution that fulfills your custom-made request!

## Output Configuration Guide



Example:



## Features

- Millions of output configuration is available
- Using ZVS technology to reduce power dissipation and improve efficiency
- Universal AC input / Full range
- Built-in active PFC compliance to EN61000-3-2
- Built-in constant current limiting circuit for single output modules
- Remote control on each output module
- Remote sense on each output module (MS-75/150/300)
- Short circuit / Overload / Over voltage protections for all modules
- Built-in parallel function for MS-300(up to 3 units)
- Cooling by built-in DC fan with fan alarm function
- Additional 12V/0.1A auxiliary output for remote control
- 3 years warranty

# Modular Series



## General Specification (Please refer to www.meanwell.com for detail spec.)



Model No.	MP450	MP650	MP1K0
AC input voltage range	85~264VAC or 120~370VDC		
Power Factor	PF > 0.95 / 230VAC, PF > 0.98 / 115VAC at full load		
AC inrush current (max.)	Cold start, 40A at 230VAC	Cold start, 50A at 230VAC	Cold start, 40A at 230VAC
Max output voltage	450W	650W	1000W
Efficiency (typical)	83%	85%	84%
Over temperature protection	Output shutdown, auto-recovery		
Fan alarm	Output shutdown when fan malfunction		
Withstand voltage	I/P - O/P: 3kVAC, I/P - FG: 1.5kVAC, O/P - FG: 0.5kVAC, 1 minute		
Working temperature	-20~+50°C@100%, +70°C @ 50% load		
Safety standards	UL60950-1, TUV EN60950-1		
EMC standards	Compliance to EN55022 class B, EN61000-3-2,3, EN61000-4-2,3,4,5,6,8,11, ENV50204, EN55024 light industry level, criteria A		
Connection	Input side: 3P/10mm pitch terminal block & JST B3B-XH		
Dimension (LxWxH)(mm)	254x 127x 63.5	278x 127x 63.5	278x 177.8x 63.5

### MS-75: 1-SLOT single output (75W max.)

Item Code	Output	★Peak I	Vdc adj.	Tol.	R&N.
L	3.3V, 0~15A	17.3A	2.6~4.0V	±2%	80mV
M	5V, 0~15A	17.3A	4.0~6.0V	±2%	80mV
N	12V, 0~6.3A	7.30A	9.0~13.2V	±1%	150mV
O	15V, 0~5.0A	5.80A	13.2~16.8V	±1%	150mV
P	24V, 0~3.2A	3.70A	20.0~26.4V	±1%	150mV
Q	48V, 0~1.6A	1.80A	40.0~53.0V	±1%	250mV

### MS-150: 1-SLOT single output (150W max.)

Item Code	Output	★Peak I	Vdc adj.	Tol.	R&N.
A	2V, 0~25A	30.0A	1.6~2.6V	±3%	50mV
B	3.3V, 0~25A	30.0A	2.6~4.0V	±2%	80mV
C	5V, 0~25A	30.0A	4.0~6.0V	±2%	80mV
D	7.5V, 0~18A	20.7A	6.0~9.0V	±2%	100mV
E	12V, 0~13A	15.0A	9.0~13.2V	±1%	150mV
F	15V, 0~10A	11.5A	13.2~16.8V	±1%	150mV
G	18V, 0~8.5A	9.80A	16.8~20.0V	±1%	150mV
H	24V, 0~6.5A	7.50A	20.0~26.4V	±1%	150mV
I	27V, 0~5.8A	6.70A	25.0~31.0V	±1%	150mV
J	33V, 0~4.7A	5.40A	30.0~40.0V	±1%	250mV
K	48V, 0~3.2A	3.68A	40.0~53.0V	±1%	250mV

### MS-300: 2-SLOT parallelable single output (300W max.)

Item Code	Output	★Peak I	Vdc adj.	Tol.	R&N.
2A	2V, 0~50A	57.5A	1.6~2.6V	±3%	80mV
2B	3.3V, 0~50A	57.5A	2.6~4.0V	±2%	80mV
2C	5V, 0~50A	57.5A	4.0~6.0V	±2%	80mV
2D	7.5V, 0~40A	46.0A	6.0~9.0V	±2%	100mV
2E	12V, 0~25A	29.0A	9.0~13.2V	±1%	150mV
2F	15V, 0~20A	23.0A	13.2~16.8V	±1%	150mV
2G	18V, 0~16.7A	19.2A	16.8~20.0V	±1%	150mV
2H	24V, 0~12.5A	14.4A	20.0~26.4V	±1%	150mV
2I	27V, 0~11.2A	12.9A	25.0~31.0V	±1%	200mV
2J	33V, 0~9.1A	10.5A	30.0~40.0V	±1%	250mV
2K	48V, 0~6.3A	7.2A	40.0~53.0V	±1%	300mV

### MD-100: 1-SLOT isolated dual output (100W max.)

Item Code	Output	Vdc adj.	Tol.	R&N.	Max.
R	5V, 2.0~10A	4.75~5.5V	±3%	100mV	90.0W
	5V, 0.0~8.0A	4.75~5.5V	±3%	100mV	
S	5V, 2.0~10A	4.75~5.5V	±3%	100mV	100.4W
	12V, 0.0~5.8A	11.4~13.2V	±3%	150mV	
T	5V, 2.0~10A	4.75~5.5V	±3%	100mV	101.0W
	15V, 0.0~4.7A	14.2~16.5V	±3%	150mV	
U	24V, 0.5~3.0A	22.8~26.4V	±3%	200mV	100.0W
	5V, 0.0~10A	4.75~5.5V	±3%	100mV	
V	24V, 0.6~3.0A	22.8~26.4V	±2%	240mV	100.8W
	12V, 0.0~4.7A	11.4~13.2V	±3%	120mV	
W	12V, 1.0~5.0A	11.4~13.2V	±2%	120mV	100.8W
	12V, 0.0~5.8A	11.4~13.2V	±3%	120mV	
X	15V, 1.0~4.7A	14.2~16.5V	±2%	150mV	100.5W
	15V, 0.0~4.7A	14.2~16.5V	±3%	150mV	

### Parallel Connection Accessory

FAP-001 (For MS-300)	
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### Series Connection Accessory

FAS-001 (For 1-slot modules)	
FAS-002 (For 2-slot modules)	

★Peak I: 35% duty cycle maximum within every 10 seconds. Average output power should not exceed the rated power.

★Please use MP450-CNPOQ, MP650-A2EHU, MP1K0-2C2CEKL-1.....etc. as the order code. For more detail information about technical issues, please refer to the user manual.

★Please refer to the user manual for more detail information about parallel connection and the parallel codes. About series connection, please contact us or your local MEAN WELL distributor for more details.

# Open Frame

## 5~20W AC/DC Encapsulated Type



### Features

- Universal AC input / Full range
- Ultra-miniature size
- Protections: Short circuit / Overload / Over voltage
- No load power consumption <0.5W (<0.75W for 20W models)
- Fully isolated plastic case
- Isolation class II (5~15W)
- Low leakage current < 200uA (20W)
- Cooling by free air convection
- Medical safety approved
- Meet industrial, IT safety requirements
- 100% full load burn-in test
- 3 years warranty



PM-05 / 10 / 15 Series				PM-20 Series	
	<b>A</b>	<b>5W</b>	<b>10W</b>	<b>15W</b>	
	<b>B</b>	2.475" (62.85mm)	2.76" (70mm)	2.95" (75mm)	
	<b>C</b>	1.85" (47mm)	2.13" (54mm)	2.441" (62mm)	
	<b>D</b>	0.306" (7.8mm)	0.315" (8mm)	0.256" (6.5mm)	
	<b>E</b>	1.97" (50mm)	1.97" (50mm)	2.09" (53mm)	
	<b>F</b>	0.689" (17.5mm)	0.689" (17.5mm)	0.788" (20mm)	
	<b>G</b>	0.295" (7.5mm)	0.295" (7.5mm)	0.256" (6.5mm)	
	<b>H</b>	0.789" (20.04mm)	0.789" (20.04mm)	0.906" (23.01mm)	
	<b>I</b>	0.59" (15mm)	0.59" (15mm)	0.59" (15mm)	
	<b>J</b>	0.776" (19.7mm)	0.89" (22.7mm)	0.89" (22.7mm)	

