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# **ENCLOSED**







### **INTRODUCTION**

Avanti Power Repairs was founded in 1996, as a company we have steadily expanded to meet the demand of our customers and will continue to do so with the ever increasing and changing demands of the industry.

We specialize in the manufacture, design and distribution of switch mode, and more recently linear power supplies. Our range is extensive starting at a low 5 watts and going through to 2000 watts. We also offer these units in both single and multi outputs, covering a vast range power supplies for every need, the majority of which have full universal input

Avanti Power Repairs is working to the highest quality standards (ISO9001) in providing advice and services based solely on your requirements. We pride ourselves on being flexible in dealing with your needs and will provide you a service that is second to none. With a skilled and dedicated workforce, this workforce will ensure that all the product information you require is available with the least delay to you as is possible.

If you do not find a product within our catalogue that meets your requirements please contact our technical sales team, at one of the addresses or numbers below, who will be more than capable of helping you find a unit to meet your needs. Our full research and development capability will allow you initial design concept to be seen through to a fully documented finish project.

### "With the Power to help you"

# **ENCLOSED**

An enclosed power supply is typically perceived as the metal cased variety; the benefit of this is to stop components being exposed & in turn providing an extra measure of safety for service personnel of end user systems. Encapsulated power supplies are also included under the enclosed power supply banner on our site as they also protect components and may offer your application the most suitable specifications.

Avanti's enclosed power supply range offer flexible OEM power solutions from 5W to 10000W in single, dual, triple and quad outputs; our parallel units have the functionality to take this up to 9000W. Our enclosed power supplies have varied function, including full range input, active power factor correction, low no load power consumption, programmable outputs and even medical safety approval to MOOP levels; the majority of which have short circuit, over load and over voltage protections.

Whether you are looking for a high reliability miniature, PFC, modular, programmable or UPS function; from the encapsulated APC Series to the large Parallel function RSP's you are sure to find the enclosed power supply you need from Avanti.

Not what you were looking for? Just give one of our sales team a call.

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#### RS-15 Series - 15W Single Output AC-DC Enclosed Power Supply

#### **Applications**

General electronic machinery or equipment

Automation

Test equipment

Small scale LED signs



#### **Features**

Universal AC input / Full range

Short circuit, over load, over voltage, over temperature

protections

Cooling by free air convection

LED indicator for power on

100% full load burn-in test

All using 105°C long life electrolytic capacitors

Withstand 300VAC surge input for 5 second

High operating temperature up to 70°C

Withstand 5G vibration test

High efficiency, long life and high reliability



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
RS-15-3-3	3.3V	3A	9.9W	80mV	72%
RS-15-5	5V	3A	15W	80mV	77%
RS-15-12	12V	1.3A	15.6W	120mV	81%
RS-15-15	15V	1A	15W	120mV	81%
RS-15-24	24V	0.625A	15W	200mV	82%
RS-15-48	48V	0.313A	15W	200mV	82%

#### **Specification**

Input Voltage 85 ~ 264Vac 120 ~ 370Vdc Input Current 0.35A/115Vac 0.25A/230Vac

Input Frequency  $47 \sim 63$ Hz

Inrush Current 50A/230Vac, cold start

Leakage Current <2mA/ 240Vac

Holdup Time 70ms/230Vac 15ms/115Vac at full load Over Voltage Protection Shut off o/p voltage, clamping by zener diode

Humidity  $20 \sim 90\%$  RH non-condensing

Over Temperature Protection Shut down o/p voltage, recovers automatically after temperature goes down

 $-40^{\circ}$ C to  $+85^{\circ}$ C,  $10 \sim 95\%$  RH

MTBF 1608.8Khrs min. MIL-HDBK-217F (25°C)

#### **Description**

Storage Temperature, Humidity

The new RS-15 Series are 20% smaller than their 20W counterpart and are our most miniature AC/DC enclosed type switching power supplies that can provide 15W by only free air convection. RS-15 is fully RoHS compliant and all the electrolytic capacitors in the unit are rated in 105°C. RS-15 can also withstand 300VAC input surge for 5 seconds and 5G vibration meaning that is suitable for operation in harsh environments. Full output wattage can be provided up to 50°C and the highest operating temperature is as high as 70°C, with certain de-rating. Other standard functions include short circuit, overload, over voltage, and over temperature protections.

#### SPS-G015 Series - 15W AC/DC Green Mode Enclosed Power Supply

#### **Applications**

Logic control circuit designing Automatic control systems Industrial control systems Test equipment LED displays Security devices



#### **Features**

Green mode designing, no load < 0.3W All using 105°C long life electrolytic capacitors Over load, over voltage, short circuit protection Small size, high efficiency Output voltage ±10% adjustment 100% full load burn-in test -20°C~70°C operating temperature UL, cUL, TUV, CB, CE approved



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-G015-3-3	3.3V	3A	10W	80mV	72%
SPS-G015-05	5V	3A	15W	80mV	77%
SPS-G015-12	12V	1.3A	15.6W	120mV	81%
SPS-G015-15	15V	1.0A	15W	120mV	81%
SPS-G015-24	24V	0.63A	15.1W	200mV	82%
SPS-G015-48	48V	0.32A	15.4W	200mV	82%

#### **Specification**

Input Voltage 88V ~ 264Vac universal full range or 125V ~375Vdc

Input Current <0.5A@100Vac input, full load condition

Input Frequency  $47 \sim 63$ Hz

Inrush Current <30A@115V, <50A@230Vac input, Cold start at 25°C ambient

Leakage Current <0.5mA@264Vac input

Holdup Time >60mS@230V, full load condition

Over Voltage Protection Over voltage latch

Rise Time <50mS

Operating Humidity 20% ~ 85% (non condensing)

Storage Temperature, Humidity  $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ ,  $10\% \sim 95\%$  (non condensing)

Terminal Pitch 5P / 7.62mm with plastic cover

#### **Description**

SPS-G015 is a single output AC/DC enclosed power supply with green mode function for low power consumption. With wide range operation temperatures of  $-20^{\circ}$ C to  $+70^{\circ}$ C (please refer to spec details),  $\pm 10^{\circ}$ 6 output voltage adjustment and <0.3W no load power consumption, as well as short circuit, over voltage and over load protections.

#### RS-25 Series - 25W Single Output AC-DC Enclosed Power Supply



#### **Features**

Universal AC input / Full range
Protections: Short circuit/Over load/Over voltage
Cooling by free air convection
LED indicator for power on
100% full load burn-in test
All using 105°C long life electrolytic capacitors
Withstand 300VAC surge input for 5 second
High operating temperature up to 70

High operating temperature up to 70

Withstand 5G vibration test

High efficiency, long life and high reliability



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
RS-25-3-3	3.3V	6A	19.8W	80mV	72%
RS-25-5	5V	5A	25W	80mV	77%
RS-25-12	12V	2.1A	25.2W	120mV	79%
RS-25-15	15V	1.7A	25.5W	120mV	82%
RS-25-24	24V	1.1A	26.4W	120mV	84%
RS-25-48	48V	0.57A	27.36W	200mV	85%

#### **Specification**

Input Voltage 88 ~ 264Vac 125 ~ 373Vdc

(Withstand 300Vac surge for 5sec. Without damage)

Frequency Range  $47 \sim 63$ Hz

Input Current 0.7A/115Vac 0.4A/230Vac Inrush Current (max.) 30A at 230Vac, cold start

Leakage Current <2mA at 240Vac

Working Humidity 20 ~ 90% RH non-condensing

Hold Time 80ms at 230Vac 14ms at 115Vac, full load

Working Temperature  $-20^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$  (Refer to output load de-rating curve)

Set up, Rise Time 1200ms, 23ms at 230VAC 2200ms, 30ms at 115Vac, full load

Over Voltage Protection Hiccup mode, recovers automatically after fault condition is removed

#### SPS-025 Series - 25W Single Output Switching Power Supply



#### **Features**

Universal input Built-in EMI filter Low ripple noise

No min. load requirement

Output voltage ±10% adjustment

100% 50°C burn-in test

Green mode design - meets IEA standard <0.75W (standby

state)

Over voltage, over load & short circuit protections



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-025-3-3	3.3V	6.0A	20W	50mV	71%
SPS-025-05	5.0V	5.0A	25W	50mV	75%
SPS-025-7-5	7.5V	3.4A	25W	50mV	79%
SPS-025-12	12V	2.1A	25W	100mV	82%
SPS-025-15	15V	1.7A	25W	100mV	82%
SPS-025-24	24V	1.1A	27W	100mV	85%
SPS-025-30	30V	0.9A	27W	100mV	85%
SPS-025-48	48V	0.57A	27W	100mV	85%

#### **Specification**

Input Voltage 85 to 264Vac 120 to 375Vdc

Input Current 0.8A max. at 100Vac input, full load

Input Frequency 47 to 63Hz

Inrush Current 30A max. at 115Vac input, full load, 50A max at 230Vac input, full load

Leakage Current 1.0mA max. at 264Vac input

Over Load Protection Over 105% ~ 200% of rating, recovers removed

automatically after fault condition has been

Short Circuit Protection Auto recovers once fault condition removed

Rise Time 20mS max

Hold Up Time 40mS min. at 230Vac

Operating Humidity 20% ~ 85% (non condensing)

Storage Temperature, Humidity -25°C ~ 75°C, 10% ~ 95% (non condensing)

Operating Temperature  $-25^{\circ}\text{C} \sim 70^{\circ}\text{C}$ ; De-rating:  $-25^{\circ}\text{C} \sim -10^{\circ}\text{C}$ :  $2.5\%/^{\circ}\text{C} / 50^{\circ}\text{C} \sim 70^{\circ}\text{C}$   $2.5\%/^{\circ}\text{C}$ 

#### SPS-G025 Series - 25W AC/DC Green Mode Enclosed Power Supply

#### **Applications**

Logic control circuit designing Automatic control systems Industrial control systems Test equipment LED displays Security devices



#### **Features**

Green mode designing, no load < 0.3W High efficiency and high reliability Built in EMI filter, low ripple noise Over load, over voltage, short circuit protection Output voltage ±10% adjustment 100% full load burn-in test -20°C~70°C operating temperature UL, cUL, TUV, CB, CE approved



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-G025-3-3	3.3V	6A	20W	50mV	72%
SPS-G025-05	5V	5A	25W	70mV	77%
SPS-G025-7-5	7.5V	3.4A	25W	70mV	78%
SPS-G025-12	12V	2.1A	25W	120mV	81%
SPS-G025-15	15V	1.7A	25W	150mV	82%
SPS-G025-24	24V	1.1A	27W	150mV	84%
SPS-G025-30	30V	0.9A	27W	200mV	85%
SPS-G025-48	48V	0.57A	27W	200mV	85%

#### **Specification**

Input Voltage 88V ~ 264Vac universal full range or 125V ~ 375Vdc

Inrush Current <30A@115V, <50A@230Vac input, Cold start at 25°C ambient

Input current <0.65A@100Vac input, full load condition

Input Frequency 47~440Hz

Hold Up Time >60mS@230V, full load condition

Leakage Current <1.5mA@264Vac input

Rise Time <30mS

Set Up Time <1 Sec@100 ~ 240Vac

Over Voltage Protection Over voltage latch

Over Load & Over 105% ~ 180% rate load or short circuit activated

Short Circuit Protection Hiccup mode with auto recovery once fault condition removed

Green Mode Function No load power consumption <0.3W at 240Vac input

Cooling Natural cooling

Terminal Pitch 5P / 7.62mm with plastic cover

#### **Description**

SPS-G025 is a single output AC/DC enclosed power supply with green mode function for low power consumption. With wide range operation temperatures of -20°C to +70°C (please refer to spec details),  $\pm 10\%$  output voltage adjustment and <0.3W no load power consumption, as well as short circuit, over voltage and over load protections. For DIN Rail applications there is also a new DIN bracket 60-475-212R.

#### SNP-C03 Series - 30W AC/DC Single Output Enclosed Power Supply



#### **Features**

With ITE safety
Only 1.142 inch height
With power on LED
With output adjustable trimmer
Efficiency between 75% to 85%
Operation from -20°C to 70°C by convection

Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SNP-C03B	3.3V	6A	30W	50mV	75%
SNP-C036	5V	6A	30W	50mV	82%
SNP-C037	12V	2.5A	30W	120mV	83%
SNP-C038	15V	2A	30W	150mV	84%
SNP-C039	24V	1.3A	30W	240mV	84%
SNP-C03T	48V	0.63A	30W	240mV	85%

#### **Specification**

Input Voltage 85Vac to 264Vac

Inrush Current less than 30A at 115Vac less than 60A at 230Vac, cold start, 25°C

Input Frequency 47Hz to 63Hz

Hold Up Time 16mS typical at rated load and 115Vac

Over Load Protection Auto recovery
Short Circuit Protection Auto recovery
Over Voltage Protection Latch off

Cooling Free air convection Storage Temperature  $-40^{\circ}\text{C}$  to  $+75^{\circ}\text{C}$ 

EMI FCC B; EN55022 B; EN55011 B EMS EN61000-4-2,-3,-4,-5,-6,-8,-11

Safety UL 60950-1CSA C22.2 No. 60950-1EN 60950-1

#### RS-35 Series - 35W Single Output AC-DC Enclosed Power Supply

#### **Applications**

General electronic machinery or equipment Automation Test equipment Small scale LED signs



#### **Features**

Universal AC input / Full range Short circuit/Over load/Over voltage protections Cooling by free air convection LED indicator for power on 100% full load burn-in test All using 105°C long life electrolytic capacitors Withstand 300VAC surge input for 5 second High operating temperature up to 70°C Withstand 5G vibration test High efficiency, long life and high reliability



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
RS-35-3-3	3.3V	7A	23.1W	80mV	73%
RS-35-5	5V	7A	35W	80mV	77%
RS-35-12	12V	3A	36W	120mV	81%
RS-35-15	15V	2.4A	36W	120mV	83%
RS-35-24	24V	1.5A	36W	120mV	84%
RS-35-48	48V	0.8A	38.4W	200mV	84%

#### **Specification**

Voltage Range 88 ~ 264Vac 125 ~ 373Vdc (Withstand 300Vac surge for 5sec. Without damage)

Frequency  $47 \sim 63$ Hz

Input Current 0.8A/115Vac 0.55A/230Vac Inrush Current 36A at 230Vac max., cold start

Leakage Current <2mA at 240Vac

Setup, Rise Time 500ms, 30ms/230Vac 1200ms, 30ms/115Vac at full load

Hold Up Time 80mS/230Vac 15mS/115Vac at full load

Over Load Protection 110 ~ 150% rated output power

Hiccup mode, recovers automatically after fault condition removed

Over Voltage Protection Hiccup mode, recovers automatically after fault condition is removed

Working Temperature  $-25^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$  (Refer to output load de-rating curve)

#### **Description**

The new RS-15 Series are 20% smaller than their 20w counterpart and are our most miniature AC/DC enclosed type switching power supplies that can provide 15W by only free air convection. RS-35 is fully RoHS compliant and all the electrolytic capacitors in the unit are rated in 105°C. RS-35 can also withstand 300VAC input surge for 5 seconds and 5G vibration meaning that is suitable for operation in harsh environments. Full output wattage can be provided up to 50°C and the highest operating temperature is as high as 70°C, with certain de-rating. Other standard functions include short circuit, overload, over voltage, and over temperature protections.