### General Specification

AC input voltage range ..... 85~264VAC; 120~370VDC  
 Frequency range ..... 47-440Hz  
 AC inrush current (max.) ... Cold start, 25A at 115VAC, 45A at 230VAC  
 ( PM-15: 30A at 115VAC, 50A at 230VAC )  
 ( PM-20: 30A at 115VAC, 65A at 230VAC )  
 Overload protection ..... >105% hiccup mode, auto recovery  
 Over voltage protection ..... 115%~135% rated output voltage, shut off,  
 AC recycle to re-start  
 Setup, rise, hold up time ... 1000ms, 20ms, 100ms @ 230VAC  
 (PM-20: 500ms, 20ms, 50ms @ 230VAC)  
 Withstand voltage ..... I/P-O/P: 4.0kVAC, 1 minute  
 Working temperature ..... -20°C~70°C (refer to output derating curve)  
 Safety standards ..... UL60601-1, TUV EN60601-1, UL60950-1 (PM-15)  
 approved  
 EMC standards ..... EN55011, EN55022 Class B, EN61000-3-2,3  
 EN61000-4-2,3,4,5,6,8,11, ENV50204, EN55024,  
 EN60601-1-2, EN61204-3 Medical level, criteria A  
 Connection ..... 4 industrial pins ( 20W: 6 industrial pins )  
 Packing ..... 0.085kg ; 120pcs / 11.2kg / 0.97CUFT(PM-05)  
 0.105kg ; 120pcs / 13.6kg / 0.97CUFT(PM-10)  
 0.14kg ; 120pcs / 17.8kg / 0.97CUFT(PM-15)  
 0.18kg ; 90pcs / 17.2kg / 0.97CUFT(PM-20)

### PM-05 Series

Model No.	Output	Tol.	R&N	Effi.
PM-05-3.3	3.3V, 0~1.25A	±3%	80mV	67%
PM-05-5	5V, 0~1.00A	±2%	80mV	71%
PM-05-12	12V, 0~0.42A	±2%	150mV	73%
PM-05-15	15V, 0~0.33A	±2%	150mV	74%
PM-05-24	24V, 0~0.23A	±2%	240mV	76%

### PM-10 Series

Model No.	Output	Tol.	R&N	Effi.
PM-10-3.3	3.3V, 0~2.50A	±3%	80mV	66%
PM-10-5	5V, 0~2.00A	±2%	80mV	74%
PM-10-12	12V, 0~0.85A	±2%	150mV	78%
PM-10-15	15V, 0~0.67A	±2%	150mV	79%
PM-10-24	24V, 0~0.42A	±2%	240mV	79%

### PM-15 Series

Model No.	Output	Tol.	R&N	Effi.
PM-15-3.3	3.3V, 0~3.50A	±3%	80mV	73%
PM-15-5	5V, 0~3.00A	±2%	80mV	76%
PM-15-12	12V, 0~1.25A	±2%	150mV	78%
PM-15-15	15V, 0~1.00A	±2%	150mV	79%
PM-15-24	24V, 0~0.63A	±2%	240mV	81%

### PM-20 Series

Model No.	Output	Tol.	R&N	Effi.
PM-20-3.3	3.3V, 0~4.50A	±3%	80mV	71%
PM-20-5	5V, 0~4.40A	±2%	80mV	75%
PM-20-12	12V, 0~1.80A	±2%	150mV	81%
PM-20-15	15V, 0~1.40A	±2%	150mV	83%
PM-20-24	24V, 0~0.92A	±2%	240mV	84%



#### Energy Saving —

We care about energy saving. This logo represents that this model has "low no load power consumption"!

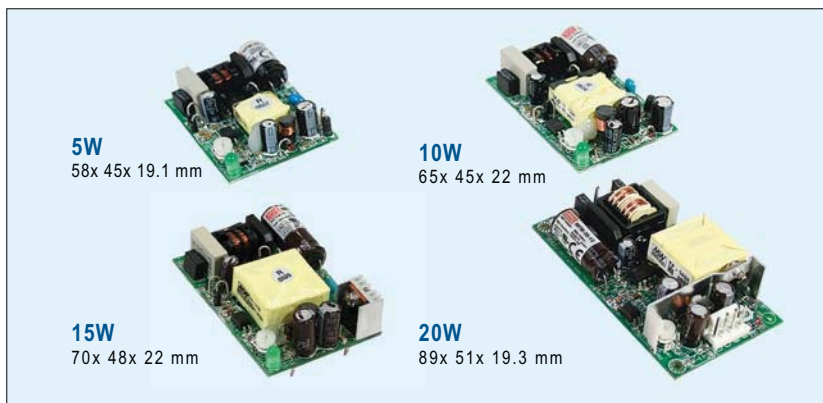


#### To satisfy our customers is our goal —

- High Quality
- Low Cost
- Prompt Delivery
- Best Service

# Open Frame

## 5~20W AC/DC On Board Type



### Features

- Universal AC input / Full range
- Ultra-miniature size, light weight
- Protections:
  - Short circuit / Overload / Over voltage / Over temp.
- No load power consumption <0.5W (<0.75W for 20W models)
- Isolation class II (5~15W)
- On-board type version available for 20W (optional)
- Low leakage current < 200uA (20W)
- Cooling by free air convection
- Medical safety approved
- Meet industrial, IT safety requirements
- 100% full load burn-in test
- 3 years warranty



### NFM-05 / 10 / 15 Series

	5W	10W	15W
A	1.77" (45mm)	1.77" (45mm)	1.89" (48mm)
B	0.689" (17.5mm)	0.689" (17.5mm)	0.788" (20mm)
C	0.21" (5.33mm)	0.22" (5.5mm)	0.157" (4mm)
D	1.85" (47mm)	2.13" (54mm)	2.441" (62mm)
E	2.28" (57.9mm)	2.56" (65mm)	2.75" (69.85mm)
F	0.491" (12.47mm)	0.491" (12.47mm)	0.492" (12.5mm)
G	0.789" (20.04mm)	0.789" (20.04mm)	0.906" (23.01mm)
H	0.196" (5mm)	0.196" (5mm)	0.157" (4mm)
I	0.75" (19.1mm)	0.87" (22mm)	0.87" (22mm)

### NFM-20 Series

### General Specification

AC input voltage range ..... 85~264VAC; 120~370VDC  
 Frequency range ..... 47-440Hz  
 AC inrush current (max.) ..... Cold start, 25A at 115VAC, 45A at 230VAC  
 ( NFM-15: 30A at 115VAC, 50A at 230VAC )  
 ( NFM-20: 30A at 115VAC, 65A at 230VAC )  
 DC adjustment range ..... ±10% rated output voltage  
 Overload protection ..... >105% hiccup mode, auto recovery  
 Over voltage protection ..... 115%~135% rated output voltage, shut off,  
 AC recycle to re-start  
 Over temp. protection ..... U1,Tj: 140~160°C, power shutdown, recovers  
 automatically after temperature goes down  
 Setup, rise, hold up time ..... 1000ms, 20ms, 100ms @ 230VAC  
 ( NFM-20: 500ms, 20ms, 50ms @ 230VAC )  
 Withstand voltage ..... I/P-O/P: 4.0KVAC, 1 minute  
 Working temperature ..... -20°C~70°C (refer to output derating curve)  
 Safety standards ..... UL60601-1, TUV EN60601-1,  
 UL60950-1 (NFM-15) approved  
 EMC standards ..... EN55011, EN55022 Class B, EN61000-3-2,3  
 EN61000-4-2,3,4,5,6,8,11, ENV50204,  
 EN55024, EN60601-1-2, EN61204-3 Medical  
 level, criteria A  
 Connection ..... 4 industrial pins for 5~15W  
 3P / 4P / 3.96mm pitch, Molex 41791-03/04  
 for 20W  
 Packing ..... 0.03kg ; 120pcs / 4.6kg / 0.97CUFT(NFM-05)  
 0.045kg ; 120pcs / 6.4kg / 0.97CUFT(NFM-10)  
 0.065kg ; 120pcs / 8.8kg / 0.97CUFT(NFM-15)  
 0.09kg ; 105pcs / 10.5kg / 0.97CUFT(NFM-20)

### NFM-05 Series

Model No.	Output	Tol.	R&N	Effi.
NFM-05-3.3	3.3V, 0~1.25A	±2%	80mV	67%
NFM-05-5	5V, 0~1.00A	±2%	80mV	71%
NFM-05-12	12V, 0~0.42A	±1%	150mV	73%
NFM-05-15	15V, 0~0.33A	±1%	150mV	74%
NFM-05-24	24V, 0~0.23A	±1%	240mV	76%

### NFM-10 Series

Model No.	Output	Tol.	R&N	Effi.
NFM-10-3.3	3.3V, 0~2.50A	±2%	80mV	66%
NFM-10-5	5V, 0~2.00A	±2%	80mV	74%
NFM-10-12	12V, 0~0.85A	±1%	150mV	78%
NFM-10-15	15V, 0~0.67A	±1%	150mV	79%
NFM-10-24	24V, 0~0.42A	±1%	240mV	79%

### NFM-15 Series

Model No.	Output	Tol.	R&N	Effi.
NFM-15-3.3	3.3V, 0~3.50A	±2%	80mV	73%
NFM-15-5	5V, 0~3.00A	±2%	80mV	76%
NFM-15-12	12V, 0~1.25A	±1%	150mV	78%
NFM-15-15	15V, 0~1.00A	±1%	150mV	79%
NFM-15-24	24V, 0~0.63A	±1%	240mV	81%

### NFM-20 Series

Model No.	Output	Tol.	R&N	Effi.
NFM-20-3.3	3.3V, 0~4.50A	±2%	80mV	71%
NFM-20-5	5V, 0~4.40A	±2%	80mV	75%
NFM-20-12	12V, 0~1.80A	±1%	150mV	81%
NFM-20-15	15V, 0~1.40A	±1%	150mV	83%
NFM-20-24	24V, 0~0.92A	±1%	240mV	84%

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# Open Frame

30~45W 1~3 Output Medical Type

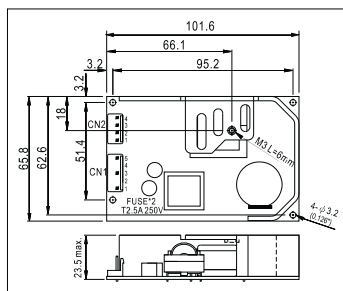


## 30W Single Output Medical Type

- Universal AC input / Full range
- Medical safety approved
- Protections: Short circuit / Overload / Over voltage / Over temp.
- Low leakage current  $\leq 0.3\text{mA}$
- Compact size, low profile
- 100% full load burn-in test
- 3 years warranty



101.6x 65.8x 23.5 mm



AC input voltage range .... 88~264VAC; 120~370VDC

Overload protection ..... >105% hiccup mode, auto-recovery

Over voltage protection ... 110%~135% rated output voltage

Leakage current ..... Less than 0.3mA at 264VAC

Withstand voltage ..... I/P-O/P: 4kVAC, I/P-FG: 1.5kVAC, 1minute

Working temperature ..... 0~40°C@100%, -10°C@80%, 60°C@60% load

Safety standards ..... UL2601-1, TUV EN60601-1, IEC60601-1 approved

EMC standards ..... EN55011 class B, EN60601-1-2, EN61000-3-2,3, EN61000-4-2,3,4,5,6,8,11, ENV50204

Connection ..... 5+4P/ 3.96mm pitch, Molex P/N: 41791-05,04

Packing ..... 0.16kg ; 90pcs / 15.8kg / 1.02CUFT

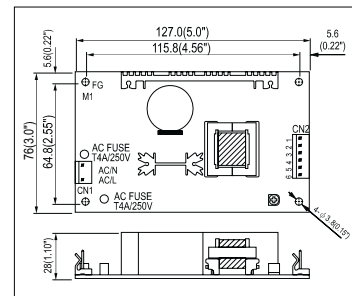
Model No.	Output	Tol.	R&N	Effi.
MPS-30-5	5V, 0~5.0A	±3%	80mV	72%
MPS-30-12	12V, 0~2.5A	±3%	120mV	75%
MPS-30-15	15V, 0~2.0A	±3%	150mV	76%
MPS-30-24	24V, 0~1.2A	±3%	240mV	77%
MPS-30-27	27V, 0~1.1A	±3%	240mV	78%
MPS-30-48	48V, 0~0.6A	±2%	240mV	78%

## 45W 1~3 Output Medical Type

- Universal AC input / Full range
- Medical safety approved
- Protections: Short circuit / Overload / Over voltage
- Low leakage current  $\leq 0.3\text{mA}$
- Approvals: UL / CUL / TUV / CB / CE
- Fixed switching frequency at 45kHz
- 100% full load burn-in test
- 3 years warranty



127x 76x 28 mm



AC input voltage range .... 90~264VAC; 120~370VDC

AC inrush current ..... Cold start, 17A at 115VAC, 35A at 230VAC

DC adjustment range ..... CH1: ±10% rated output voltage

Overload protection ..... 53~75W hiccup mode, auto-recovery

Over voltage protection ... CH1: 115%~135% rated output voltage

Leakage current ..... Less than 0.3mA at 264VAC

Setup, rise, hold up time ..800ms, 30ms, 50ms at full load and 230VAC

Withstand voltage ..... I/P - O/P: 4kVAC, I/P - FG: 1.5kVAC, 1 minute

Working temperature ..... -10°C~60°C (refer to output derating curve)

Safety standards ..... UL2601-1, TUV EN60601-1, IEC60601-1 approved

EMC standards ..... EN55011 class B, EN61000-4-2,3,4,5,6,8,11, EN61000-3-2,3, EN60601-1-2, ENV50204

Connection ..... 2P,6P/ 3.96mm pitch, Molex P/N: 5277-02, 5273-06

Packing ..... 0.18kg ; 72pcs/ 15.1kg / 1.35CUFT (MPS-45)  
0.20kg ; 72pcs/ 17.4kg / 1.35CUFT (MPD-45)  
0.21kg ; 72pcs/ 18.0kg / 1.35CUFT (MPT-45)

### Single Output

Model No.	Output	Tol.	R&N	Effi.
MPS-45-3.3	3.3V, 0~8.0A	±3%	80mV	65%
MPS-45-5	5V, 0~8.0A	±3%	100mV	72%
MPS-45-7.5	7.5V, 0~5.4A	±3%	100mV	75%
MPS-45-12	12V, 0~3.7A	±2%	100mV	76%
MPS-45-13.5	13.5V, 0~3.3A	±2%	100mV	76%
MPS-45-15	15V, 0~3.0A	±2%	100mV	77%
MPS-45-24	24V, 0~1.9A	±2%	100mV	78%
MPS-45-27	27V, 0~1.7A	±2%	100mV	78%
MPS-45-48	48V, 0~1.0A	±2%	100mV	78%

### Dual Output

Model No.	Output	Tol.	R&N	Effi.	Max.
MPD-45A	5V, 0.4~5.0A	±4%	60mV	76%	40W
	12V, 0.2~2.5A	±7%	120mV		
MPD-45B	5V, 0.4~5.0A	±4%	60mV	78%	45W
	24V, 0.2~1.8A	±7%	150mV		

### Triple Output

Model No.	Output	Tol.	R&N	Effi.	Max.
MPT-45A	5V, 0.4~5.0A	±4%	60mV	73%	41W
	12V, 0.2~2.5A	±7%	120mV		
	-5V, 0.0~0.5A	±5%	60mV		
MPT-45B	5V, 0.4~5.0A	±4%	60mV	75%	43W
	12V, 0.2~2.5A	±7%	120mV		
	-12V, 0.0~0.5A	±5%	100mV		
MPT-45C	5V, 0.4~5.0A	±4%	60mV	75%	44W
	15V, 0.2~2.3A	±7%	120mV		
	-15V, 0.0~0.5A	±5%	100mV		