#### SPS-035 Series - 35W Single Output Switching Power Supply



#### **Features**

Universal input
Built-in EMI filter
Low ripple noise
No min. load requirement
Output voltage ±10% adjustment
100% 50°C burn-in test

Over voltage, short circuit shut down & auto recovery



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-035-3.3	3.3V	9.0A	35W	50mV	68%
SPS-035-05	5.0V	7.0A	35W	50mV	70%
SPS-035-7.5	7.5V	4.7A	35W	70mV	74%
SPS-035-12	12V	3.0A	35W	100mV	76%
SPS-035-15	15V	2.4A	35W	100mV	76%
SPS-035-15M	18V	2.0A	35W	150mV	77%
SPS-035-24	24V	1.5A	35W	150mV	78%
SPS-035-24Q	28V	1.25A	35W	200mV	78%
SPS-035-48	48V	0.75A	35W	250mV	80%

#### **Specification**

Input Voltage 85 to 264Vac 120 to 375Vdc

Inrush Current 30A max. At 115Vac input, full load 50A max.

at 230Vac input, full load

Leakage Current 1.0mA max. at 264Vac input

Current 1.0A max. at 100Vac input, full load

Input Frequency 47 to 63Hz

Over Load Protection 105% to 180% of rated load, auto recovery

Short circuit protection auto recovery
Cooling Natural Cooling
Operating temperature 0°C to 70°C

Safety Approvals Meets UL 1950, CSA22.2, TUV EN 60950, IEC 60950, EMKO-TSE

Packing N.W. 0.35kg

#### RD-35 Series - 35W Dual Output AC-DC Enclosed Power Supply

#### **Applications**

General electronic machinery or equipment Automation Test equipment



#### **Features**

Universal AC input
Short circuit, over load, over voltage protections
Cooling by free air convection
LED indicator for power on
100% full load burn-in test
All using 105°C long life electrolytic capacitors
Withstand 300VAC surge input for 5 second
High operating temperature up to 70°C
Withstand 5G vibration test
High efficiency, long life and high reliability



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
RD-35A	5V	4A	32W	80mV	79%
	12V	1A		120mV	
RD-35B	5V	2.2A	35W	80mV	82%
	24V	1A		120mV	
RD-3513	14V	1.3A	35.1W	120mV	80%
	-14V	1.3A		120mV	

#### **Description**

A highly efficient and reliable enclosed power supply, with a high operating temperature of -25~+70°C and cooling by free air convection. Built to withstand 300VAC surge input for 5 seconds and 5G vibrations. Overload, short circuit and over voltage protection with hiccup mode (recovering automatically after fault condition is removed).

#### SPS-035-D Series - 35W Dual Output AC-DC Enclosed Power Supply



#### **Features**

Power ON with LED indicator Built in EMI filter, low ripple noise Over load, over voltage short circuit protection 100% 50° burn-in test UL, cUL, CB, CE approved

CB ( € .91/...

Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-035-D1	+5V	4.0A	35W	50mV	75%
	+12V	1.5A		120mV	
SPS-035-D2	+5V	4.0A	35W	50mV	75%
	+24V	1.3A		240mV	
SPS-035-D3	+12V	1.5A	35W	120mV	76%
	-12V	1.5A		120mV	
SPS-035-D4	+15V	1.3A	35W	150mV	76%
	-15V	1.3A		200mV	

**Specification** 

Input Voltage 85~264 Vac or 120~375Vdc, universal full range

Frequency  $47 \sim 63 \text{ Hz}$ 

Input Current <1.0A @100Vac, full load condition

Inrush Current <30A@115V / <50A@230Vac input, full load condition.

Cold start at 25°C ambient

Leakage Current <1.0mA@240Vac input

Over Load Protection Over 105% ~ 180% of rating, recovers automatically after fault condition has been

removed.

Short Circuit Protection Shutdown, recovers automatically after fault condition has been removed.

Rise time <20ms

Setup Time <2.0Sec @115V, <0.8Sec @230V

Hold Up Time >40mS@230V Cooling Natural Cooling

Operating Temperature -10~70°C; De-rating: 45°C~70°C : 2.5%/°C

Storage Temperature -10~+75°C

Operating Humidity 20% ~ 85% (non condensing) Storage Humidity 10% ~ 95% (non condensing)

Safety Standards UL 60950-1st, CSA C22.2 No.60950-1-03 1st approved. TUV EN 60950-1st, IEC

60950-1st, EMKO-TSE (74-SEC)207/94 standard

EMC EN 55022 CLASS B, EN 61000-3-2, 3, FCC CFR 47 PART 15 CLASS B, CNS

13438 CLASS B. EN 55024: EN 61000-4-2, 3,4,5,6,8,11.

M.T.B.F. 472K hours

#### SPS-035-ID Series - 35W Dual Output Enclosed Power Supply

#### **Applications**

Industrial applications where isolated dual outputs are required



#### **Features**

V1 & V2 output and isolated, V2 polarity can be positive or negative

Power On with LED indicator Built in EMI filter, low ripple & noise

Over voltage protection: Shutdown and latch off Overload and short circuit protection: Hiccup mode

100% full load burn in test

-20~+70°C operating temperature



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-035-ID1	5V	4A	35W	70mV	79%
		2.5A	35W	120mV	79%
SPS-035-ID2	5V	4A	35W	70mV	79%
		1.3A	35W	200mV	79%
SPS-035-ID8	12V	3A	36W	120mV	82%
		1.5A	36W	120mV	82%
SPS-035-ID9	15V	2.4A	36W	150mV	83%
		1.5A	36W	150mV	83%

#### **Description**

The SPS-035 series is a highly efficient 35W dual output enclosed power supply with isolated outputs. The power supply can operate between -20~+70°C with cooling by free air convection and has protections such as over voltage, overload and short circuit.

#### **EPS-45-C Series - 45W Single Output Enclosed Switching Power Supply**

#### **Applications**

Factory automation Electrical or mechanical equipment



#### **Features**

Universal AC input/Full range
Optional L-bracket and cover
High efficiency up to 90%
Protections: Short circuit, overload and over voltage
Cooling by free air convection
2" x 4" compact size
LED indicator for power on
No load power consumption <0.3W



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
EPS-45-3-3-C	3.3V	8A	26.4W	80mV	80%
EPS-45-5-C	5V	8A	40W	80mV	82%
EPS-45-7-5-C	7.5V	5.4A	40.5W	100mV	84%
EPS-45-12-C	12V	3.75A	45W	120mV	87%
EPS-45-15-C	15V	3A	45W	150mV	88%
EPS-45-24-C	24V	1.9A	45.6W	240mV	89%
EPS-45-36-C	36V	1.25A	45W	280mV	89%
EPS-45-48-C	48V	1A	48W	300mV	90%

#### **Description**

The EPS-45-C series is a 45W single output high efficiency AC/DC green enclosed switching power supply. Possessing up to 90% of high efficiency the unit can be cooled from -30~+70°C ambient temperature which is required for operating in a closed loop system.

#### RS-50 Series - 50W Single Output AC-DC Enclosed Power Supply

#### **Applications**

General electronic machinery or equipment Automation Test equipment Small scale LED signs



#### **Features**

Universal AC input / Full range
Short circuit/Over load/Over voltage protections
Cooling by free air convection
LED indicator for power on
100% full load burn-in test
All using 105°C long life electrolytic capacitors
Withstand 300VAC surge input for 5 second
High operating temperature up to 70°C
Withstand 5G vibration test
High efficiency, long life and high reliability



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
RS-50-3-3	3.3V	10A	33W	80mV	72%
RS-50-5	5V	10A	50W	80mV	78%
RS-50-12	12V	4.2A	50.4W	120mV	81%
RS-50-15	15V	3.4A	51W	120mV	83%
RS-50-24	24V	2.2A	52.8W	120mV	84%
RS-50-48	48V	1.1A	52.8W	200mV	86%

#### **Specification**

Input Voltage 88 ~ 264Vac 125 ~ 373Vdc

(Withstand 300VAC surge for 5sec. without damage)

Input Current 1.3A at 115Vac 0.8A at 230Vac

Inrush Current 33A/230Vac, cold start

Leakage Current <2mA at 240Vac

Input Frequency 47 ~ 63Hz

Hold Time 60ms/230Vac 14ms/115Vac at full load

Storage Temperature, Humidity  $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ ,  $10 \sim 95\%$  RH

Set Up, Rise Time 500ms, 20ms/230Vac 1200ms, 30ms/115Vac at full load

Safety Standards UL60950-1, TUV EN60950-1 Approved

Withstand Voltage I/P-O/P:3KVac I/P-FG:1.5KVac O/P-FG:0.5KVac

#### **Description**

The new RS-50 Series are 20% smaller than their 50W counterpart and are our most miniature AC/DC enclosed type switching power supplies that can provide 15W by only free air convection. RS-50 is fully RoHS compliant and all the electrolytic capacitors in the unit are rated in 105°C. RS-50 can also withstand 300VAC input surge for 5 seconds and 5G vibration meaning that is suitable for operation in harsh environments. Full output wattage can be provided up to 50°C and the highest operating temperature is as high as 70°C, with certain de-rating. Other standard functions include short circuit, overload, over voltage, and over temperature protections.

#### SPS-G050 Series - 50W AC-DC High Reliability Enclosed Power Supply

#### **Applications**

Logic control circuit designing Automatic control systems Industrial control systems Test equipment printers POS systems Display systems Franking machines Gambling machines



#### **Features**

Green-mode design

No load <0.5W

High efficiency and high reliability

Built in EMI filter, low ripple noise

Over load, over voltage, short circuit protection

Output voltage ±10% adjustment

100% full load burn-in test

-20°C~70°C Operating temperature

UL, cUL, TUV, CB, CE standard



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-G050-T1	5V	0.5A	50W	70mV	75%
	12V	0.2A		120mV	
	-12V	0A		150mV	
SPS-G050-T2	5V	0.5A	50W	70mV	75%
	12V	0.2A		120mV	
	-5V	0A		120mV	
SPS-G050-T3	5V	0.5A	51W	70mV	78%
	12V	0.2A		120mV	
	24V	0.1A		200mV	

#### **Specification**

Input Voltage 88V ~ 264Vac or 125V ~ 375Vdc Universal full range

(Withstand 300VAC surge for 5sec. without damage)

Input Current <1.3A@100V ac input, full load condition

Input Frequency 47 ~ 63Hz

Inrush Current <30A@115V, <50A@230V ac input,

Cold start at 25°C ambient

Leakage Current <1.5mA@264V ac input

Rise Time <30mS

Hold Up Time >60mS@230V, full load condition

Set Up Time <1 Sec@100 ~ 240V ac

#### **Description**

TUV & CB certification available Feb 09 UL certification available March 09 UL 60950-1, 2nd Edition TUV

EN60950-1: 2006 IEC 60950-1: 2005

#### RD-50 Series - 50W Dual Output AC-DC Enclosed Power Supply

#### **Applications**

General electronic machinery or equipment Automation Test equipment



#### **Features**

Universal AC input
Short circuit, over load, over voltage protections
Cooling by free air convection
LED indicator for power on
100% full load burn-in test
All using 105°C long life electrolytic capacitors
Withstand 300VAC surge input for 5 second
High operating temperature up to 70°C
Withstand 5G vibration test
High efficiency, long life and high reliability



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
RD-50A	5V	6A	54W	80mV	79%
	12V	2A		120mV	
RD-50B	5V	4A	54W	80mV	80%
	24V	1.4A		150mV	

#### **Description**

A highly efficient and reliable enclosed power supply, with a high operating temperature of -25~+70°C and cooling by free air convection. Built to withstand 300VAC surge input for 5 seconds and 5G vibrations. Overload, short circuit and over voltage protection with hiccup mode (recovering automatically after fault condition is removed).

#### SPS-G050-D Series - 50W Dual Output AC-DC Enclosed Power Supply

#### **Applications**

Programmable logic controller Automatic control systems Test equipment Printers POS systems Franking machines



#### **Features**

Full range AC input
Built in EMI filter, low ripple noise
Over load, over voltage protection
Short circuit shutdown and auto recovery
100% full load burn-in test
-20°C ~70°C Operating temperature
UL, cUL, TUV, CB, CE approved



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-G050-D1	5V	6A	51W	70mV	79%
	12V	3A		120mV	
SPS-G050-D2	5V	6A	52W	70mV	80%
	24V	2A		200mV	

#### **Description**

SPS-G050D Series are dual output power supplies with IC function, creating operating temperatures as low as -20°C. The input voltage range is from  $88V \sim 264Vac$  or  $125V \sim 375Vdc$ , making it suitable for worldwide use, and the output voltage is adjustable by 10%.

Isolated output version, SPS-G050ID Series, is also available.

#### SPS-G050-ID Series - 50W Isolated Dual Output AC-DC Enclosed PSU

#### **Applications**

Programmable logic controller Automatic control systems Test equipment Printers POS systems Franking machines



#### **Features**

Full range AC input
Isolated outputs
Built in EMI filter, low ripple noise
Over load, over voltage protection
Short circuit shutdown and auto recovery
100% full load burn-in test
-20°C ~70°C Operating temperature
UL, cUL, TUV, CB, CE approved



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-G050-ID1	5V	6A	51W	70mV	79%
	12V	3A		120mV	
SPS-G050-ID2	5V	6A	52W	70mV	80%
	24V	2A		200mV	

#### **Description**

SPS-G050ID Series are isolated dual output power supplies with IC function, creating operating temperatures as low as  $-20^{\circ}$ C. The input voltage range is from 88V  $\sim 264$ Vac or 125V  $\sim 375$ Vdc, making it suitable for worldwide use, and the output voltage is adjustable by 10%.

#### RID-50 Series - 50W Dual Isolated Output AC-DC Enclosed PSU

#### **Applications**

General electronic machinery or equipment Automation Test equipment



#### **Features**

Isolated output & ground
Universal AC input
Short circuit, over load, over voltage protections
Cooling by free air convection
LED indicator for power on
100% full load burn-in test
Using 105°C long life electrolytic capacitors
Withstand 300VAC surge input for 5 seconds
High operating temperature up to 70°C
Withstand 5G vibration test
High efficiency, long life and high reliability
UL, cUL, TUV, CE & CB approvals



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
RID-50A	5V	6A	54W	80mV	80%
	12V	2A		120mV	
RID-50B	5V	4A	54W	80mV	81%
	24V	1.4A		150mV	

#### **Description**

A highly efficient and reliable dual output enclosed power supply, with a high operating temperature of -25~+70°C and cooling by free air convection. Isolated output and ground for both channels. Built to withstand 300VAC surge input for 5 seconds and 5G vibrations. Overload, short circuit and over voltage protection with hiccup mode (recovering automatically after fault condition is removed).

#### RT-50 Series - 50W Triple Output AC-DC Enclosed Power Supply

#### **Applications**

General electronic machinery or equipment Automation Test equipment



#### **Features**

Universal AC input / Full range
Short circuit, over load, over voltage protections
Cooling by free air convection
LED indicator for power on
100% full load burn-in test
All using 105°C long life electrolytic capacitors
Withstand 300VAC surge input for 5 seconds
High operating temperature up to 70°C
Withstand 5G vibration test
High efficiency, long life and high reliability



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
RT-50A	5V	4A	46.5W	80mV	77%
	12V	2A		120mV	
	-5V	0.5A		100mV	
RT-50B	5V	4A	50W	80mV	77%
	12V	2A		120mV	
	-12V	0.5A		120mV	
RT-50C	5V	4A	50W	80mV	78%
	15V	2A		120mV	
	-15V	0.5A		120mV	
RT-50D	5V	3A	51W	80mV	80%
	24V	1A		150mV	
	12V	1A		120mV	

#### **Description**

A highly efficient and reliable triple output enclosed power supply, with a high operating temperature of  $-25 \sim +70^{\circ}$ C and cooling by free air convection. Built to withstand 300VAC surge input for 5 seconds and 5G vibrations. Overload, short circuit and over voltage protection with hiccup mode (recovering automatically after fault condition is removed).