## 40/60W

### Single Output with High Efficiency

Under Development

- Full range up to 305VAC
- Built-in active PFC function
- Built-in 3 in 1 dimming function (1~10VDC, PWM signal or resistance)
- High efficiency up to 91%
- CV+CC design
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Suitable for LED lighting and moving sign applications
- Output models:  
12V(40W only) / 15V / 20V / 24V / 30V / 36V / 42V / 48V / 54V
- Dimension(LxWxH): 185x 61.5x 38.8mm
- 5 years warranty



# Open Frame

## 75~160W 1~3 Output Medical Type

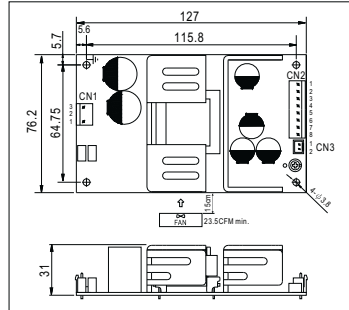


### 75W 1~3 Output Medical Type

- Universal AC input / Full range
- Medical safety approved
- Protections: Short circuit / Overload / Over voltage
- No load power consumption <0.75W (single output models only)
- Low leakage current <200uA
- Fixed switching frequency at 65kHz
- Free air convection for 75W and 100W with 23.5CFM forced air
- 3 years warranty
- Suitable for medical & IT applications



127x 76.2x 31 mm



AC input voltage range ..... 90~264VAC; 127~370VDC  
 AC inrush current ..... Cold start, 25A at 115VAC, 50A at 230VAC  
 DC adjustment range ..... CH1: -5%~+10% rated output voltage  
 Overload protection ..... 140%~180% hiccup mode, auto-recovery  
 Over voltage protection ..... CH1: 115%~135% rated output voltage  
 Leakage current ..... Less than 200uA at 264VAC  
 Setup, rise, hold up time .... 500ms, 30ms, 80ms at full load and 230VAC  
 Withstand voltage ..... I/P-O/P: 4kVAC, I/P-FG: 1.5kVAC, 1 minute  
 Working temperature ..... -20°C ~ +70°C (refer to output derating curve)  
 Safety standards ..... UL60601-1, TUV EN60601-1 approved  
 EMC standards ..... EN55011 / EN55022 class B, EN61000-3-2,-3, EN61000-4-2,3,4,5,6,8,11, ENV50204, EN61000-6-2, EN60601-1-2, EN61204-3 medical level  
 Connection ..... 3+8P / 3.96mm pitch, JST P/N: B3P / B8P-VH  
 Packing ..... 0.23kg ; 63pcs / 15.5kg / 1.35CUFT

#### ♦ Single Output

Model No.	Output	Tol.	R&N	Effi.
RPS-75-3.3	3.3V, 0~20A	±2%	80mV	73%
RPS-75-5	5V, 0~18.7A	±2%	80mV	78%
RPS-75-12	12V, 0~8.3A	±1%	120mV	82%
RPS-75-15	15V, 0~6.7A	±1%	150mV	83%
RPS-75-24	24V, 0~4.2A	±1%	240mV	85%
RPS-75-36	36V, 0~2.8A	±1%	300mV	86%
RPS-75-48	48V, 0~2.1A	±1%	300mV	86%

#### ♦ Dual Output

Model No.	Output	Tol.	R&N	Effi.	Max.
RPD-75A	5V, 1.0~9.5A	±2%	80mV	77%	96W
	12V, 0.3~4.0A	±6%	120mV		
RPD-75B	5V, 1.0~6.8A	±2%	80mV	79%	99W
	24V, 0.2~2.7A	±6%	200mV		

#### ♦ Triple Output

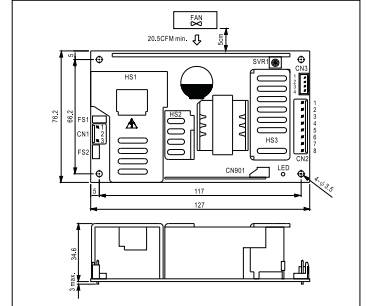
Model No.	Output	Tol.	R&N	Effi.	Max.
RPT-75A	5V, 0.6~8.0A	±2%	80mV	76%	93W
	12V, 0.2~4.0A	±6%	120mV		
	-5V, 0.1~1.0A	±5%	120mV		
RPT-75B	5V, 0.6~8.0A	±2%	80mV	77%	100W
	12V, 0.2~4.0A	±6%	120mV		
	-12V, 0.1~1.0A	±5%	120mV		
RPT-75C	5V, 0.6~8.0A	±2%	80mV	77%	100W
	15V, 0.1~3.0A	±8%	150mV		
	-15V, 0.1~1.0A	±5%	150mV		
RPT-75D	5V, 0.6~7.0A	±2%	80mV	79%	95W
	24V, 0.1~2.0A	±8%	200mV		
	12V, 0.1~1.0A	±8%	120mV		
RPT-7503	3.3V, 0.7~7.0A	±4%	80mV	74%	81W
	5V, 0.0~8.0A	±6%	120mV		
	12V, 0.0~1.5A	+10%, -6%	120mV		

### 160W Medical Type with PFC Function

- Universal AC input / Full range
- Built-in active PFC function
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Free air convection for 110W and 160W with 20.5 CFM forced air (RPS-160); Free air convection for 100W and 150W with 20.5 CFM forced air (RPD / T-160)
- 5"x3" compact size
- With power good and fail signal output
- Built-in remote sense function for 5~15V (RPS-160)
- Standby 5V@0.8A (G model)
- No load power consumption under 0.75W by PS-ON control (G model)
- 3 years warranty



127x 76.2x 34.6mm



AC input voltage range ..... 90~264VAC; 127~370VDC  
 AC inrush current ..... Cold start, 35A at 115VAC, 70A at 230VAC  
 DC adjustment range ..... RPS-160: ±10% rated output voltage  
 RPD/T-160: 0~+10% for CH1  
 Overload protection ..... 105%~135% hiccup mode, auto-recovery  
 Over voltage protection ..... CH1: 115%~135% shut off, re-power on to recovery  
 Leakage current ..... Less than 300uA at 240VAC  
 Setup, rise, hold up time ..... 1200ms, 30ms, 16ms at full load and 230VAC  
 Withstand voltage ..... I/P - O/P: 4kVAC, I/P - FG: 1.5kVAC, 1 minute  
 Working temperature ..... -20°C~70°C (refer to output derating curve)  
 Safety standards ..... UL60601-1, TUV EN60601-1 approved  
 EMC standards ..... EN55011/EN55022 class B, EN61000-4-2,3,4,5,6,8,11, EN61000-3-2,3, EN60601-1-2, ENV50204, EN61000-6-2 (RPS(G)-160)  
 Connection ..... 3+8+2(4)P/3.96mm pitch JST B3P / B8P-VH, B2B (B4B)-XH

#### ♦ Single Output

Model No.	Output	Tol.	R&N	Effi.
RPS□-160-5	5V, 0~30.0A	±4%	100mV	85%
RPS□-160-12	12V, 0~12.9A	±3%	100mV	87%
RPS□-160-15	15V, 0~10.3A	±3%	120mV	87%
RPS□-160-24	24V, 0~6.5A	±2%	150mV	87%
RPS□-160-48	48V, 0~3.25A	±2%	250mV	88%

#### ♦ Dual Output

Model No.	Output	Tol.	R&N	Effi.	Max.
RPD□-160B	5V, 1.0~12A	±2.5%	80mV	84%	150W
	24V, 0.2~3.6A	±6%	200mV		

#### ♦ Triple Output

Model No.	Output	Tol.	R&N	Effi.	Max.
RPT□-160A	5V, 0.6~14A	±2%	100mV	84%	141W
	12V, 0.2~5.5A	±5%	120mV		
	-5V, 0.1~1.0A	-5%, +7%	120mV		
RPT□-160B	5V, 0.6~14A	±2%	100mV	84%	142W
	12V, 0.2~5.0A	±5%	120mV		
	-12V, 0.1~1.0A	-4%, +5%	120mV		
RPT□-160C	5V, 0.6~14A	±2%	100mV	83%	139W
	15V, 0.1~3.6A	±4%	150mV		
	-15V, 0.1~1.0A	-5%, +7%	150mV		
RPT□-160D	5V, 0.3~11A	±2%	100mV	83%	144W
	12V, 0.2~5.0A	±5%	120mV		
	24V, 0.15~1.2A	±4%	200mV		