#### SPS-G050-T Series - 50W Triple Output AC-DC Enclosed Power Supply

#### **Applications**

Programmable logic controller Automatic control systems Test equipment Printers POS systems Franking machines



#### **Features**

Full range AC input
Built in EMI filter, low ripple noise
Over load, over voltage protection
Short circuit shutdown and auto recovery
100% full load burn-in test
-20°C ~70°C Operating temperature
UL, cUL, TUV, CB, CE approved



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-G050-T1	5V	6A	50W	70mV	75%
	12V	2.5A		120mV	
	-12V	1A		150mV	
SPS-G050-T2	5V	6A	50W	70mV	75%
	12V	2.5A		120mV	
	-5V	1A		120mV	
SPS-G050-T3	5V	6A	51W	70mV	78%
	12V	2.5A		120mV	
	24V	2A		200mV	

#### **Specification**

Input Voltage 88V ~ 264Vac or 125V ~ 375Vdc Universal full range

(Withstand 300VAC surge for 5sec. without damage)

Input Current <1.3A@100V ac input, full load condition

Input Frequency  $47 \sim 63$ Hz

Inrush Current <30A@115V, <50A@230V ac input,

Cold start at 25°C ambient

Leakage Current <1.5mA@264V ac input

Rise Time <30mS

Hold Up Time >60mS@230V, full load condition

Set Up Time <1 Sec@100 ~ 240V ac

#### **Description**

SPS-G050T Series are triple output power supplies with IC function, creating operating temperatures as low as  $-20^{\circ}$ C. The input voltage range is from 88V ~ 264Vac or 125V ~ 375Vdc, making it suitable for worldwide use, and the output voltage is adjustable by 10%.

#### **RQ-50 Series - 50W Quad Output AC-DC Enclosed Power Supply**

#### **Applications**

General electronic machinery or equipment Automation Test equipment



#### **Features**

Universal AC input / Full range
Protections: Short circuit/Over load/Over voltage
Cooling by free air convection
LED indicator for power on
100% full load burn-in test
All using 105°C long life electrolytic capacitors
Withstand 300VAC surge input for 5 second
High operating temperature up to 70°C
Withstand 5G vibration test
High efficiency, long life and high reliability



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
RQ-50B	5V	5A	46W	80mV	74%
	12V	1A	46W	120mV	
	-5V	0.5A	46W	100mV	
	-12V	0.5A	46W	80mV	
RQ-50C	5V	5A	50W	80mV	75%
	15V	1A	50W	120mV	
	-5V	0.5A	50W	100mV	
	-15V	0.5A	50W	80mV	
RQ-50D	5V	3A	53.4W	80mV	79%
	12V	1A	53.4W	120mV	
	24V	1A	53.4W	180mV	
	-12V	0.5A	53.4W	80mV	

#### **Description**

A highly efficient and reliable quad output enclosed power supply, with a high operating temperature of -25~+70°C and cooling by free air convection. Built to withstand 300VAC surge input for 5 seconds and 5G vibrations. Overload, short circuit and over voltage protection with hiccup mode (recovering automatically after fault condition is removed).

#### AD-55 Series - 55W Single Output PSU With Battery Charger

**Applications**Control panels
UPS battery back-up



#### **Features**

Universal AC input range
High Efficiency
Low working temperature
Soft start circuit
Limiting AC surge current
Short circuit, overload & over voltage protected
Battery low protections
100% full load burn in test
Built in EMI filter
Fixed Switching frequency at 45KHz
UL60950-1, TUV EN60950-1 Approved



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
AD-55A	14V	4A	51.38W	100mV	71%
	13.4V	0.23A			
AD-55B	28V	2A	54W	100mV	74%
	26.5V	0.16A			

#### **Description**

AD-55 Series is a 55W single output AC/DC power supply with battery charger (UPS) Function that meets UL, TUV, CB & CE requirements. AD-55 Series also has standard features such as short circuit, over load and over load protections as well as optional battery low protections and alarm signals. Suitable applications include control panels, back-up systems.

#### ADD-55 Series - 55W Dual Output Power Supply With Battery Charger



#### **Features**

Universal full range AC input
Short circuit, over load & over voltage protections
Battery low protection
Cooling by free air convection
100% full load burn-in test
Optional DC Alarm Signals
Fixed switching frequency at 45KHz



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
ADD-55A	14V	2.5A	53W	100mV	71%
	5V	3A		100mV	
	13.4V	0.23A			
ADD-55B	28V	1.3A	55.12W	150mV	74%
	5V	3A		150mV	
	26.5V	0.16A			

#### SPS-M060 Series - AC-DC Single Output Enclosed Medical Power Supply



#### **Features**

Green-mode designing, meet IEA standard<0.75W (standby state)

Power ON with LED indicator

Over load, over voltage and short circuit protection

Output voltage ±10% adjustment

Non min. load requirement

Meet UL, 2601-1 medical standard

CB .₹1/4. ( €

Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-M060-05	5V	10A	50W	50mV	74%
SPS-M060-12	12V	5A	60W	120mV	77%
SPS-M060-15	15V	4A	60W	150mV	77%
SPS-M060-24	24V	2.5A	60W	240mV	80%
SPS-M060-30	30V	2A	60W	300mV	80%
SPS-M060-48	48V	1.3A	60W	300mV	80%

#### **Description**

This 60 Watt Medical Application Unit meets the UL 2601-4 medical standard and is currently going through approvals for cUL/UL, CB and CE. For more details please click through to the specification or complete an enquiry form for a member of our sales team to contact you.

#### SPS-S060 Series - 60W Single Output AC-DC S Series Enclosed PSU

#### **Applications**

19" Rack-Mount (Industrial computer system)

Industrial control systems



#### **Features**

Light weight, compact size

Green-mode designing, meet IEA standard<0.75W (standby

state)

Over load, over voltage & short circuit protection

Output voltage ±10% adjustment

Built-in EMI filter, low ripple noise

100% 50° burn-in test

UL, cUL, CB, CE certified; meets TUV standard (48V CE only)

CB.₹1.5 ( €

Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-S060-05	5V	10A	50W	50mV	74%
SPS-S060-7-5	8V	7A	50W	75mV	75%
SPS-S060-12	12V	7A	60W	120mV	77%
SPS-S060-15	15V	4A	60W	150mV	78%
SPS-S060-24	24V	2.5A	60W	240mV	80%
SPS-S060-48	48V	1.25A	60W	480mV	80%

#### **Specification**

Input Voltage Universal input 85~264 VAC or 120~375VDC

AC Frequency 47 ---- 63 Hz

Input Current <1.8A@100V AC input, full load condition Inrush Current <30A@115V / <60A@230V AC input.

Cold start at 25°C ambient

Leakage Current <1.5mA@264V AC input

Rise time <20mS

Hold up time >16.7mS@115V, >60mS@230V

Setup time Typically:800mS@115V, 300mS@230V, AC INPUT

Over Load Protection Shutdown when load over 105% ~ 180% of rating, recovers automatically after

fault condition has been

Short Circuit Shutdown, recovers automatically after fault condition has been removed

Cooling Natural Cooling

Temperature Operating:  $-25 \sim 70^{\circ}$ C; De-rating:  $-10^{\circ}$ C  $\sim -25^{\circ}$ C:  $3.0\%/^{\circ}$ C  $/ 45^{\circ}$ C  $\sim 70^{\circ}$ C:  $3.0\%/^{\circ}$ C

#### IT-60 Series - 60W Triple Isolated Output Switching Power Supply

#### **Applications**

General electronic machinery



#### **Features**

Isolated output &GND for Ch1,2,3 Universal AC input / Full range Protections: Short circuit / Over load/ Over voltage LED indicators for power On 100% full load burn-in test Fixed switching frequency at 67KHz



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
IT-60D	5V	3A	58.2W	80mV	76%
	12V	1A		120mV	
	24V	1.4A		240mV	
IT-60F	5V	3A	58.2W	80mV	76%
	15V	1A		150mV	
	24V	1.3A		240mV	

#### **Description**

The IT-60 series is a highly efficient and reliable power supply with isolated triple output and universal AC input. Protections including short circuit, overload and over voltage; Fixed switching frequency at 67KHz.

#### **IQ-60 Series - 60W Isolated Quad Output Switching Power Supply**

#### **Applications**

General electronic equipment



#### **Features**

Isolated output & GND for CH1, CH2 & CH3, CH4 Universal AC input/full range Protections: Short circuit/Overload/Over voltage LED indicator for power on 100% full load burn-in test Fixed switching frequency at 67KHz



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
IQ-60D	5V	3A	60W	80mV	76%
	12V	0.5A		120mV	
	-12V	0.5A		120mV	
	24V	1.3A		240mV	
IQ-60F	5V	3A	60W	80mV	76%
	15V	0.5A		150mV	
	-15V	0.5A		150mV	
	24V	1.25A		240mV	

#### **Description**

The IQ-60 Series is an isolated quad output switching power supply with universal AC input. Protections including short circuit, overload and over voltage, including an LED indicator for power on. Fixed switching frequency at 67KHz.

#### SPS-060P Series - 60W~72W Single Output Switching Power Supply



#### **Features**

Universal input
PFC function
Built-in EMI filter
Low ripple noise
No min. load requirement
Output voltage ±10% adjustment
100% 50°C burn-in test
Over voltage, over load protection



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-070P-48	48V	1.5A	72W	300mV	80%
SPS-060P-3.3	3.3V	15.0A	49.5W	50mV	67%
SPS-060P-05	5.0V	12.0A	60W	50mV	72%
SPS-070P-12	12V	6.0A	72W	120mV	75%
SPS-070P-15	15V	4.8A	72W	150mV	76%
SPS-070P-15M	18V	4.0A	72W	180mV	77%
SPS-070P-24	24V	3.0A	72W	240mV	78%
SPS-070P-24Q	28V	2.6A	72.8W	280mV	79%

#### **Specification**

Input Voltage 85 to 264Vac 120 to 375Vdc

Input Frequency 47 to 63Hz

Input Current 1.8A max. at 100Vac input, full load

Inrush Current 30A max. at 115Vac input, full load 60A max.

at 230Vac input, full load

Leakage current 1.5mA max. at 264Vac input

Over load protection 105% to 180% of rated load, auto recovery

Short circuit protection auto recovery
Rise Time 20mS max
Cooling Natural Cooling
Operating temperature 0°C to 70°C

Hold up time 16.7mS min. at 115Vac input 80mS min. at 230Vac input Set up time 800mS typ. at 115Vac input 300mS typ. at 230Vac input

#### SPS-M060-D Series - 60W Dual Output AC-DC For Medical Enclosed Power S



#### **Features**

Power ON with LED indicator Over load, over voltage and short circuit protection Built in EMI filter, low ripple noise Built-in long life ball bearing fan Meet UL, 2601-1 medical standard



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-M060-D1	5V	10A	60W	50mV	75%
	12V	3A		120mV	
SPS-M060-D2	5V	6A	60W	120mV	86%
	24V	2.5A		120mV	
SPS-M060-D3	12V	5A	60W	120mV	77%
	-12V	2.5A		120mV	
SPS-M060-D4	15V	4A	60W	150mV	77%
	-15V	2A		150mV	

#### SPS-060PD Series - 60W Dual Output PFC AC-DC Enclosed Power Supply



#### **Features**

Power ON with LED indicator Built in EMI filter, low ripple noise Over load, over voltage, short circuit protections 100% 50° burn-in test Power Factor Correction function UL, cUL, TUV, CB, CE approved



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-060PD1	5V	8A	60W	50mV	75%
	12V	4A		120mV	
SPS-060PD2	5V	6A	60W	50mV	75%
	24V	2.2A		240mV	
SPS-060PD3	12V	3.43A	60W	120mV	75%
	-12V	3.43A		120mV	
SPS-060PD4	15V	3A	60W	150mV	75%
	-15V	3A		150mV	

#### **Specification**

Input Voltage 88V 85 ~ 264Vac 120 ~ 375Vdc

Frequency  $47 \sim 63$ Hz

Input Current <1.8A/100Vac input, cold start

Inrush Current <30A/115V <60A/230Vac input, cold start PFC Meets IEC 1000-3-2 Class A standard

Leakage Current <1.5mA/264Vac input

Rise Time <20mS

Hold Up Time >16.7mS/115V, >80mS/230V

Setup Time <3Sec/115V/60Hz; <1Sec/230V/50Hz

Operating Temperature  $-10^{\circ}\text{C} \sim 70^{\circ}\text{C}$ ; De-rating:  $42^{\circ}\text{C} \sim 70^{\circ}\text{C}$ :  $2.0\%/^{\circ}\text{C}$ 

Operating Humidity 20% ~ 85% (non condensing)

M.T.B.F. 260K hours

#### SPS-060P-ID Series - 60W Dual Isolated Output AC/DC PFC Enclosed Switch Mode Power Supply

#### **Applications**

Programmable logic controllers Automatic controls Industrial controls Test equipment Motor-Base machinery



#### **Features**

Isolated outputs
High Reliability and Efficiency
Power on LED indicator
Built-in EMI filter
Low ripple noise
Over voltage, over load, short circuit protection
First output voltage adjustable ±10% on ID5 & ID6
100% full load burn in test
-20°C to 70°C operating temperature
UL, cUL, TUV, CB & CE approved



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-060P-ID1	5V	8A	60W	70mV	76%
	12V	4A		120mV	
SPS-060P-ID2	5V	6A	60W	70mV	77%
	24V	2.2A		240mV	
SPS-060P-ID5	12V	5A	60W	120mV	77%
	5V	3A		70mV	
SPS-060P-ID6	24V	2.5A	60W	240mV	78%
	5V	3A		70mV	

#### **Description**

SPS-060P-ID is a dual isolated output enclosed switch mode power supply range with PFC function. These high reliability enclosed power supplies have universal full range input voltage and wide range operating temperatures of -  $20^{\circ}$ C to  $70^{\circ}$ C. The primary output voltage of the ID5 & ID6 models is also adjustable by  $\pm 10^{\circ}$ 

# SPS-060P-IT Series - 60W Triple Isolated Output AC/DC PFC Enclosed Switch Mode Power Supply

### **Applications**

Programmable logic controllers Automatic controls Industrial controls Test equipment Motor-Base machinery



#### **Features**

All outputs are isolated outputs
Output 2 & 3 have polarity option (+ or -)
High Reliability and Efficiency
Power on LED indicator
Built-in EMI filter
Low ripple noise
Over voltage, over load, short circuit protection
100% full load burn in test
-20°C to 70°C operating temperature
UL, cUL, TUV, CB & CE approved



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-060P-IT1	5V	8A	60W	70mV	75%
	12V	4A		120mV	
	-5V	1A		100mV	
SPS-060P-IT2	5V	7A	60W	70mV	76%
	12V	4A		120mV	
	-12V	1A		150mV	
SPS-060P-IT3	5V	7A	60W	70mV	76%
	12V	3A		150mV	
	-15V	1A		200mV	
SPS-060P-IT4	5V	6A	60W	70mV	78%
	12V	2A		120mV	
	24V	1.2A		200mV	

### **Description**

SPS-060P-IT is a triple isolated output enclosed switch mode power supply range with PFC function. These high reliability enclosed power supplies have universal full range input voltage and wide range operating temperatures of -20°C to 70°C. The second & third output voltages can also be set as positive or negative.

# SPS-060PT Series - 60W Triple Output AC-DC Enclosed Power Supply



#### **Features**

Power ON with LED indicator Built-in EMI filter, low ripple noise PFC function optional Over load, over voltage protection Short circuit shutdown and Auto recovery 100% 50° burn-in test. UL, cUL, TUV, CB, CE approved



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-060PT1	5V	8A	60W	50mV	74%
	12V	4A		120mV	
	-5V	1A		100mV	
SPS-060PT2	5V	7A	60W	50mV	74%
	12V	4A		120mV	
	-12V	1A		150mV	
SPS-060PT3	5V	7A	60W	50mV	74%
	15V	3A		150mV	
	-15V	1A		200mV	
SPS-060PT4	5V	6A	60W	50mV	74%
	12V	2A		120mV	
	24V	1.2A		200mV	

# SPS-060P-Q Series - 60W Quad Output AC-DC PFC Enclosed Power Supply

### **Applications**

Programmable logic controllers Automatic controls Industrial controls Test equipment POS systems



#### **Features**

Universal input AC 85~264V or DC 120~375V High reliability and high efficiency Power ON with LED indicator Built-in EMI filter, low ripple noise Over voltage protection Over load & short circuit protection 100% full load burn-in test -20°C to 70°C operating temperature UL, cUL, TUV, CB, CE approved



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-060P-Q1	5V	7A	60W	70mV	75%
	12V	3A		120mV	
	-5V	1A		100mV	
	-12V	1A		240mV	

# **Description**

SPS-060P-Q is a quad output AC/DC enclosed power supply with universal input of PWM IC design. Standard features include built in PFC, wide operating temperatures of -20°C to +70°C and over voltage, Over load & short circuit protections.

# **RD-65 Series - 65W Dual Output AC-DC Enclosed Power Supply**

## **Applications**

General electronic machinery or equipment Automation Test equipment



#### **Features**

Universal AC input / Full range
Short circuit, over load, over voltage protections
Cooling by free air convection
LED indicator for power on
100% full load burn-in test
All using 105°C long life electrolytic capacitors
Withstand 300VAC surge input for 5 second
High operating temperature up to 70°C
Withstand 5G vibration test
High efficiency, long life and high reliability



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
RD-65A	5V	6A	66W	80mV	79%
	12V	3A		120mV	
RD-65B	5V	4A	68W	80mV	78%
	24V	2A		150mV	

#### **Description**

A highly efficient and reliable enclosed power supply, with a high operating temperature of -25~+70°C and cooling by free air convection. Built to withstand 300VAC surge input for 5 seconds and 5G vibrations. Overload, short circuit and over voltage protection with hiccup mode (recovering automatically after fault condition is removed).

## RID-65 Series - 65W Dual Isolated Output AC-DC Switching Power Supply

#### **Applications**

General electronic machinery or equipment Automation Test equipment



#### **Features**

Isolated output & ground
Universal AC input
Short circuit, over load, over voltage protections
Cooling by free air convection
LED indicator for power on
100% full load burn-in test
All using 105°C long life electrolytic capacitors
Withstand 300VAC surge input for 5 seconds
High operating temperature up to 70°C
Withstand 5G vibration test
High efficiency, long life and high reliability
UL, cUL, TUV, CE & CB approvals

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Model No	Voltage (max)	Current (amps)	Power (watts)	<b>R&amp;N</b> (mV)	Efficiency (%)
RID-65A	5V	6A	66W	80mV	81%
	12V	3A		120mV	
RID-65B	5V	4A	68W	80mV	82%
	24V	2A		150mV	
	24V	2A		150mV	

#### **Description**

A highly efficient and reliable dual output enclosed power supply, with a high operating temperature of -25~+70°C and cooling by free air convection. Isolated output and ground for both channels. Built to withstand 300VAC surge input for 5 seconds and 5G vibrations. Overload, short circuit and over voltage protection with hiccup mode (recovering automatically after fault condition is removed).

## **RT-65 Series - 65W Triple Output AC-DC Enclosed Power Supply**

## **Applications**

General electronic machinery or equipment Automation Test equipment



#### **Features**

Universal AC input / Full range
Short circuit, over load, over voltage protections
Cooling by free air convection
LED indicator for power on
100% full load burn-in test
All using 105°C long life electrolytic capacitors
Withstand 300VAC surge input for 5 seconds
High operating temperature up to 70°C
Withstand 5G vibration test
High efficiency, long life and high reliability



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
RT-65A	5V	6A	66.1W	80mV	77%
	12V	3A		120mV	
	-5V	0.5A		80mV	
RT-65B	5V	6A	65W	80mV	77%
	12V	3A		120mV	
	-12V	0.5A		80mV	
RT-65C	5V	5A	66W	80mV	78%
	15V	2.2A		120mV	
	-15V	0.5A		80mV	
RT-65D	5V	4A	68W	80mV	79%
	24V	2A		150mV	
	12V	1A		120mV	

#### **Description**

A highly efficient and reliable triple output enclosed power supply, with a high operating temperature of -25~+70°C and cooling by free air convection. Built to withstand 300VAC surge input for 5 seconds and 5G vibrations. Overload, short circuit and over voltage protection with hiccup mode (recovering automatically after fault condition is removed).

### **RQ-65 Series - 65W Quad Output AC-DC Enclosed Power Supply**

# **Applications**

General electronic machinery or equipment Automation Test equipment



#### **Features**

Universal AC input / Full range
Protections: Short circuit/Over load/Over voltage
Cooling by free air convection
LED indicator for power on
100% full load burn-in test
All using 105°C long life electrolytic capacitors
Withstand 300VAC surge input for 5 second
High operating temperature up to 70°C
Withstand 5G vibration test
High efficiency, long life and high reliability



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
RQ-65B	5V	6A	62.5W	80mV	76%
	12V	2A	62.5W	120mV	
	-5V	0.5A	62.5W	80mV	
	-12V	0.5A	62.5W	80mV	
RQ-65C	5V	5A	65W	80mV	76%
	15V	2A	65W	120mV	
	-5V	0.5A	65W	80mV	

#### **Description**

A highly efficient and reliable quad output enclosed power supply, with a high operating temperature of -25~+70°C and cooling by free air convection. Built to withstand 300VAC surge input for 5 seconds and 5G vibrations. Overload, short circuit and over voltage protection with hiccup mode (recovering automatically after fault condition is removed).

### **EPS-65-C Series - 65W Single Ouput Enclosed Switching Power Supply**

### **Applications**

Factory Automation Electrical or mechanical equipment



#### **Features**

Universal AC input/Full range
Optional L-Bracket and cover
High efficiency up to 90%
Protections: Short circuit/Overload/Over voltage
Cooling by free air convection
2" x 4" compact size
LED indicator for power on
No load power consumption <0.3W

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Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
EPS-65-3-3-C	3.3V	11A	36.3W	80mV	80%
EPS-65-5-C	5V	11A	55W	80mV	82%
EPS-65-7-5-C	7.5V	8A	60W	100mV	84%
EPS-65-12-C	12V	5.42A	65.04W	120mV	86%
EPS-65-15-C	15V	4.34A	65.1W	150mV	87%
EPS-65-24-C	24V	2.71A	65.04W	240mV	88%
EPS-65-36-C	36V	1.81A	72W	280mV	89%
EPS-65-48-C	48V	1.36A	72W	300mV	90%

### **Description**

The EPS-65-C series is a 65W single output high efficiency AC/DC green open frame switching power supply. Possessing up to 90% of high efficiency the unit can be cooled from -30~+70°C ambient temperature which is required for operating in a closed loop system.

## SPS-070 Series - 72W Single Output NON PFC Switching Power Supply

#### **Applications**

Logic control circuit designing Automatic control systems Industrial control systems Test equipment Printers POS systems Electronic voting machines Franking machines Gambling machines



#### **Features**

Green-mode design

No load power consumption <0.75W

Universal input

Output voltage ±10% adjustment
100% full load burn-in test

Over voltage, over load, short circuit protections
-20°C to 70°C operating temperature

Power On with LED indicator

UL, cUL, TUV, CB, CE Approvals



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-070-3-3	3.3V	15A	50W	50mV	73%
SPS-070-05	5V	12A	60W	50mV	76%
SPS-070-12	12V	6A	72W	120mV	81%
SPS-070-15	15V	5A	72W	150mV	82%
SPS-070-24	24V	3A	72W	150mV	84%
SPS-070-48	48V	2A	72W	150mV	86%

#### **Description**

SPS-070 Series is a 72W single output enclosed switching power supply that offers' 3.3V, 5V, 12V, 15V, 24V & 48V output options. Which are adjustable by  $\pm 10\%$ . With no load power consumption <0.75W and efficiency up to 86% SPS-070 also complies to new CE directive LVD 2006/95/EC and EMC 2004/108/EC and UL, cUL, CB EN60950-1 approvals

## SPS-070P Series - 72W Single Output PFC Switching Power Supply

#### **Applications**

Logic control circuit designing Automatic control systems Industrial control systems Test equipment

Printers

POS systems

Electronic voting machines

Franking machines
Gambling machines



#### **Features**

Green-mode design
No load power consumption <0.75W
Universal input
PFC function
Output voltage ±10% adjustment
100% full load burn-in test
Over voltage, over load, short circuit protections
-20°C to 70°C operating temperature
Power On with LED indicator
UL, cUL, TUV, CB, CE Approvals



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-070P-3-3	3.3V	15A	50W	50mV	73%
SPS-070P-05	5V	12A	60W	50mV	76%
SPS-070P-12	12V	6A	72W	120mV	81%
SPS-070P-15	15V	5A	72W	150mV	82%
SPS-070P-24	24V	3A	72W	150mV	84%
SPS-070P-48	48V	2A	72W	150mV	86%

#### **Specifications**

Input Voltage 85~264 VAC or 120~375VDC, universal input

Input frequency  $47 \sim 63$ Hz

Input Current <1.8A max at 100VAC input, full load condition

Inrush Current <30A@115V / <60A@230VAC input

Cold start 25°C ambient

Leakage Current <1.5mA@264VAC input

Rise time <20mS

Over Load Protection Over 105% ~ 150% of rating, recovers

Automatically after fault condition has been removed.

Short Circuit Protection Shutdown, recovers automatically after fault condition has been removed

Operating Temperature  $-20^{\circ}\text{C} \sim 70^{\circ}\text{C}$ ; De-rating  $45^{\circ}\text{C} \sim 50^{\circ}\text{C} : 2.0\%/^{\circ}\text{C}$ 

#### **Description**

SPS-070P Series is a 72W single output PFC Function enclosed switching power supply that offers 3.3V, 5V, 12V, 15V, 24V & 48V output options. Which are adjustable by  $\pm 10\%$ . With no load power consumption <0.75W and efficiency up to 86% SPS-070P also complies to EN61000-3-2 Class A, new CE directive LVD 2006/95/EC and EMC 2004/108/EC and UL, cUL, CB EN60950-1 approvals

# SPS-075 Series - AC-DC Single Output Enclosed Power Supply



#### **Features**

85V to 132 V or 170V to 264V Selected by switch Built in EMI filter, low ripple noise Over load, over voltage, short circuit protection Output voltage ±10% adjustment Non min load requirement 100% 50° burn-in test Meets UL, cUL, TUV, CB, CE standard



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-075-3-3	3.3V	18A	75W	50mV	70%
SPS-075-05	5V	15A	75W	50mV	72%
SPS-075-7-5	8V	10A	75W	100mV	73%
SPS-075-10	10V	8A	75W	100mV	74%
SPS-075-12	12V	6.3A	75W	120mV	75%
SPS-075-15	15V	5A	75W	150mV	76%
SPS-075-18	18V	4.2A	75W	180mV	77%
SPS-075-24	24V	3.2A	75W	240mV	78%
SPS-075-28	28V	3A	75W	280mV	79%
SPS-075-48	48V	2A	75W	480mV	80%

### RS-75 Series - 75W Single Output AC-DC Enclosed Power Supply

#### **Applications**

General electronic machinery or equipment

Automation Test equipment Small scale LED signs



#### **Features**

Universal AC input / Full range
Short circuit, over load, over voltage protections
Cooling by free air convection
LED indicator for power on
100% full load burn-in test
All using 105°C long life electrolytic capacitors
Withstand 300VAC surge input for 5 second
High operating temperature up to 70°C

Withstand 5G vibration test High efficiency, long life and high reliability



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
RS-75-5		12A	60W	80mV	76%
RS-75-3-3	3.3V	15A	50W	80mV	71%
RS-75-12	12V	6A	72W	120mV	81%
RS-75-15	15V	5A	75W	120mV	82%
RS-75-24	24V	3.2A	77W	120mV	85%
RS-75-48	48V	2A	77W	200mV	86%

#### **Specification**

Input Voltage 88 ~ 264Vac 125 ~ 373Vdc

Input frequency  $47 \sim 63$ Hz

Input Current 2A/115Vac 1.2A/230Vac Inrush Current 40A/230Vac cold start

Leakage Current <2mA / 240Vac

Storage Temperature, Humidity -40°C  $\sim$  +85°C, 10  $\sim$  95% RH Working Humidity 20  $\sim$  90% RH non-condensing

Temperature Coefficient  $\pm 0.03\%$ /°C (0~50°C)

Over Load Protection 110 ~ 150% rated output power

Hiccup mode, recovers automatically after Fault condition is removed Hiccup mode, recovers automatically after fault condition is removed

Over Voltage Protection Hiccup mode, recovers automatically after fault condition is

MTBF 265Khrs min. MIL-HDBK-217F (25°C)

#### **Description**

The new RS-75 Series are 20% smaller than their 75W counterpart and are our most miniature AC/DC enclosed type switching power supplies that can provide 75W by only free air convection. RS-75 is fully RoHS compliant and all the electrolytic capacitors in the unit are rated in 105°C. RS-75 can also withstand 300VAC input surge for 5 seconds and 5G vibration meaning that is suitable for operation in harsh environments. Full output wattage can be provided up to 50°C and the highest operating temperature is as high as 70°C, with certain de-rating. Other standard functions include short circuit, overload, over voltage, and over temperature protections.

#### SP-75 Series - 75W Single Output Switching Power Supply

### **Applications**

General electronic equipment Automation Test equipment



#### **Features**

Universal AC input/Full range

Built-in active PFC function, PF>0.93

Protections: Short circuit/Overload/Over voltage

Built-in constant current limiting circuit

Low profile: 33mm thickness LED indicator for power on 100% full load burn-in test

Fixed switching frequency at PFC:67KHz PWM:134KHz

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Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SP-75-3-3	3.3V	15A	50W	80mV	68%
SP-75-5	5V	15A	75W	80mV	72%
SP-75-7-5	8V	10A	75W	80mV	74%
SP-75-12	12V	6.3A	76W	80mV	77%
SP-75-13-5	14V	6A	76W	80mV	78%
SP-75-15	15V	5A	75W	80mV	79%
SP-75-24	24V	3.2A	77W	100mV	80%
SP-75-27	27V	3A	76W	100mV	80%
SP-75-48	48V	2A	77W	100mV	80%

#### **Description**

The SP-75 series is a single output switching power supply with universal AC input. This power supply has a low profile of 33mm and built-in constant current limiting circuit. Protections including short circuit, overload and over voltage. With a fixed switching frequency at PFC: 67KHz, PWM: 134KHz enabling designs to avoid interference with system clock frequencies.