□ = blank, G; blank: basic function, G: with 5Vsb/0.8A & no load power consumption < 0.75W

# Open Frame

## 120~200W 1~4 Output Medical Type

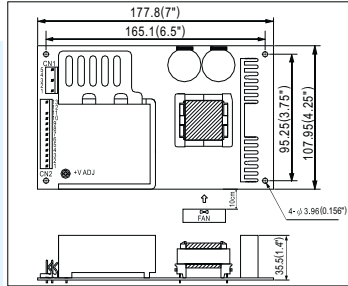


### 120 & 200W 1~4 Output Medical Type

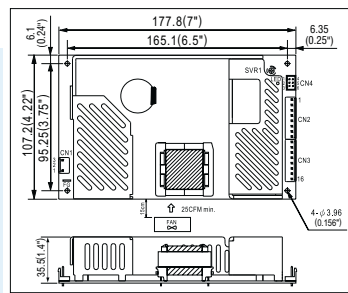
- Universal AC input / Full range
- PF> 0.95@230VAC (200W)
- Protections: Short circuit / Overload / Over voltage / OTP (200W)
- Leakage current≤180uA
- Built-in remote sense and remote ON/OFF control (200W)
- PG / PF signal output (optional for 120W)
- 80W / 140W free air convection, 120W / 200W with 25CFM forced air
- 100% full load burn-in test
- 3 years warranty
- Suitable for medical & IT applications



**120W**  
177.8x 108x 35.5mm



**200W**  
177.8x 107.2x 35.5 mm



AC input voltage range ..... 90~264VAC; 127~370VDC  
 AC inrush current ..... Cold start, 35A at 115VAC, 60A at 230VAC  
 DC adjustment range ..... CH1: -5~+10% rated output voltage  
 Overload protection ..... 110~160% hiccup mode, auto-recovery  
 Over voltage protection ..... CH1: 115%~140% rated output voltage  
 Leakage current ..... Less than 180uA at 264VAC  
 Setup, rise, hold up time ..... 1000ms, 20ms, 16ms at full load and 230VAC  
 Withstand voltage ..... I/P - O/P: 4kVAC, I/P - FG: 1.5kVAC, 1 minute  
 Working temperature ..... -20°C~70°C (refer to output derating curve)  
 Safety standards ..... UL60601-1, TUV EN60601-1, IEC60601-1 approved;  
 Design refer to UL60950-1, TUV EN60950-1  
 EMC standards ..... EN55011/EN55022 class B,  
 EN61000-4-2,3,4,5,6,8,11, EN61000-3-2,3,  
 EN60601-1-2, ENV50204, EN61000-6-2  
 Connection ..... 5P,13P/ 3.96mm pitch, Molex 5273-05, 5273-13 (120W)  
 3P, 20P / 3.96mm pitch, JST B3P/VH, Molex 5566-20 (MPS-200)  
 3P, 8Px2 / 3.96mm pitch, JSTB3P / B8Px2-VH (MPD/T/Q-200)  
 Packing ..... 0.55kg ; 24pcs / 14.5kg / 1.04CUFT (120W)  
 0.66kg ; 24pcs / 16.8kg / 1.04CUFT (200W)

#### Single Output

Model No.	Output	Tol.	R&N	Effi.
MPS-120-3.3	3.3V, 0~24A	±3%	80mV	68%
MPS-120-5	5V, 0~22A	±3%	80mV	73%
MPS-120-12	12V, 0~10A	±2%	100mV	77%
MPS-120-15	15V, 0~8.0A	±2%	100mV	79%
MPS-120-24	24V, 0~5.0A	±2%	120mV	81%
MPS-120-48	48V, 0~2.5A	±2%	120mV	82%

Model No.	Output	Tol.	R&N	Effi.
MPS-200-3.3	3.3V, 0~40A	±2%	80mV	77%
MPS-200-5	5V, 0~40A	±2%	80mV	81%
MPS-200-12	12V, 0~16.7A	±2%	100mV	84%
MPS-200-15	15V, 0~13.4A	±2%	100mV	85%
MPS-200-24	24V, 0~8.4A	±1%	150mV	86%
MPS-200-48	48V, 0~4.2A	±1%	200mV	87%

#### Dual Output

Model No.	Output	Tol.	R&N	Effi.	Max.
MPD-120A	5V, 2.0~12A	±2%	80mV	75%	110W
	12V, 0.5~6.0A	±7%	120mV		
MPD-120B	5V, 2.0~12A	±2%	80mV	76%	120W
	24V, 0.3~3.2A	±8%	250mV		

#### Dual Output

Model No.	Output	Tol.	R&N	Effi.	Max.
MPD-200A	5V, 4.0~24A	±2%	80mV	82%	196W
	12V, 0.8~9.6A	+8%, -5%	120mV		
MPD-200B	5V, 4.0~24A	±2%	80mV	83%	196W
	24V, 0.4~4.8A	±6.5%	180mV		

#### Triple Output

Model No.	Output	Tol.	R&N	Effi.	Max.
MPT-120A	5V, 2.0~12A	±2%	80mV	72%	111W
	12V, 0.4~5.8A	+8%, -6%	120mV		
MPT-120B	-5V, 0.0~1.0A	±5%	80mV		
	5V, 2.0~12A	±2%	80mV	73%	110W
MPT-120C	12V, 0.4~5.3A	±6%	120mV		
	-12V, 0.0~1.0A	±5%	80mV		
MPT-120D	5V, 2.0~11A	±2%	80mV	72%	119W
	15V, 0.4~4.4A	+6%, -7%	150mV		
MPT-120D	-15V, 0.0~1.0A	±5%	80mV		
	5V, 2.0~12A	±2%	80mV	74%	110W
MPT-120D	24V, 0.4~2.6A	+8%, -6%	300mV		
	12V, 0.0~1.0A	±5%	120mV		

MPT-200A	5V, 4.0~24A	±2%	80mV	80%	200W
	12V, 0.8~9.0A	±8%	120mV		
MPT-200B	-5V, 0.0~2.4A	±5%	80mV		
	5V, 4.0~24A	±2%	80mV	80%	196W
MPT-200C	12V, 0.6~7.2A	±8%	120mV		
	-12V, 0.0~2.4A	±5%	80mV		
MPT-200C	5V, 4.0~24A	±2%	80mV	80%	201W
	15V, 0.5~5.6A	±8%	150mV		
MPT-200D	-15V, 0.0~2.4A	±5%	80mV		
	5V, 4.0~24A	±2%	80mV	81%	196W
MPT-200D	24V, 0.3~3.6A	±8%	180mV		
	12V, 0.0~2.4A	±5%	80mV		

#### Quad Output

Model No.	Output	Tol.	R&N	Effi.	Max.
MPQ-120B	5V, 2.0~11A	±2%	80mV	71%	111W
	12V, 0.5~5.0A	±6%	120mV		
	-5V, 0.0~1.0A	±5%	80mV		
MPQ-120C	-12V, 0.0~1.0A	±5%	80mV		
	5V, 2.0~11A	±2%	80mV	71%	110W
	15V, 0.5~3.8A	+6%, -7%	150mV		
MPQ-120D	-5V, 0.0~1.0A	±5%	80mV		
	-15V, 0.0~1.0A	±5%	80mV		
	5V, 2.0~11A	±2%	80mV	74%	120W
MPQ-120D	12V, 0.2~1.1A	+8%, -6%	150mV		
	24V, 0.3~2.3A	±8%	300mV		
	-12V, 0.0~1.0A	±5%	80mV		
MPQ-120E	5V, 2.0~11A	±2%	80mV	73%	109W
	12V, 0.5~3.3A	±6%	120mV		
	15V, 0.0~1.0A	±8%	80mV		
MPQ-120E	24V, 0.0~1.0A	±5%	80mV		

MPQ-200B	5V, 3.0~18A	±2%	80mV	78%	193W
	12V, 0.7~8.4A	±8%	120mV		
	-5V, 0.0~2.4A	±5%	80mV		
MPQ-200C	-12V, 0.0~2.4A	±5%	80mV		
	5V, 3.0~18A	±2%	80mV	78%	190W
	15V, 0.5~6.0A	±6%	150mV		
MPQ-200D	-5V, 0.0~2.4A	±5%	80mV		
	-15V, 0.0~2.4A	±5%	80mV		
	5V, 3.0~18A	±2%	80mV	79%	195W
MPQ-200D	24V, 0.3~3.6A	±8%	180mV		
	12V, 0.0~2.4A	±5%	80mV		
	-12V, 0.0~2.4A	±5%	80mV		
MPQ-200F	5V, 3.0~18A	±2%	80mV	81%	200W
	24V, 0.3~3.3A	±8%	180mV		
	15V, 0.0~2.4A	±5%	80mV		
MPQ-200F	-15V, 0.0~2.4A	±5%	80mV		

# Open Frame

## 5~25W Single and Dual Output



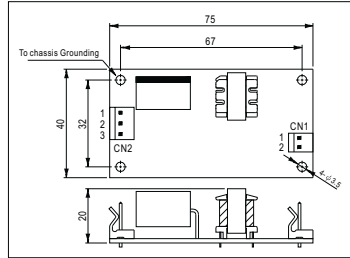
### 5W Single Output Switching Power Supply

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage / Over temp.
- Cooling by free air convection
- Fixed switching frequency at 67kHz
- Low leakage current <0.5mA
- 100% full load burn-in test
- Low cost, high reliability
- 2 years warranty

CB CE



75x 40x 20 mm



AC input voltage range ..... 85~264VAC; 120~370VDC  
 AC inrush current ..... Cold start, 30A at 230VAC  
 Overload protection ..... >105% hiccup mode, auto-recovery  
 Over voltage protection ..... 115%~135% rated output voltage  
 Over temp. protection ..... U1, Tj:140°C, hiccup mode, auto-recovery  
 Leakage current ..... Less than 0.5mA at 240VAC  
 Withstand voltage ..... I/P-O/P: 3kVAC, I/P-FG:1.5kVAC, 1minute  
 Working temperature ..... -10~60°C (refer to output derating curve)  
 Safety standards ..... UL60950-1 CB approval by TUV  
 EMC standards ..... EN55022 class B, EN61000-3-2,3, EN61000-4-2,3,4,5,6,8,11  
 Connection ..... 3P, 2P/ 3.96mm pitch, Molex 5285-03,5273-02  
 Packing ..... 0.05kg ; 120pcs / 6.25kg / 1.0CUFT

Model No.	Output	Tol.	R&N	Effi.
PS-05-5	5V, 0~1.0A	±2%	100mV	70%
PS-05-12	12V, 0~0.45A	±2%	120mV	75%
PS-05-15	15V, 0~0.35A	±2%	120mV	75%
PS-05-24	24V, 0~0.22A	±2%	200mV	76%
PS-05-48	48V, 0~0.11A	±1%	200mV	76%

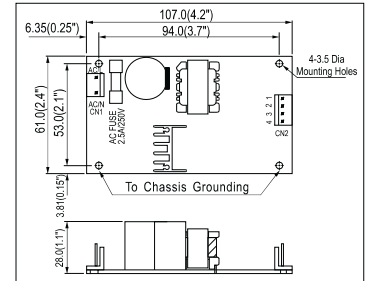
### 25W 1~2 Output Switching Power Supply

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage / Over temp.
- Cooling by free air convection
- Fixed switching frequency at 100kHz
- Low leakage current <0.5mA
- 100% full load burn-in test
- Low cost, high reliability
- 2 years warranty

UL us CB CE



107x 61x 28 mm



AC input voltage range ..... 85~264VAC; 120~370VDC  
 AC inrush current ..... Cold start, 36A at 230VAC  
 Overload protection ..... >105% hiccup mode, auto-recovery  
 Over voltage protection ..... 115%~135% rated output voltage  
 Over temp. protection ..... U1, Tj:135°C, power shutdown  
 Leakage current ..... Less than 0.5mA at 240VAC  
 Withstand voltage ..... I/P-O/P: 3kVAC, I/P-FG:1.5kVAC, 1minute  
 Working temperature ..... -10~60°C (refer to output derating curve)  
 Safety standards ..... UL60950-1, TUV EN60950-1 approved  
 EMC standards ..... EN55022 class B, EN61000-3-2,3, EN61000-4-2,3,4,5  
 Connection ..... 3P, 4P/ 3.96mm pitch, Molex P/N: 41791-03, 04  
 Packing ..... 0.14kg ; 96pcs / 15.0kg / 1.30CUFT(PS-25)  
 0.15kg ; 96pcs / 15.9kg / 1.30CUFT(PD-25)  
 0.13kg ; 96pcs / 15.4kg / 1.30CUFT(PD-2503)

#### Single Output

Model No.	Output	Tol.	R&N	Effi.
PS-25-3.3	3.3V, 0~5.0A	±3%	80mV	66%
PS-25-5	5V, 0~5.0A	±2%	80mV	74%
PS-25-7.5	7.5V, 0~3.3A	±2%	80mV	76%
PS-25-12	12V, 0~2.1A	±2%	100mV	78%
PS-25-13.5	13.5V, 0~1.9A	±2%	100mV	78%
PS-25-15	15V, 0~1.7A	±2%	100mV	78%
PS-25-24	24V, 0~1.0A	±2%	240mV	79%
PS-25-27	27V, 0~0.9A	±2%	240mV	79%
PS-25-48	48V, 0~0.5A	±2%	350mV	79%

#### Dual Output

Model No.	Output	Tol.	R&N	Effi.	Max.
PD-25A	5V, 0.2~2.5A	±2%	50mV	71%	25W
	12V, 0.1~1.5A	±6%	150mV		
PD-25B	5V, 0.2~2.0A	±2%	50mV	77%	25W
	24V, 0.1~1.0A	±6%	200mV		
PD-2505	5V, 0.1~3.0A	±6%	50mV	73%	25W
	-5V, 0.1~2.5A	±6%	50mV		
PD-2512	12V, 0.1~1.2A	±4%	50mV	74%	24W
	-12V, 0.1~1.2A	±4%	50mV		
PD-2515	15V, 0.1~1.0A	±4%	50mV	75%	24W
	-15V, 0.1~1.0A	±4%	50mV		
PD-2503	3.3V, 0.2~5.0A	±2%	50mV	72%	25W
	5V, 0.1~4.0A	+5%,-8%	50mV		

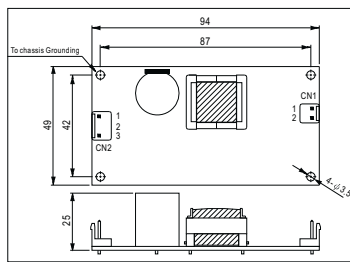
### 15W Single Output Switching Power Supply

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage / Over temp.
- Cooling by free air convection
- Fixed switching frequency at 67kHz
- Low leakage current <0.5mA
- 100% full load burn-in test
- Low cost, high reliability
- 2 years warranty

CB CE



94x 49x 25 mm



AC input voltage range ..... 85~264VAC; 120~370VDC  
 AC inrush current ..... Cold start, 40A at 230VAC  
 Overload protection ..... >105% hiccup mode, auto-recovery  
 Over voltage protection ..... 115%~135% rated output voltage  
 Over temp. protection ..... U1, Tj:140°C, hiccup mode, auto-recovery  
 Leakage current ..... Less than 0.5mA at 240VAC  
 Withstand voltage ..... I/P-O/P: 3kVAC, I/P-FG:1.5kVAC, 1minute  
 Working temperature ..... -10~60°C (refer to output derating curve)  
 Safety standards ..... EN60950-1 CB approval by TUV  
 EMC standards ..... EN55022 class B, EN61000-3-2,3, EN61000-4-2,3,4,5,6,8,11  
 Connection ..... 3P, 2P/ 3.96mm pitch, JST B3P/B2P-VH  
 Packing ..... 0.083kg ; 120pcs / 10.96kg