### HRP-75 Series - 75W Single Output AC-DC Enclosed Power Supply with PFC

Applications
General electronics
Factory automation
Moving signs
LED displays
Test and measurement equipment
electrical and mechanical industry



#### **Features**

Universal AC input
Built-in active PFC function >0.9
No load power consumption <0.5W
Short circuit, over load, over voltage, over temperature protections
Withstand 300VAC surge input for 5 seconds
Cooling by free air convection
1U low profile 38mm
Built-in remote on/off control



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
HRP-75-3-3	3.3V	15A	50W	80mV	77%
HRP-75-5	5V	15A	75W	80mV	82.5%
HRP-75-7-5	8V	10A	75W	100mV	84%
HRP-75-12	12V	6.3A	76W	120mV	87%
HRP-75-15	15V	5A	75W	150mV	88%
HRP-75-24	24V	3.2A	77W	150mV	88.5%
HRP-75-36	36V	2.1A	76W	200mV	89%
HRP-75-48	48V	2A	77W	240mV	89%

#### **Description**

HRP-75 Series are a 75W miniature high reliability ac/dc enclosed power supply range that has many energy saving features to help the end user equipment comply with the requirements of energy star and EuP.

#### SPS-G075 Series - 75W Single Output Green Mode Enclosed Power Supply

**Applications:** Logic control circuit designing, Industrial control systems, POS systems, Electronic voting machines Franking machines, Gambling machines



#### **Features**

Green-mode designing, no load < 0.5W High efficiency and high reliability Built in EMI filter, low ripple noise Over load, over voltage, short circuit protection Output voltage ±10% adjustment 100% full load burn-in test -20°C to +70°C operating temperature



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-G075-05	5V	12A	60W	70mV	77%
SPS-G075-12	12V	6A	72W	120mV	82%
SPS-G075-15	15V	5A	75W	150mV	83%
SPS-G075-24	24V	3.2A	77W	150mV	84%
SPS-G075-30	30V	2.5A	75W	200mV	86%
SPS-G075-48	48V	2A	77W	200mV	86%
SPS-G075-T4B	5V	8A	68W	70mV	78%
	15V	3A		120mV	
	-15V	1A		100mV	

# **Specification**

Leakage Current

Input Voltage 88V ~ 264Vav or 125V ~ 375Vdc

Input frequency  $47 \sim 63$ Hz

Input Current <1.8A@100Vac input, full load condition Inrush Current <30A@115V, <50A@230Vav input,

Cold start at 25°C ambient <1.5mA@264Vac input

Rise Time <30mS

Hold Up Time >60mS@230V, full load condition Over Voltage Protection Shutdown, re-power on to recover

Over Load Protection Over 105% ~ 150% of rating, recovers automatically after fault condition has been

removed.

Short Circuit Protection Shutdown, recovers automatically after fault condition has been removed.

Operating Temperature  $-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$ ; De-rating:  $45^{\circ}\text{C} \sim 70^{\circ}\text{C}$ :  $2.5\%/^{\circ}\text{C}$ 

Cooling Natural cooling

Operating Humidity 20% ~ 85% (non condensing)

### **Description**

SPS-G075 Series are single output Green Mode Designed enclosed power supplies. With no load power consumption levels less than 0.5Watts, operating temperatures from -20°C to +70°C and efficiency up to 86% SPS-G075 is an ideal power supply for applications with environmental protection requirements.

## RSP-75 Series - 75W PFC Function Single Output Enclosed Power Supplies

### **Applications**

Industrial automation system Mechanical equipment Electrical equipment Household appliances Instrumentation



#### **Features**

Universal 85-264VAC input
Built-in constant current limiting circuit
1U low profile
Remote on-off control
Built-in active PFC function
Cooling via free air convection



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
RSP-75-3-3	3.3V	15A	49.5W	80mV	76%
RSP-75-5	5V	15A	75W	80mV	82%
RSP-75-7-5	7.5V	10A	75W	80mV	84%
RSP-75-12	12V	6.3A	75.6W	120mV	85%
RSP-75-13-5	13.5V	5.6A	75.6W	120mV	85%
RSP-75-15	15V	5A	75W	120mV	86%
RSP-75-24	24V	3.2A	76.8W	120mV	87%
RSP-75-27	27V	2.8A	75.6W	120mV	88%
RSP-75-48	48V	1.6A	76.8W	200mV	89%

#### **Description**

RSP-75 Series are 1U low profile 75W PFC function enclosed switching power supplies, offering high efficiency levels of 89%. The range has a fanless design with built-in constant current limiting circuit, remote on/off control and protections including short circuit, over load and over voltage. Output options for RSP-75 Series include 3.3V, 5V, 7.5V, 12V, 13.5V, 15V, 24V, 27V & 48V models.

### SPS-G075-D Series - 75W Dual Output AC-DC Enclosed Power Supply

## **Applications**

Programmable logic controller Automatic control systems Test equipment Printers POS systems Franking machines



#### **Features**

Full range AC input
Built in EMI filter, low ripple noise
Over load, over voltage protection
Short circuit shutdown and auto recovery
100% full load burn-in test
-20°C ~70°C Operating temperature
UL, cUL, TUV, CB, CE approved



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-G075-D1	5V	8A	68W	70mV	78%
	12V	5A		120mV	
SPS-G075-D2	5V	8A	68W	70mV	79%
	24V	2.5A		200mV	

### **Description**

SPS-G075-D Series are dual output power supplies with IC function, creating operating temperatures as low as -20 $^{\circ}$ C. The input voltage range is from 88V ~ 264Vac or 125V ~ 375Vdc, making it suitable for worldwide use. Isolated output version, SPS-G075-ID Series, is also available.

### SPS-G075-ID Series - 75W Isolated Dual Output AC-DC Enclosed PSU

### **Applications**

Programmable logic controller Automatic control systems Test equipment Printers POS systems Franking machines



#### **Features**

Output 1 & 2 isolated
Full range AC input
Built in EMI filter, low ripple noise
Over load, over voltage protection
Short circuit shutdown and auto recovery
100% full load burn-in test
-20°C ~70°C Operating temperature
UL, cUL, TUV, CB, CE approved



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-G075-ID1	5V	8A	68W	70mV	78%
	12V	5A		120mV	
SPS-G075-ID2	5V	8A	68W	70mV	79%
	24V	2.5A		200mV	

#### **Description**

SPS-G075-ID Series are dual isolated output power supplies with IC function, creating operating temperatures as low as  $-20^{\circ}$ C. The input voltage range is from  $88V \sim 264V$ ac or  $125V \sim 375V$ dc, making it suitable for worldwide use.

## SPS-G075-T Series - 75W Triple Output AC-DC Enclosed Power Supply

## **Applications**

Programmable logic controller Automatic control systems Test equipment Printers POS systems Franking machines



#### **Features**

Full range AC input
Built in EMI filter, low ripple noise
Over load, over voltage protection
Short circuit shutdown and auto recovery
100% full load burn-in test
-20°C ~70°C Operating temperature
UL, cUL, TUV, CB, CE approved



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-G075-T1A	5V	8A	65W	70mV	76%
	12V	3A		120mV	
	-5V	1A		100mV	
SPS-G075-T1B	5V	8A	65W	70mV	78%
	12V	3A		120mV	
	-12V	1A		100mV	
SPS-G075-T3	5V	8A	68W	70mV	78%
	12V	3A		120mV	
	24V	2A		200mV	
SPS-G075-T4A	5V	8A	68W	70mV	78%
	15V	3A		120mV	
	24V	2A		200mV	

### **Description**

SPS-G075T Series are triple output power supplies with IC function, creating operating temperatures as low as -20 $^{\circ}$ C. The input voltage range is from 88V ~ 264Vac or 125V ~ 375Vdc, making it suitable for worldwide use, and the output voltage is adjustable by 10%.

### **TP-75 Series - 75W Triple Output PFC Function Power Supply**

## **Applications**

General electronic equipment
Factory automation
Instrumentation
Moving signs
Telecommunications
Data communications



#### **Features**

Universal AC input/Full range Built-in active PFC function, PF>0.95

Protections: Short circuit/Overload/Over voltage

Low profile: 33mm thickness LED indicator for power on Cooling by free air convection

Fixed switching frequency at PFC:67KHz PWM:134KHz



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
TP-75A	5V	7A	74W	100mV	70%
	12V	3A		120mV	
	-5V	1A		100mV	
TP-75B	5V	7A	76W	100mV	70%
	12V	3A		120mV	
	-12V	0.4A		120mV	
TP-75C	5V	6A	75W	100mV	70%
	15V	2.5A		120mV	
	-15V	0.5A		120mV	
TP-75D	5V	7A	76W	100mV	70%
	24V	2A		120mV	
	12V	0.4A		120mV	
TP-7503	5V	9A	75W	100mV	70%
	3.3V	8A		50mV	
	12V	0.3A		120mV	

#### **Description**

The TP-75 Series is a triple output enclosed power supply with PFC function. Cooling by free air convection allowing an operating temperature of -10~+60°C. Protections including short circuit, overload and over voltage. With a fixed switching frequency at PFC: 67KHz, PWM: 134KHz enabling designs to avoid interference with system clock frequencies.

### SPS-G075-Q Series - 75W Quad Output AC-DC Enclosed Power Supply

## **Applications**

Programmable logic controller Automatic control systems Test equipment Printers POS systems Franking machines



#### **Features**

Full range AC input
Built in EMI filter, low ripple noise
Over load, over voltage protection
Short circuit shutdown and auto recovery
100% full load burn-in test
-20°C ~70°C Operating temperature
UL, cUL, TUV, CB, CE approved



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-G075-Q1	5V	8A	65W	70mV	76%
	12V	3A		120mV	
	-5V	1A		100mV	
	-12V	1A		100mV	
SPS-G075-Q3	5V	8A	68W	70mV	78%
	12V	3A		120mV	
	24V	2A		200mV	
	-12V	1A		100mV	
SPS-G075-Q4	5V	8A	68W	70mV	78%
	15V	3A		120mV	
	24V	2A		200mV	
	-15V	1A		100mV	

#### **Description**

SPS-G075-Q Series are quad output power supplies with IC function, creating operating temperatures as low as  $-20^{\circ}$ C. The input voltage range is from  $88V \sim 264Vac$  or  $125V \sim 375Vdc$ , making it suitable for worldwide use.

### RD-85 Series - 85W Dual Output AC-DC Enclosed Power Supply

# **Applications**

General electronic machinery or equipment Automation Test equipment



#### **Features**

Universal AC input / Full range
Short circuit, over load, over voltage protections
Cooling by free air convection
LED indicator for power on
100% full load burn-in test
All using 105°C long life electrolytic capacitors
Withstand 300VAC surge input for 5 second
High operating temperature up to 70°C
Withstand 5G vibration test
High efficiency, long life and high reliability



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
RD-85A	5V	8A	88W	80mV	78%
	12V	4A		120mV	
RD-85B	5V	8A	88W	80mV	80%
	24V	2A		120mV	

#### **Description**

A highly efficient and reliable enclosed power supply, with a high operating temperature of -25~+70°C and cooling by free air convection. Built to withstand 300VAC surge input for 5 seconds and 5G vibrations. Overload, short circuit and over voltage protection with hiccup mode (recovering automatically after fault condition is removed).

## RID-85 Series - 85W Dual Isolated Output Enclosed Switching Power Supply

#### **Applications**

General electronic machinery or equipment Automation Test equipment



#### **Features**

Isolated output & ground
Universal AC input
Short circuit, over load, over voltage protections
Cooling by free air convection
LED indicator for power on
100% full load burn-in test
All using 105°C long life electrolytic capacitors
Withstand 300VAC surge input for 5 seconds
High operating temperature up to 70°C
Withstand 5G vibration test
High efficiency, long life and high reliability
UL, cUL, TUV, CB & CE approvals



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
RID-85A	5V	8A	88W	80mV	80%
	12V	4A		120mV	
RID-85B	5V	8A	88W	80mV	81%
	24V	2A		120mV	

#### **Description**

A highly efficient and reliable dual output enclosed power supply, with a high operating temperature of -25~+70°C and cooling by free air convection. Isolated output and ground for both channels. Built to withstand 300VAC surge input for 5 seconds and 5G vibrations. Overload, short circuit and over voltage protection with hiccup mode (recovering automatically after fault condition is removed).

## **RQ-85 Series - 85W Quad Output Enclosed Switching Power Supply**

#### **Applications**

General electronic machinery or equipment Automation Test equipment



#### **Features**

Universal AC input / Full range
Protections: Short circuit/Over load/Over voltage
Cooling by free air convection
LED indicator for power on
100% full load burn-in test
All using 105°C long life electrolytic capacitors
Withstand 300VAC surge input for 5 second
High operating temperature up to 70°C
Withstand 5G vibration test
High efficiency, long life and high reliability



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
RQ-85B	5V	7A	81W	80mV	76%
	12V	3.1A	81W	120mV	
	-5V	0.5A	81W	100mV	
	-12V	0.5A	81W	80mV	
RQ-85C	5V	7A	82.5W	80mV	77%
	15V	2.5A	82.5W	120mV	
	-5V	0.5A	82.5W	100mV	
	-15V	0.5A	82.5W	80mV	
RQ-85D	5V	6A	84W	80mV	78%
	12V	2A	84W	120mV	
	24V	1A	84W	150mV	
	-12V	0.5A	84W	80mV	

### **Description**

A highly efficient and reliable quad output enclosed power supply, with a high operating temperature of -25~+70°C and cooling by free air convection. Built to withstand 300VAC surge input for 5 seconds and 5G vibrations. Overload, short circuit and over voltage protection with hiccup mode (recovering automatically after fault condition is removed).

### RT-85 Series - 85W Triple Output AC-DC Enclosed Power Supply

#### **Applications**

General electronic machinery or equipment Automation test equipment



#### **Features**

Universal AC input / Full range
Short circuit, over load, over voltage protections
Cooling by free air convection
LED indicator for power on
100% full load burn-in test
All using 105°C long life electrolytic capacitors
Withstand 300VAC surge input for 5 seconds
High operating temperature up to 70°C
Withstand 5G vibration test
High efficiency, long life and high reliability



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
RT-85A	5V	8A	84.5W	80mV	76%
	12V	4A		120mV	
	-5V	0.5A		100mV	
RT-65B-85	5V	8A	88W	80mV	76%
	12V	4A		120mV	
	-12V	0.5A		120mV	
RT-65C-85	5V	5A	66W	80mV	78%
	15V	2.2A		120mV	
	-15V	0.5A		120mV	
RT-65D-85	5V	4A	68W	80mV	79%
	24V	2A		150mV	
	12V	1A		120mV	

### **Description**

A highly efficient and reliable triple output enclosed power supply, with a high operating temperature of -25~+70°C and cooling by free air convection. Built to withstand 300VAC surge input for 5 seconds and 5G vibrations. Overload, short circuit and over voltage protection with hiccup mode (recovering automatically after fault condition is removed).

# SPU-100 Series - 100W Single Output U-Bracket Switching Power Supply



#### **Features**

Universal full range AC 90 ~ 264V High efficiency. Built in EMI filter, low ripple noise Over load, over voltage, short circuit protection Output voltage  $\pm 10\%$  adjustment 100% 50°C burn-in test Short circuit/over load/ over voltage protected UL/CSA/TUV/CE standard



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPU-100-5	5V	20A	100W	50mV	72%
SPU-100-24	24V	4.2A	100W	240mV	80%

# HRP-100 Series - 100W Single Output AC-DC Enclosed Power Supply with PFC Function

### **Applications**

General electronic machinery
Factory automation
Instrumentation
Moving Signs
Telecommunications
Data communications



#### **Features**

Universal AC input / Full range
Built-in active PFC function
High efficiency up to 90%
Withstand 300VAC surge input for 5 seconds
Protections: Short circuit / Overload / Over voltage

Cooling by free air convection

1U low profile 38mm

Built-in remote ON-OFF control No load power consumption<0.5W

Protections: Over temperature (optional)

All using 105°C long life electrolytic capacitors

Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
HRP-100-3-3	3.3V	20A	66W	80mV	78%
HRP-100-5	5V	17A	85W	80mV	83%
HRP-100-7-5	8V	14A	101.3W	100mV	84%
HRP-100-12	12V	8.5A	102W	120mV	88%
HRP-100-15	15V	7A	105W	150mV	88%
HRP-100-24	24V	4.5A	108W	150mV	88.5%
HRP-100-36	36V	3A	104.4W	200mV	89%
HRP-100-48	48V	2.2A	106W	240mV	90%

#### **Description**

The HRP-100 series is a highly efficient (up to 90%) single output enclosed power supply. Equipped with built-in active PFC function, including protections including short circuit, overload and over voltage. With a low 1U profile of 38mm and cooling by free air convection allowing an operating temperature of -40~+60°C.

# PSC-100C Series - 100W AC/DC Single Output Enclosed Power Supply with UPS Function Battery Charger

### **Applications**

Security systems
Access control systems
Emergency lighting systems
Alarm systems
UPS systems
Central monitoring systems



#### **Features**

90-264VAC Universal AC input
Enclosed within L-Bracket and cover case
Short circuit, over load, over voltage protections
Battery low protection / Battery polarity protection by fuse
Relay contact signal output for AC OK and Battery low
Cooling by free air convection



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
PSC-100A-C	13.8V	4.75A	100.05W	100mV	86%
	13.8V	2.5A			
PSC-100B-C	27.6V	2.4A	100.74W	100mV	88%
	27.6V	1.25A			

#### **Description**

PSC-100C Series is a 100W AC/DC enclosed power supply with additional charger output, designed primarily for the security industry. The product features 90-264VAC Universal AC input voltage, 13.8V and 27.6V output options and short circuit, over load and over voltage protections. PSC-100C Series has been designed with battery low protection, battery polarity protection, via fuse, and relay contact signal output for AC OK and Battery low making it ideal for security systems.

## RSP-100 Series - 100W 1U Single Output Enclosed Power Supplies with PFC Function

#### **Applications**

Industrial automation systems
Mechanical & electrical equipment
Instrumentation
Household appliances
Applications requiring a low profile installation



#### **Features**

Universal full range AC input
Built-in active PFC function
Short circuit, over load, over voltage, over temperature protections
Built-in constant current limiting circuitry
Cooling by free air convection
1U low profile 30mm
Remote On-Off Control
LED indicator for power on



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
RSP-100-3-3	3.3V	20A	66W	100mV	83%
RSP-100-5	5V	20A	100W	100mV	86%
RSP-100-7-5	7.5V	13.5A	101.25W	100mV	87%
RSP-100-12	12V	8.5A	102W	100mV	86%
RSP-100-13-5	13.5V	7.5A	101.25W	100mV	86.5%
RSP-100-15	15V	6.7A	100.5W	100mV	87%
RSP-100-24	24V	4.2A	100.8W	150mV	87%
RSP-100-27	27V	3.8A	102.6W	150mV	87%
RSP-100-48	48V	2.1A	100.8W	250mV	88%

#### **Description**

RSP-100 Series extends the RSP range to include a lower 100W of output power, in a 1U low profile 30mm enclosure. These enclosed power supplies feature high efficiency, free air convection cooling and a 1U low profile making them ideal for end users looking for energy saving, noise free and low profile economical power supplies. The RSP-100 Series, from Mean Well provides output voltages from 3.3V to 48V, features 85-264Vac input range, is equipped with PFC function and possesses up to 88% high efficiency. Other built in features of this Mean Well enclosed power supply range include remote on/off control, short circuit, over load, over voltage and over temperature protections. The series also complies with UL, CUL, TUV, CCC, CB & CE safety regulations and is certified to TUV EN61558-2-16 to meet the requirements of household electrical appliances.

## RS-100 Series - 100W Single Output AC-DC Enclosed Power Supply

# **Applications**

General electronic machinery or equipment Automation Test equipment Small scale LED signs



#### **Features**

Universal AC input
Short circuit, over load, over voltage protections
Cooling by free air convection
LED indicator for power on
100% full load burn-in test
All using 105°C long life electrolytic capacitors
Withstand 300VAC surge input for 5 second
High operating temperature up to 70°C
Withstand 5G vibration test
High efficiency, long life and high reliability



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
RS-100-3-3	3.3V	20A	66W	80mV	74%
RS-100-5	5V	16A	80W	80mV	77%
RS-100-12	12V	8.5A	102W	120mV	81%
RS-100-15	15V	7A	105W	120mV	82%
RS-100-24	24V	4.5A	108W	120mV	84%
RS-100-48	48V	2.3A	110.4W	200mV	84%

#### **Description**

The new RS-100 Series are 20% smaller than their 100W counterpart and are our most miniature AC/DC enclosed type switching power supplies that can provide 100W by only free air convection. RS-100 is fully RoHS compliant and all the electrolytic capacitors in the unit are rated in 105°C. RS-100 can also withstand 300VAC input surge for 5 seconds and 5G vibration meaning that is suitable for operation in harsh environments. Full output wattage can be provided up to 50°C and the highest operating temperature is as high as 70°C, with certain de-rating. Other standard functions include short circuit, overload, over voltage, and over temperature protections.

# SPS-S100 Series - 100W Single Output AC-DC Enclosed Power Supply



### **Features**

Light weight, compact size
Universal AC input
Over load, over voltage & short circuit protection
Output voltage ±10% adjustment
Built-in EMI filter, low ripple noise
100% 50° burn-in test
Meet UL, cUL, CB, CE, TUV standard

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Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-S100-3-3	3.3V	20A	66W	50mV	70%
SPS-S100-05	5V	16A	80W	50mV	77%
SPS-S100-7-5	8V	11A	83W	75mV	78%
SPS-S100-12	12V	8.5A	102W	120mV	81%
SPS-S100-15	15V	7A	105W	120mV	82%
SPS-S100-24	24V	4.5A	108W	120mV	84%
SPS-S100-30	30V	4A	108W	300mV	84%
SPS-S100-48	48V	2.3A	110W	300mV	85%

# SPS-G100 Series - 100W Single Output AC/DC Green Mode Enclosed Power Supply

### **Applications**

Programmable logic controllers
Automatic controls
Industrial controls
Test equipment
Printers
POS systems
Electronic voting machines
Franking machines
Gambling machines



#### **Features**

Green mode design, no load <1W
High efficiency and high reliability
Built in EMI filter, low ripple noise
Over voltage protection: Shutdown and latch off
Over load & short circuit protection: Hiccup mode
Output voltage ±10% adjustment
-20~70 Operating temperature
Power ON with LED indicator
UL, cUL, TUV, CB, CE approved

CB ≜≣ .¶1. ( €

Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-G100-3-3	3.3V	20A	66W	70mV	74%
SPS-G100-05	5V	16A	80W	80mV	77%
SPS-G100-7-5	8V	12A	90W	80mV	79%
SPS-G100-12	12V	8.5A	102W	120mV	81%
SPS-G100-15	15V	7A	105W	150mV	82%
SPS-G100-24	24V	4.5A	108W	150mV	84%
SPS-G100-30	30V	4A	108W	200mV	84%
SPS-G100-48	48V	2.3A	110W	200mV	85%
SPS-G100-ID6	24V	4A	90W	200mV	81%
	5V	3A		80mV	

#### **Description**

SPS-G100 is a 100W universal AC input green mode design enclosed power supply range. Available in 3.3V, 5V, 7.5V, 12V, 15V, 24V, 30V & 48V outputs. With no load power consumption less than 1W at 230VAC, high efficiency up to 85% and high reliability this is a truly green mode power supply.

# SP-100 Series - 100W Single Output Enclosed Power Supply with PFC Function

### **Applications**

General electronic equipment Automation Test equipment



#### **Features**

Universal AC input/full range

Built-in active PFC function, PF>0.93 Protections: Short circuit/Overload/ Over voltage

Built-in constant current limiting circuit

Remote ON-OFF control (Optional)

LED indicator for power on 100% full load burn-in test

Fixed switching frequency at PFC:67KHz PWM:134KHz

Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SP-100-3-3	3.3V	20A	66W	100mV	70%
SP-100-5	5V	20A	100W	100mV	76%
SP-100-7-5	8V	14A	101.25W	100mV	78%
SP-100-12	12V	8.5A	102W	100mV	80%
SP-100-13-5	14V	8A	101.25W	100mV	80%
SP-100-15	15V	7A	100.5W	100mV	82%
SP-100-24	24V	4.2A	101W	100mV	84%
SP-100-27	27V	4A	103W	150mV	83%
SP-100-48	48V	2.1A	101W	150mV	82%

### **Description**

The Sp-100 series is a 100W single output switching power supply with PFC function. Protections including short circuit, overload and over voltage. With fixed switching frequency at PFC: 67KHz, PWM: 134KHz enabling designs to avoid interference with system clock frequencies.

# SPS-100P Series - 100W Single Output AC/DC PFC Power Supply

# **Applications**

Programmable logic controller Automatic controls Industrial controls Test equipment Printers POS systems Electronic voting machines Franking machines Gambling machines



#### **Features**

Power ON with LED indicator Built-in EMI filter, low ripple noise Over voltage protection Over load & short circuit protection Output voltage ±10% adjustment 100% full load burn-in test -20°C to 70°C operating temperature UL, cUL, TUV, CB, CE standard



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-100P-3-3	3.3V	23A	76W	70mV	74%
SPS-100P-05	5V	20A	100W	70mV	78%
SPS-100P-12	12V	8.5A	102W	120mV	83%
SPS-100P-15	15V	7A	105W	150mV	84%
SPS-100P-24	24V	4.3A	103W	240mV	84%
SPS-100P-30	30V	4A	105W	240mV	85%
SPS-100P-48	48V	2.3A	110W	300mV	86%

### **Description**

SPS-100P Series is a range of 100W single output power supplies with PFC and full range AC input for worldwide use. The new circuit of SPS-100P includes a built-in PWM control IC which brings the max output wattage on the 48V output model up to 110W, in natural cooling conditions.

# SPS-100PD Series - 100W Dual Output Switching Power Supply



### **Features**

Universal AC input, PFC function (option)
Built-in EMI filter, low ripple noise
Over load, over voltage & short circuit protection
100% 50° burn-in test
UL, cUL, TUV, CB, CE certified
Isolated outputs



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-100PD4	-15V	4A	100W	150mV	76%
SPS-100PD3	-12V	5A	100W	120mV	76%
SPS-100PD1	12V	6A	100W	120mV	76%
SPS-100PD2	24V	4A	100W	240mV	76%

## SPS-G100-D Series - 100W Dual Output AC/DC Enclosed Switch Mode Power Supply

#### **Applications**

Automatic control systems Programmable logic controllers Test equipment



#### **Features**

Universal full range input
Power on with LED indicator
Built in EMI filter, low ripple noise
Over voltage protection - Shutdown and latch off
Over load & short circuit protections - Hiccup mode
100% full load burn-in test
-20°C ~ +70°C operating temperature
UL, cUL, TUV, CB, CE approved



Model No	Voltage (max)	Current (amps)	Power (watts)	R&N (mV)	Efficiency (%)
SPS-G100-D1	5V	10A	88W	80mV	78%
	12V	6A		120mV	
SPS-G100-D2	5V	10A	90W	80mV	79%
	24V	3A		200mV	

#### **Description**

SPS-G100-D Series is a dual output enclosed power supply range designed with wide operating temperature ranges. These enclosed power supplies comply with EN61000-3-2 Class A and are approved to UL, cUL, CB and TUV EN60950-1:2006.

## SPU-100-D Series - 100W Dual Output U-Bracket Power Supply



## **Features**

Universal AC input
Built in EMI filter
100% 50° burn-in test
Low ripple noise
High efficiency
Overload, over voltage & short circuit protection
Approvals: UL/cUL/TUV/CE/CB

Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
SPU-100-D1	5V	20A	100W	50mV	74%
	12V	2.5A		80mV	
SPU-100-D2	5V	20A	100W	50mV	75%
	24V	2A		120mV	
SPU-100-D3	24V	4.2A	100W	120mV	77%
	5V	2A		50mV	

# SPS-G100-ID Series - 100W Dual Isolated Output AC/DC Enclosed Switch Mode Power Supply

## **Applications**

Automatic control systems Programmable logic controllers Test equipment



#### **Features**

Output 1 & 2 are isolated
Universal full range input
Power on with LED indicator
Built in EMI filter, low ripple noise
Over voltage protection - Shutdown and latch off
Over load & short circuit protections - Hiccup mode
First output voltage +/-10% adjustable on ID5 & ID6
100% full load burn-in test
-20°C ~ +70°C operating temperature
UL, cUL, TUV, CB, CE approved



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
SPS-G100-ID1	5V	10A	88W	80mV	78%
	12V	6A		120mV	
SPS-G100-ID2	5V	10A	90W	80mV	79%
	24V	3A		200mV	
SPS-G100-ID5	12V	7A	88W	120mV	79%
	5V	3A		80mV	

## **Description**

SPS-G100-ID Series is a dual isolated output enclosed power supply range designed with wide operating temperature ranges. These enclosed power supplies comply with EN61000-3-2 Class A and are approved to UL, cUL, CB and TUV EN60950-1:2006.

### SPS-100P-ID Series - 100W Dual Isolated Output Enclosed Power Supply

## **Applications**

Programmable logic controllers Automatic controls Industrial controls Test equipment Motor-Based machinery



#### **Features**

Universal AC input, PFC function
Isolated outputs
±10% output voltage adjustment on output 1 of SPS-100P-ID5/ID6 models
Built-in EMI filter, low ripple noise
Over load, over voltage & short circuit protection
100% full load burn-in test
-20°C to +70°C operating temperature
Power ON with LED indicator
UL, cUL, TUV, CB, CE certified



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
SPS-100P-ID1	5V	12A	100W	70mV	81%
	12V	7A		120mV	
SPS-100P-ID2	5V	12A	100W	70mV	82%
	24V	4A		240mV	
SPS-100P-ID5	12V	8A	100W	120mV	82%
	5V	3A		70mV	
SPS-100P-ID6	24V	4A	100W	240mV	83%
	5V	3A		70mV	

#### **Description**

SPS-100P-ID is a range of dual isolated output enclosed power supplies with power factor correction. Featuring wide operating temperatures from  $-20^{\circ}$ C to  $+70^{\circ}$ C and high efficiency up to 83% these enclosed power supplies are highly reliable.