Model No.	Output	Tol.	R&N	Effi.
PS-15-5	5V, 0~2.80A	±2%	100mV	74%
PS-15-12	12V, 0~1.25A	±2%	120mV	77%
PS-15-15	15V, 0~1.00A	±2%	120mV	78%
PS-15-24	24V, 0~0.625A	±2%	150mV	79%
PS-15-48	48V, 0~0.313A	±2%	200mV	77%

# Open Frame

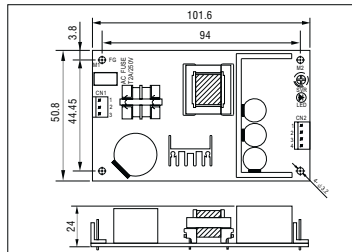
35~75W Single, Dual, and Triple Output



## 35W Single Output Switching Power Supply

- 4"x2"x 0.95" compact size
- Universal AC input / Full range
- Cooling by free air convection

- Protections: Short circuit / Overload / Over voltage
- 2 years warranty



AC input voltage range ..... 90~264VAC; 127~370VDC  
 DC adjustment range ..... ±10% rated output voltage  
 Overload protection ..... 105%~160% hiccup mode, auto-recovery  
 Over voltage protection ..... 115%~150% rated output voltage  
 Withstand voltage ..... I/P-O/P: 3.0kVAC, I/P-FG: 1.5kVAC, 1minute  
 Working temperature ..... -20°C~+65°C (refer to output derating curve)  
 Safety standards ..... UL60950-1, TUV EN60950-1 approved  
 EMC standards ..... EN55022 class B, EN61000-3-2,3, EN61000-4-2,3,4,5,6,8,11; ENV50204  
 Connection ..... 3+4P / 3.96mm pitch, JST B3P/B4P-VH  
 Packing ..... 0.124kg; 96pcs / 12.9kg / 0.8CUFT

Model No.	Output	Tol.	R&N	Effi.
PS-35-3.3	3.3V, 0~6.0A	±2%	80mV	70%
PS-35-5	5V, 0~6.0A	±2%	100mV	78%
PS-35-7.5	7.5V, 0~4.7A	±2%	100mV	80%
PS-35-12	12V, 0~3.0A	±1%	120mV	81%
PS-35-13.5	13.5V, 0~2.6A	±1%	120mV	81%
PS-35-15	15V, 0~2.4A	±1%	150mV	81%
PS-35-24	24V, 0~1.5A	±1%	200mV	85%
PS-35-48	48V, 0~0.75A	±1%	240mV	84%

## 75W Single Output with PFC Function

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- High efficiency up to 90%
- Protections: Short circuit / Overload / Over voltage

- No load power consumption <0.5W
- Cooling by free air convection
- LED indicator for power on
- Case available (ELP-75-x-C)
- 1U low profile
- 3 years warranty



AC input voltage range ..... 90~264VAC; 127~370VDC  
 AC inrush current ..... Cold start, 60A at 230VAC  
 DC adjustment range ..... ±10% rated output voltage  
 Overload protection ..... 105%~150% hiccup mode, auto-recovery  
 Over voltage protection ..... 115%~135% rated output voltage  
 Leakage current ..... Less than 1mA at 240VAC  
 Setup, rise, hold up time .... 2500ms, 50ms, 20ms at full load and 230VAC  
 Withstand voltage ..... I/P-O/P: 3kVAC, I/P-FG: 1.5kVAC, O/P-FG: 0.5kVAC  
 Working temperature ..... -30°C~+70°C (refer to output derating curve)  
 Safety standards ..... UL60950-1, TUV EN60950-1 approved  
 EMC standards ..... EN55022 class B, EN61000-3-2,-3, EN61000-4-2,3,4,5,6,8,11, ENV50204,  
 Connection ..... 3+6P / 3.96mm pitch, JST B3P/B6P-VH

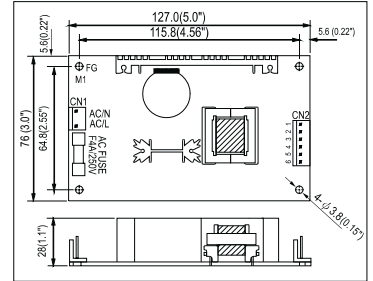
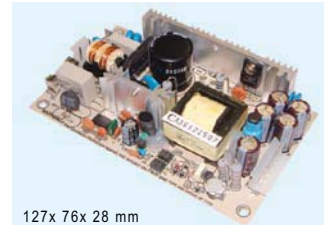
Model No.	Output	Tol.	R&N	Effi.
ELP-75-3.3□	3.3V, 0~15A	±3%	80mV	80%
ELP-75-5□	5V, 0~15A	±2%	80mV	82%
ELP-75-12□	12V, 0~6.25A	±2%	120mV	89%
ELP-75-15□	15V, 0~5A	±2%	150mV	90%
ELP-75-24□	24V, 0~3.15A	±1%	240mV	90%
ELP-75-36□	36V, 0~2.1A	±1%	280mV	90%
ELP-75-48□	48V, 0~1.6A	±1%	300mV	90%

□= blank, -C ; blank: PCB type, -C: Enclosed type

## 45W 1~3 Output Switching Power Supply

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- Fixed switching frequency at 65kHz

- Low leakage current <0.5mA
- 100% full load burn-in test
- Low cost, high reliability
- 2 years warranty



AC input voltage range ...90~264VAC; 127~370VDC  
 AC inrush current .....Cold start, 15A at 115VAC, 30A at 230VAC  
 DC adjustment range .....CH1: -5%~+10% rated output voltage  
 Overload protection .....53~75W hiccup mode, auto-recovery  
 Over voltage protection ..CH1: 115%~135% rated output voltage  
 Leakage current .....Less than 0.5mA at 240VAC  
 Withstand voltage ..... I/P-O/P: 3kVAC, I/P-FG: 1.5kVAC, 1minute  
 Working temperature ..... -10~60°C (refer to output derating curve)  
 Safety standards ..... UL60950-1, TUV EN60950-1, CCC GB4943 approved  
 EMC standards ..... EN55022 class B, EN61000-3-2,3, EN61000-4-2,3,4,5,6,8,11, ENV50204, GB9254  
 Connection ..... 2P, 6P/ 3.96mm pitch, Molex 5277-02 / 5273-06  
 Packing ..... 0.19kg ; 72pcs / 15.6kg / 1.35CUFT(PS-45)  
 0.20kg ; 72pcs / 16.0kg / 1.35CUFT(PD-45)  
 0.21kg ; 72pcs / 17.0kg / 1.35CUFT(PT-45)

### Single Output

Model No.	Output	Tol.	R&N	Effi.
PS-45-3.3	3.3V, 0~8.0A	±3%	80mV	69%
PS-45-5	5V, 0~8.0A	±3%	100mV	74%
PS-45-7.5	7.5V, 0~5.4A	±3%	100mV	75%
PS-45-12	12V, 0~3.7A	±2%	100mV	76%
PS-45-13.5	13.5V, 0~3.3A	±2%	100mV	77%
PS-45-15	15V, 0~3.0A	±2%	100mV	77%
PS-45-24	24V, 0~1.9A	±2%	100mV	78%
PS-45-27	27V, 0~1.7A	±2%	100mV	78%
PS-45-48	48V, 0~1.0A	±2%	100mV	78%

### Dual Output

Model No.	Output	Tol.	R&N	Effi.	Max.
PD-45A	5V, 0.4~5.0A	±4%	50mV	77%	40W
	12V, 0.2~2.5A	±7%	120mV		
PD-45B	5V, 0.4~5.0A	±4%	50mV	78%	45W
	24V, 0.2~1.8A	±7%	120mV		

### Triple Output

Model No.	Output	Tol.	R&N	Effi.	Max.
PT-45A	5V, 0.4~5.0A	±4%	50mV	75%	41W
	12V, 0.2~2.5A	±7%	120mV		
	-5V, 0.0~0.5A	±5%	50mV		
PT-45B	5V, 0.4~5.0A	±4%	50mV	75%	43W
	12V, 0.2~2.5A	±7%	120mV		
	-12V, 0.0~0.5A	±5%	100mV		
PT-45C	5V, 0.4~5.0A	±4%	50mV	75%	44W
	15V, 0.2~2.3A	±7%	120mV		
	-15V, 0.0~0.5A	±5%	100mV		