## SPS-100P-IT Series - 100W Triple Isolated Output AC/DC PFC Enclosed Power Supply

## **Applications**

Programmable logic controller Automatic control Industrial control Test equipment



#### **Features**

All outputs are isolated
Outputs two & three have polarity option
Power on LED indicator
Built in EMI filter
Low ripple noise
Over voltage protection
Over load & short circuit protection
100% full load burn-in test
-20°C to +70°C operating temperature
UL, cUL, TUV, CB, CE Approved

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Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
SPS-100P-IT1	5V	12A	100W	70mV	78%
	12V	5A		120mV	
	-5V	2A		100mV	
SPS-100P-IT2	5V	12A	100W	70mV	78%
	12V	5A		120mV	
	-12V	2A		150mV	
SPS-100P-IT3	5V	12A	100W	70mV	78%
	15V	4A		150mV	
	-15V	2A		200mV	
SPS-100P-IT4	5V	12A	100W	70mV	78%
	12V	4A		120mV	
	24V	2A		240mV	

#### **Description**

SPS-100P-IT Series are a range of triple output enclosed switch mode power supply with PFC function and isolated outputs. These enclosed power supplies have a wide operation range of  $-20^{\circ}$ C to  $+70^{\circ}$ C, have built in EMI filter and over voltage, over load and short circuit protections.

## **SPS-100PT Series - 100W Triple Output PFC Function Power Supply**



#### **Features**

Universal AC input
PFC Function (option)
Built-in EMI filter
Low ripple noise
Over voltage, over load protection
Short circuit shut down & auto recovery
100% 50° burn-in test
UL, cUL, TUV, CB, CE approved



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
SPS-100-PT1	5V	12A	100W	50mV	73%
	12V	5A		120mV	
	-5V	2A		100mV	
SPS-100-PT2	5V	12A	100W	50mV	74%
	12V	5A		120mV	
	-12V	2A		150mV	
SPS-100-PT3	5V	12A	100W	50mV	75%
	15V	3A		150mV	
	-15V	2A		200mV	
SPS-100-PT4	5V	12A	100W	50mV	75%
	12V	3A		120mV	
	24V	2A		240mV	

## **TP-100 Series - 100W Triple Output PFC Function Power Supply**

## **Applications**

General electronic equipment
Factory automation
Instrumentation
Moving signs
Telecommunications
Data communications



#### **Features**

Universal AC input/Full range Built-in active PFC function, PF>0.94 Protections: Short circuit/Overload/Over voltage Free air cooling convection Fixed switching frequency at 100KHz



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
TP-100A	5V	10A	101W	100mV	75%
	12V	4A		120mV	
	-5V	1A		100mV	
TP-100B	5V	10A	105.2W	100mV	78%
	12V	4A		120mV	
	-12V	1A		100mV	
TP-100C	5V	10A	104W	100mV	77%
	15V	3A		150mV	
	-15V	1A		100mV	
TP-100D	5V	10A	105.2W	100mV	78%
	24V	2A		150mV	
	12V	1A		100mV	

## **Description**

The TP-100 Series is a 100W triple output enclosed power supply with PFC function. Protections including short circuit, overload and over voltage. Cooling by free air convection allows an operating temperature -10~+60°C. With a fixed switching frequency at 100KHz enabling designs to avoid interference with system clock frequencies.

## SPS-100-T Series - 100W Triple Output Power Supply



#### **Features**

Universal AC input, PFC function (option)
Built-in EMI filter, low ripple noise
Over load, over voltage & short circuit protection
100% 50° burn=in test
UL, cUL, TUV, CB, CE approved

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Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
SPS-100-T1	5V	12A	100W	50mV	73%
	12V	5A		120mV	
	-5V	2A		100mV	
SPS-100-T2	5V	12A	100W	50mV	74%
	12V	3A		120mV	
	-12V	2A		150mV	
SPS-100-T3	5V	12A	100W	50mV	75%
	15V	3A		150mV	
	-15V	2A		200mV	
SPS-100-T4	5V	12A	100W	50mV	75%
	12V	3A		120mV	
	24V	2A		240mV	

## SPS-100P-Q Series - 100W Quad Output AC/DC Enclosed Power Supply with PFC

## **Applications**

Programmable logic controller Automatic control Industrial control Test equipment



#### **Features**

Universal full range input
Power ON with LED indicator
Built-in EMI filter, low ripple noise
Over voltage, Over load, short circuit protection
100% full load burn-in test
-20°C to 70°C operating temperature
UL, cUL, TUV, CB, CE approved



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
SPS-100P-Q1	5V	12A	100W	70mV	77%
	12V	5A		120mV	
	-5V	1A		100mV	
	-12V	1A		150mV	
SPS-100P-Q2	5V	12A	100W	70mV	77%
	15V	5A		150mV	
	-5V	1A		100mV	
	-15V	1A		200mV	
SPS-100P-Q3	5V	12A	100W	70mV	78%
	12V	5A		120mV	
	-12V	1A		150mV	
	24V	2A		240mV	

#### **Description**

SPS-100P-Q Series are 100W Quad output AC/DC enclosed power supplies with PFC function. This enclosed power supply range has wide operating temperatures from -20C to +70C, Built-in EMI filter and Over voltage, Over load and short circuit protection.

# SPU-100-Q Series - 100W Quad Output U-Bracket Power Supply



## **Features**

Universal full range AC 90 ~ 364V Light weight, compact size Built-in EMI filter, low ripple noise 100% 50° burn-in test High efficiency, high reliability UL/CSA/TUV/CE standard



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
SPU-100-Q1	5V	12A	100W	60mV	72%
	12V	4A		100mV	
	-5V			150mV	
	-12V	0.5A		240mV	

## SPS-G100-Q Series - 100W Quad Output AC/DC Enclosed Switch Mode Power Supply

## **Applications**

Automatic control systems Programmable logic controllers Test equipment



#### **Features**

Universal full range input
Power on with LED indicator
Built in EMI filter, low ripple noise
Over voltage protection - Shutdown and latch off
Over load & short circuit protections - Hiccup mode
100% full load burn-in test
-20°C ~ +70°C operating temperature
UL, cUL, TUV, CB, CE approved



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
SPS-G100-Q1	5V	10A	85W	80mV	76%
	12V	4A		120mV	
	-12V	1A		100mV	
	-5V	1A		100mV	
SPS-G100-Q3	5V	10A	88W	80mV	77%
	24V	4A		200mV	
	12V	2A		120mV	
	-12V	1A		100mV	
SPS-G100-Q4	5V	10A	88W	80mV	78%
	15V	4A		150mV	
	24V	2A		200mV	
	-15V	1A		100mV	

#### **Description**

SPS-G100-Q Series is a quad output enclosed power supply range designed with wide operating temperature ranges. These enclosed power supplies comply with EN61000-3-2 Class A and are approved to UL, cUL, CB and TUV EN60950-1:2006.

## **QP-100 Series - 100W Quad Output PFC Function Power Supply**

## **Applications**

General electronic machinery
Factory automation
Instrumentation
Moving signs
Telecommunications
Data communications



#### **Features**

Universal AC input Built-in active PFC function, PF>0.95 Short circuit, over load, over voltage protections Free air cooling convection Output 4: ± Polarity is selectable Fixed switching frequency at 100KHz



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
QP-100D	5V	8A	100W	120mV	78%
	12V	2.4A		150mV	
	24V	1A		200mV	
	-12V	1A		150mV	
QP-100F	5V	8A	103W	120mV	78%
	15V	2A		180mV	
	24V	1A		200mV	
	-15V	1A		150mV	
QP-100-3A	5V	8A	99.4W	100mV	74%
	3.3V	8A		100mV	
	12V	2.5A		150mV	
	-5V	1A		150mV	
QP-100-3B	5V	8A	100W	100mV	74%
	3.3V	8A		100mV	
	12V	2.2A		150mV	
	-12V	1A		150mV	
QP-100-3C	5V	8A	101W	100mV	75%
	3.3V	8A		100mV	
	15V	2A		150mV	
	-15V	1A		150mV	
QP-100-3D	5V	8A	105W	100mV	75%
	3.3V	8A		100mV	
	24V	1.3A		150mV	
	-12V	1A		150mV	

#### **Description**

The QP-100 series is a 100W quad output enclosed power supply with PFC function. Protections including short circuit, overload and over voltage. Cooling by free air convection allows an operating temperature of -10~+60°C. With a fixed switching frequency of 100KHz enabling designs to avoid interference with system clock frequencies.



Universal input
Built-in EMI filter
Low ripple noise
100% 50°C burn in test
Over voltage, over load protection
Short circuit shut down & auto recovery



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
SPS-100-Q1	5V	12A	100W	50mV	72%
	12V	5A		120mV	
	-5V	1A		100mV	
	-12V	1A		240mV	
SPS-100-Q2	5V	12A	100W	50mV	73%
	15V	5A		150mV	
	-5V	1A		100mV	
	-15V	1A		300mV	
SPS-100-Q3	5V	12A	100W	50mV	73%
	12V	5A		120mV	
	-12V	1A		240mV	
	24V	2A		240mV	

## MWP-602(A) Series - 104W AC-DC Triple Output for Video Game



#### **Features**

Low cost, high reliability 105°C Output capacitor Internal AC input range Built in EMI filter, low ripple noise High efficiency, low working temperature Soft-start circuit, limiting as surge current Short circuit, overload protected Compact size, light weight 100% full load burn-in test Output voltage correction LED



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
MWP-602-MWP-602A	5V	15A	104W	50mV	75%
	12V	2A		120mV	
	-5V	1A		60mV	

## MWP-606(A) Series - 104W AC-DC Triple Output for Video Game



#### **Features**

Low cost, high reliability 105°C Output capacitor Internal AC input range Built in EMI filter, low ripple noise High efficiency, low working temperature Soft-start circuit, limiting as surge current Short circuit, overload protected Compact size, light weight 100% full load burn-in test Output voltage correction LED

Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
MWP-606-MWP-606A	5V	15A	104W	50mV	75%
	12V	2A		120mV	
	-5V	1A		60mV	



Universal AC input/Full range Protections: Short circuit / overload Cooling by free air convection





Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
MWP-608	5V	10A	104W	50mV	80%
	12V	2A		120mV	
	24V	1.25A		150mV	

## **Specifications**

Input voltage range 88~132VAC / 176~264VAC selected by switch 47~63Hz

Frequency range  $47 \sim 63$ Hz

AC current 2.8A/115V 1.7A/230V

Inrush current Cold start 20A/115V 40A/230V

Leakage current <3.5mA/240VAC

DC output power 104W Efficiency 80%

Setup, rise, hold up time 200ms, 50ms, 16ms at full load

Overload protection  $150 \sim 200\%$  rated output power (CH1:19.2 ~ 29.2)

Protection type: Fold back current limiting, recovers automatically after fault

condition is removed

Operating display Double colour LED correct range: Green (5~5.4Vref.) Wrong range: Red

Working temp  $-10^{\circ}\text{C} \sim +60^{\circ}\text{C}$ 

Working humidity  $20\% \sim 90\%$  RH non condensing Storage temp., humidity  $-20^{\circ}\text{C} \sim +85^{\circ}\text{C}$ ,  $5\% \sim 95\%$  RH

Temp. coefficient  $\pm 0.05\%$  / °C (0~50°C) on +5V output

Vibration 10 ~ 500Hz, 2G 10 min. /1 cycle, period for 60 min. each along X,Y,Z axes

MTBF 267K hrs min. MIL-HDBK-217F (25°C)

Safety standards TUV EN60950-1 Approved



 $85V\sim132~V$  or  $170V\sim264V$  Selected by switch Built in EMI filter, low ripple noise Over load, over voltage, short circuit protection Output voltage  $\pm10\%$  adjustment Non min load requirement  $100\%~50^{\circ}\text{C}$  burn-in test Meets UL, cUL, TUV, ,CB, CE standard



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
SPS-110-3-3	3.3V	25A	110W	50mV	70%
SPS-110-05	5V	22A	110W	50mV	75%
SPS-110-7-5	8V	15A	110W	100mV	75%
SPS-110-10	10V	11A	110W	100mV	76%
SPS-110-12	12V	9.2A	110W	120mV	78%
SPS-110-15	15V	8A	110W	150mV	79%
SPS-110-18	18V	6.2A	110W	180mV	79%
SPS-110-24	24V	5A	110W	240mV	80%
SPS-110-28	28V	4A	110W	280mV	80%
SPS-110-48	48V	2.3A	110W	480mV	81%



Universal AC input with active power factor correction, P.F.>0.95
Built in EMI filter, low ripple noise
Over load, over voltage, short circuit protection
Over temperature protection (Optional)
Output voltage  $\pm 10\%$  adjustment
Remote Control ON/OFF (Optional)
Non min load requirement

Non min load requirement 100% 50°C burn-in test

UL, cUL, TUV, ,CB, CE pending

Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
SPS-120P-3-3	3.3V	25A	120W	50mV	69%
SPS-120P-05	5V	20A	120W	70mV	75%
SPS-120P-7-5	8V	16A	120W	80mV	77%
SPS-120P-12	12V	10A	120W	100mV	80%
SPS-120P-15	15V	8A	120W	120mV	80%
SPS-120P-24	24V	5A	120W	150mV	81%
SPS-120P-30	30V	4A	120W	180mV	81%
SPS-120P-48	48V	2.5A	120W	250mV	81%

## RD-125 Series - 125W Dual Output AC-DC Enclosed Power Supply

#### **Applications**

General electronic machinery or equipment Automation Test equipment



#### **Features**

Short circuit, over load, over voltage protections Cooling by free air convection LED indicator for power on 100% full load burn-in test All using 105°C long life electrolytic capacitors Withstand 300VAC surge input for 5 second High operating temperature up to 70°C Withstand 5G vibration test High efficiency, long life and high reliability UL, cUL, TUV, CE & CB approvals



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
RD-125A	5V	8A	131W	80mV	82%
	12V	8A		120mV	
RD-125B	5V	5A	133.4W	80mV	85%
	24V	5A		120mV	
RD-125-1224	12V	4A	133.2W	120mV	85%
	24V	4A		200mV	
RD-125-1248	12V	2.3A	138W	120mV	86%
	48V	2.3A		240mV	
RD-125-2448	24V	2A	144W	200mV	86%
	48V	2A		240mV	
RD-125-2412	24V	4A	133.2W	200mV	85%
	12V	4A		120mV	
RD-125-4812	48V	2.3A	138W	240mV	86%
	12V	2.3A		120mV	
RD-125-4824	48V	2A	144W	240mV	86%
	24V	2A		240mV	

#### **Description**

A highly efficient and reliable enclosed power supply, with a high operating temperature of -25~+70°C and cooling by free air convection. Built to withstand 300VAC surge input for 5 seconds and 5G vibrations. Overload, short circuit and over voltage protection with hiccup mode (recovering automatically after fault condition is removed).

Motor-based machinery Automation equipment Test equipment POS systems Franking machines Banking machines Printers/plotters



#### **Features**

Isolated output & GND for CH1,CH2
AC input range selectable by switch
Short circuit, over load, over voltage protections
Cooling by free air convection
LED indicator for power on
100% full load burn-in test
High reliability



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
RID-125-1224	12V	4A	133.2W	120mV	85%
	24V	4A		200mV	
RID-125-2448	24V	2A	144W	200mV	86%
	48V	2A		240mV	
RID-125-1248	12V	2.3A	138W	120mV	85%
	48V	2.3A		240mV	

#### **Description**

AC/DC switching power supplies that can provide 125W using air convection. The units can withstand 300VAC input surge for 5 seconds and 5G vibration that is suitable to be operated in harsh environment. Possessing 12V or 24V main output channel (CH1) with up to 180% of high peak load capability the isolated design between CH1 and CH2 can significantly prevent noise sourcing from the motor action from entering control circuits and hence secure the accurate operation of the end equipment. Other standard functions include short circuit, overload, and over voltage protections.