# Open Frame

## 45~65W Single, Dual, and Triple Output

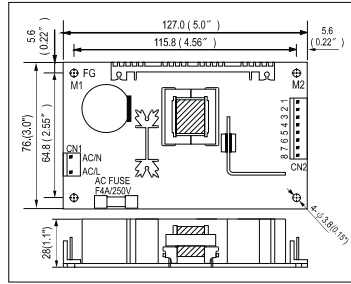


### 45 & 65W Triple Output with 3.3V Channel

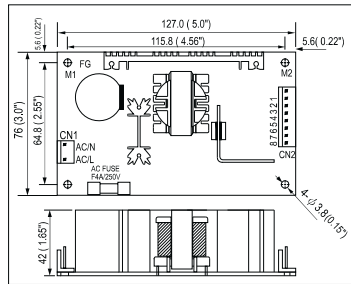
- Universal AC input / Full range
- Total power for CH1+2: 35W (PT-45)
- Total power for CH1+2: 54W (PT-65)
- Protections: Short circuit / Overload / Over voltage
- Fixed switching frequency at 65kHz
- Cooling by free air convection
- 100% full load burn-in test
- 2 years warranty



**PT-4503**  
127x 76x 28 mm



**PT-6503**  
127x 76x 42 mm



AC input voltage range ..... 90~264VAC; 127~370VDC  
 AC inrush current ..... Cold start, 20A at 115VAC, 40A at 230VAC  
 DC adjustment range ..... 3.3V:  $\pm 10\%$  rated output voltage  
 Overload protection ..... 120%~160% hiccup mode, auto-recovery  
 Over voltage protection ..... 5V: 115%~135% rated output voltage  
 Leakage current ..... Less than 1.0mA at 240VAC  
 Setup, rise, hold up time ..... 800ms, 50ms, 60ms at full load and 230VAC  
 Withstand voltage ..... I/P-O/P: 3kVAC, I/P-FG: 1.5kVAC, 1minute  
 Working temperature ..... -10~60°C (refer to output derating curve)  
 Safety standards ..... UL60950-1, TUV EN60950-1 approved  
 EMC standards ..... EN55022 class B, EN61000-3-2,3, EN61000-4-2,3,4,5,6,11  
 Connection ..... 2P, 8P/ 3.96mm pitch, Molex: 5277-02, 5273-08  
 Packing ..... 0.23kg ; 72pcs / 17.6kg / 1.35CUFT(PT-4503)  
 0.28kg ; 54pcs / 16.2kg / 1.35CUFT(PT-6503)

#### ♦ Triple Output (45W)

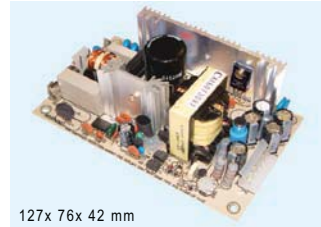
Model No.	Output	Tol.	R&N	Effi.	Max.
PT-4503	3.3V, 0.0~5.0A	$\pm 2\%$	50mV	72%	45W
	5V, 0.2~7.0A	+4%, -2%	50mV		
	12V, 0.0~1.2A	$\pm 4\%$	100mV		

#### ♦ Triple Output (65W)

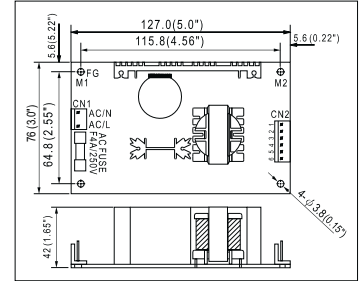
Model No.	Output	Tol.	R&N	Effi.	Max.
PT-6503	3.3V, 0.0~7.0A	$\pm 3\%$	50mV	72%	62W
	5V, 0.2~10A	+4%, -2%	50mV		
	12V, 0.0~1.2A	$\pm 4\%$	100mV		

### 65W 1~3 Output Switching Power Supply

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- Fixed switching frequency at 65kHz
- Low leakage current <0.5mA
- 100% full load burn-in test
- Low cost, high reliability
- 2 years warranty



127x 76x 42 mm



AC input voltage range ..... 90~264VAC; 127~370VDC  
 AC inrush current ..... Cold start, 20A at 115VAC, 40A at 230VAC  
 DC adjustment range ..... CH1: -5%~+10% rated output voltage  
 Overload protection ..... 73~105W hiccup mode, auto-recovery  
 Over voltage protection ..... CH1: 115%~135% rated output voltage  
 Leakage current ..... Less than 0.5mA at 240VAC  
 Setup, rise, hold up time ..... 800ms, 20ms, 60ms at full load and 230VAC  
 Withstand voltage ..... I/P-O/P: 3kVAC, I/P-FG: 1.5kVAC, 1minute  
 Working temperature ..... 0~45°C@100%, -10°C@80%, 60°C@50% load  
 Safety standards ..... UL60950-1, TUV EN60950-1, CCC GB4943 approved

EMC standards ..... EN55022 class B, EN61000-3-2,3, EN61000-4-2,3,4,5,6,8,11, ENV50204, GB9254  
 Connection ..... 2P, 6P/ 3.96mm pitch, Molex P/N: 5277-02, 5273-06  
 Packing ..... 0.21kg ; 54pcs / 14.2kg / 1.35CUFT(PS-65)  
 0.24kg ; 54pcs / 15.0kg / 1.35CUFT(PD-65)  
 0.25kg ; 54pcs / 15.9kg / 1.35CUFT(PT-65)

#### ♦ Single Output

Model No.	Output	Tol.	R&N	Effi.
PS-65-3.3	3.3V, 0~12A	$\pm 3\%$	80mV	69%
PS-65-5	5V, 0~12A	$\pm 3\%$	100mV	76%
PS-65-7.5	7.5V, 0~8.0A	$\pm 3\%$	100mV	79%
PS-65-12	12V, 0~5.2A	$\pm 2\%$	100mV	79%
PS-65-13.5	13.5V, 0~4.7A	$\pm 2\%$	100mV	79%
PS-65-15	15V, 0~4.2A	$\pm 2\%$	100mV	79%
PS-65-24	24V, 0~2.7A	$\pm 2\%$	100mV	80%
PS-65-27	27V, 0~2.4A	$\pm 2\%$	100mV	80%
PS-65-48	48V, 0~1.35A	$\pm 2\%$	100mV	80%

#### ♦ Dual Output

Model No.	Output	Tol.	R&N	Effi.	Max.
PD-65A	5V, 0.4~7.0A	$\pm 4\%$	50mV	78%	61W
	12V, 0.2~3.2A	$\pm 7\%$	120mV		
PD-65B	5V, 0.4~6.0A	$\pm 4\%$	50mV	81%	66W
	24V, 0.2~2.6A	$\pm 7\%$	150mV		

#### ♦ Triple Output

Model No.	Output	Tol.	R&N	Effi.	Max.
PT-65A	5V, 0.4~7.0A	$\pm 4\%$	50mV	76%	60W
	12V, 0.2~3.2A	$\pm 7\%$	120mV		
	-5V, 0.0~0.7A	$\pm 5\%$	50mV		
PT-65B	5V, 0.4~7.0A	$\pm 4\%$	50mV	77%	64W
	12V, 0.2~3.2A	$\pm 7\%$	120mV		
PT-65C	-12V, 0.0~0.7A	$\pm 5\%$	100mV		
	5V, 0.4~7.0A	$\pm 4\%$	50mV	77%	65W
	15V, 0.2~2.6A	$\pm 7\%$	120mV		
PT-65D	-15V, 0.0~0.7A	$\pm 5\%$	100mV		
	5V, 0.5~5.0A	$\pm 4\%$	50mV	79%	68W
	12V, 0.2~4.0A	$\pm 6\%$	100mV		
	24V, 0.2~1.3A	$\pm 6\%$	200mV		



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