General electronic machinery or equipment Automation Test equipment



#### **Features**

Protections: Short circuit, Overload, Over voltage Cooling by free air convection
LED indicator for power on
100% full load burn-in test
All using 105°C long life electrolytic capacitors
Withstand 300VAC surge input for 5 seconds
High operating temperature up to 70°C
Withstand 5G vibration test
High efficiency, long life and high reliability



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
RT-125A	5V	12A	131W	80mV	79%
	12V	6A		120mV	
	-5V	1A		80mV	
RT-125B	5V	12A	132W	80mV	80%
	12V	5A		120mV	
	-12V	1A		120mV	
RT-125C	5V	10A	132.5W	80mV	81%
	15V	4.5A		150mV	
	-15V	1A		150mV	
RT-125D	5V	8A	136W	80mV	82%
	24V	3A		150mV	
	12V	2A		120mV	

### **Description**

A highly efficient and reliable triple output enclosed power supply, with a high operating temperature of -25~+70°C and cooling by free air convection. Built to withstand 300VAC surge input for 5 seconds and 5G vibrations. Overload, short circuit and over voltage protection with hiccup mode (recovering automatically after fault condition is removed).

General electronic machinery or equipment Automation Test equipment



#### **Features**

Protections: Short circuit/Over load/Over voltage Cooling by free air convection LED indicator for power on 100% full load burn-in test All using 105°C long life electrolytic capacitors Withstand 300VAC surge input for 5 second High operating temperature up to 70°C Withstand 5G vibration test High efficiency, long life and high reliability



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
RQ-125B	5V	11A	120W	80mV	79%
	12V	4.5A	120W	120mV	
	-5V	1A	120W	80mV	
	-12V	0.5A	120W	80mV	
RQ-125C	5V	10A	122.5W	80mV	80%
	15V	4A	122.5W	120mV	
	-5V	1A	122.5W	80mV	
	-15V	0.5A	122.5W	80mV	
RQ-125D	5V	8A	124W	80mV	82%
	12V	2.5A	124W	120mV	
	24V	2A	124W	150mV	
	-12V	0.5A	124W	80mV	

### **Description**

A highly efficient and reliable quad output enclosed power supply, with a high operating temperature of -25~+70°C and cooling by free air convection. Built to withstand 300VAC surge input for 5 seconds and 5G vibrations. Overload, short circuit and over voltage protection with hiccup mode(recovering automatically after fault condition is removed)

General electronics
Factory automation
Moving signs
Test and measurement equipment



#### **Features**

Universal AC input
Built-in active PFC function, PF>0.95
High efficiency up to 88% (typ.)
Short circuit, over load, over voltage, over temperature protections
Withstand 300VAC surge input for 5 seconds
Cooling by free air convection
Built-in constant current limiting circuit
1U low profile 38mm
Built-in ON-OFF control
Built-in remote sense function
Stand by 5V@0.3A
No load power consumption <0.5A



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
HRPG-150-3-3	3.3V	30A	99W	80mV	80%
HRPG-150-5	5V	26A	130W	80mV	84%
HRPG-150-7-5	8V	20A	150W	100mV	86%
HRPG-150-12	12V	13A	156W	120mV	87%
HRPG-150-15	15V	10A	150W	150mV	87%
HRPG-150-24	24V	6.5A	156W	150mV	87%
HRPG-150-36	36V	4.3A	155W	200mV	88%
HRPG-150-48	48V	3.3A	158.4W	240mV	88%

### **Description**

HRPG-150 Series are 150W AC/DC miniature enclosed type power supplies with PFC function that fulfil the requirement of EN61000-3-2 for harmonic current with remote ON/OFF control and 5V/0.3A standby output to achieve no load power consumption <0.5W. Other standard functions of HRPG-150 include 300VAC input surge immunity for 5 seconds, remote sense, LED indicator, heavy industry level of EMS immunity(EN61000-6-2), and protection for short-circuit, overload (constant current limiting), over voltage, and over temperature.

Charger for lead acid batteries



#### **Features**

AC input selected by switch
Short circuit, over load, over voltage protections
Built in constant current limiting circuit
Built in temperature compensation circuit
Alarm signal output option

Approvals: UL/ TUV/ CE

Fixed switching frequency at 25KHz

Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
SC-150-13-5	14V	11.2A	151.2W	180mV	83%
SC-150-27	27V	6A	151.2W	240mV	86%
SC-150-54	54V	3A	151.2W	240mV	86%

General electronics
Factory automation
Moving signs
Test and measurement equipment



#### **Features**

Universal AC input
Built-in active PFC function, PF>0.95
High efficiency up to 89% (typ.)
Short circuit, over load, over voltage, over temperature protections
Withstand 300VAC surge input for 5 seconds
Cooling by free air convection
Built-in constant current limiting circuit
1U low profile 38mm
Built-in remote sense function



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
HRP-150-3-3	3.3V	30A	99W	80mV	80%
HRP-150-5	5V	26A	130W	80mV	85%
HRP-150-7-5	8V	20A	150W	100mV	87%
HRP-150-12	12V	13A	156W	120mV	88%
HRP-150-15	15V	10A	150W	150mV	88%
HRP-150-24	24V	6.5A	156W	150mV	88%
HRP-150-36	36V	4.3A	155W	200mV	89%
HRP-150-48	48V	3.3A	158.4W	240mV	89%

#### **Description**

HRP-150 Series are 150W AC/DC miniature enclosed type power supplies with PFC function that fulfil the requirement of EN61000-3-2 for harmonic current with high operating efficiency and low no load power consumption. Standard functions of HRP-150 include 300VAC input surge immunity for 5 seconds, remote sense, LED indicator, heavy industry level of EMS immunity(EN61000-6-2), and protection for short-circuit, overload (constant current limiting), over voltage, and over temperature.

Security systems
Communication systems
Lit Displays
LED Displays
LED Lighting
Test & measurement equipment



#### **Features**

Cooling by free air convection
LED indicator for power on
100% full load burn-in test
Short circuit, over load, over voltage protections
All using 105°C long life electrolytic capacitors
Withstand 300VAC surge input for 5 second
High operating temperature up to 70°C
Withstand 5G vibration test
High efficiency, long life and high reliability



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
RS-150-3-3	3.3V	30A	99W	80mV	74%
RS-150-5	5V	26A	130W	80mV	78%
RS-150-12	12V	12.5A	150W	120mV	83%
RS-150-15	15V	10A	150W	120mV	84%
RS-150-24	24V	6.5A	156W	120mV	86%
RS-150-48	48V	3.3A	158.4W	200mV	87%

## **Description**

RS-150 Series is a single output enclosed AC-DC power supply, with cooling by free air convection the power supply has a working temperature of -25~+70°C. Withstanding 300VAC surge input for 5 seconds.



Power ON with LED indicator
Built-in EMI filter, low ripple noise
Over load, over voltage protection
Short circuit shutdown and Auto recovery
Output ±10% adjustment
Non min. load requirement
100% 50° burn-in test
UL, cUL, CB, CE pending

CB ( €.91/...

Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
SPS-S150-05	5V	26A	130W	80mV	78%
SPS-S150-7-5	8V	17.4A	150W	80mV	83%
SPS-S150-12	12V	12.5A	150W	120mV	83%
SPS-S150-15	15V	10A	150W	120mV	84%
SPS-S150-24	24V	6.5A	156W	120mV	86%
SPS-S150-36	36V	4.4A	158.4W	200mV	86%

IC testing equipment Factory automation Mechanical and electrical industry



#### **Features**

Universal AC input / Full range Built-in active PFC function, PF>0.95 Short circuit, over load, over voltage, over temperature protections Fixed switching frequency at 100KHz Output voltage programmable from 20~110% by 1~5.5VDC external control signal



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
SPV-150-12	12V	12.5A	150W	150mV	82%
SPV-150-24	24V	6.25A	150W	150mV	83%
SPV-150-48	48V	3.125A	150W	240mV	83%

### **Description**

SPV-150 Series are a programmable output 150W single output enclosed power supply range with efficiency up to 83% and built in active PFC >0.94. These enclosed power supplies also have remote on/off control and full protections.



Universal full range AC input Built-in active PFC function, PF>0.93 Short circuit, over load, over voltage, over temperature protections

Built-in constant current limiting circuit Remote ON-OFF control(Optional)

LED indicator for power on

100% full load burn-in test

Fixed switching frequency at PFC:67KHz PWM:134KHz



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
SP-150-3-3	3.3V	30A	99W	100mV	73%
SP-150-5	5V	30A	150W	100mV	79%
SP-150-7-5	8V	20A	150W	100mV	81%
SP-150-12	12V	12.5A	150W	100mV	84%
SP-150-13-5	14V	11.2A	151.2W	100mV	84%
SP-150-15	15V	10A	150W	100mV	83.5%
SP-150-24	24V	6.3A	150W	150mV	85%
SP-150-27	27V	6A	151.2W	150mV	86%
SP-150-48	48V	3.2A	154W	250mV	85%

## **Description**

The SP-150 Series is a 150W single output switching power supply with PFC function. Protections including short circuit, over load, over voltage and over temperature. Cooling by free air convection allowing an operating temperature of -10~+60°C. With a fixed switching frequency at PFC: 67KHz, PWM: 134KHz enabling designs to avoid interference with system clock frequencies.

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**Avanti Power Repairs Ltd** 

Mechanical & electrical equipment Instrumentation Household appliances Applications requiring a low profile installation



#### **Features**

Universal AC input/full range
Built-in active PFC function
Short circuit, over load, over voltage, over temperature
protections
Built-in constant current limiting circuitry
Cooling by free air convection
1U low profile 30mm
Remote On-Off Control
LED indicator for power on



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
RSP-150-3-3	3.3V	30A	99W	100mV	81.5%
RSP-150-5	5V	30A	150W	100mV	87%
RSP-150-7-5	7.5V	20A	150W	100mV	88.5%
RSP-150-12	12V	12.5A	150W	100mV	90%
RSP-150-13-5	13.5V	11.2A	151.2W	100mV	87.5%
RSP-150-15	15V	10A	150W	100mV	88.5%
RSP-150-24	24V	6.3A	151.2W	150mV	89%
RSP-150-27	27V	5.6A	151.2W	150mV	89.5%
RSP-150-48	48V	3.2A	153.6W	250mV	90%

#### **Description**

RSP-150 Series offers 150W of output power in a 1U low profile 30mm enclosure. These enclosed power supplies feature high efficiency and free air convection cooling

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# **Avanti Power Repairs Ltd**

## USP-150 - 150W U-Bracket Single Output with PFC Function

## Applications

General electronic equipment Low profile applications Embedded power solutions



Universal AC input/ Full range (Up to 295 VAC)

Built in active PFC compliance

Constant Voltage design High efficiency up to 93%

Protections: Short circuit/ Overload/ Over voltage/ Over

temperature

Cooling by free air convection U-bracket low profile: 33mm

ZVS technology to reduce power dissipation





Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
USP-150-12	12V	12.5A	150W	100mV	92%
USP-150-15	15V	10A	150W	150mV	92%
USP-150-24	24V	6.3A	151.2W	150mV	93%
USP-150-36	36V	4.2A	151.2W	250mV	93%
USP-150-48	48V	3.2A	154W	250mV	93%

## **Description**

The USP-150 Series is a single output U-bracket power supply with PFC function. A highly efficient power supply at 93%, protections including, short circuit, overload, over voltage and over temperature. Cooling by free air convection allows an operating temperature of -30~+65°C.



AC 90~132 V / 180~264V auto sensing High efficiency, high reliability Built in EMI filter, low ripple noise Over load, over voltage, short circuit protection 100% 50°C burn-in test Meet UL, cUL, TUV, CB, CE standard



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
SPU-150-D1	8V	18A	150W	80mV	73%
	5V	3A		50mV	
SPU-150-D2	12V	12A	150W	120mV	75%
	5V	3A		50mV	
SPU-150-D3	24V	6A	150W	240mV	76%
	5V	3A		50mV	

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# Avanti Power Repairs Ltd

SPU-150-Q Series - 150W Quad Output Power Supply

Features

Auto sensing AC input High efficiency



Light weight, compact size Built-in EMI filter, low ripple noise 100% 50° burn-in test UL, cUL, TUV, CB, CE Standard



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
SPU-150-Q1	5V	25A	150W	50mV	72%
	12V	10A		150mV	
	-12V	2A		240mV	
	-5V	1A		100mV	
SPU-150-Q2	5V	20A	150W	50mV	75%
	15V	8A		150mV	
	-15V	2A		150mV	
	-5V	1A		100mV	
SPU-150-Q3	5V	20A	150W	50mV	72%
	12V	8A		150mV	
	-12V	2A		240mV	
	24V	2A		240mV	
SPU-150-Q4	5V	20A	150W	50mV	72%
	15V	4A		150mV	
	-15V	2A		300mV	
	-5V	1A		100mV	

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# Avanti Power Repairs Ltd

Factory automation Instrumentation Moving Signs Telecommunications Data communications



#### **Features**

Universal AC input Built-in active PFC function, PF>0.95 Short circuit, over load, over voltage protections Forced air cooling by built-in DC fan Fixed switching frequency at 100KHz



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
QP-150B	5V	15A	150W	100mV	76%
	12V	4A		150mV	
	-12V	2A		150mV	
	-5V	1A		100mV	
QP-150C	5V	15A	153W	100mV	77%
	15V	3A		150mV	
	-15V	2A		150mV	
	-5V	1A		100mV	

## **Description**

The QP-150B, C Series is a quad output enclosed power supply with PFC function. Protections including short circuit, overload and over voltage. Forced air cooling by built-in DC fan allows an operating temperature of -10~+60°C. With a fixed switching frequency at 100KHz enabling designs to avoid interference with system clock frequencies.

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**Avanti Power Repairs Ltd** 

Instrumentation
Moving signs
Telecommunications
Data communications



#### **Features**

Universal AC input
Built-in active PFC function, PF>0.95
Short circuit, over load, over voltage protections
Forced air cooling by built-in DC fan
Output: 4±Polarity is selectable

Fixed switching frequency at 100KHz

CB((:,91...)

Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
QP-150D	5V	10A	150.2W	120mV	78%
	12V	4A		150mV	
	24V	2A		200mV	
	-12V	1A		150mV	
QP-150F	5V	10A	152W	120mV	78%
	15V	3A		150mV	
	24V	2A		200mV	
	-15V	1A		150mV	
QP-150-3A	5V	10A	146W	100mV	73%
	3.3V	10A		100mV	
	12V	5A		150mV	
	-5V	1A		150mV	
QP-150-3B	5V	10A	150.2W	100mV	75%
	3.3V	10A		100mV	
	12V	5A		150mV	
	-12V	1A		150mV	
QP-150-3C	5V	10A	152W	100mV	74%
	3.3V	10A		100mV	
	15V	4A		150mV	
	-15V	1A		150mV	
QP-150-3D	5V	10A	150.2W	100mV	
	3.3V	10A		100mV	
	24V	2.5A		150mV	
	-12V	1A		150mV	

### **Description**

The QP-150 Series is a quad output enclosed power supply with PFC function. Protections including short circuit, overload and over voltage. Forced air cooling by built-in DC fan allows an operating temperature of -10~+60°C. With a fixed switching frequency at 100KHz enabling designs to avoid interference with system clock frequencies.

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**Avanti Power Repairs Ltd** 

**TP-150 Series - 150W AC-DC Triple Output PFC Function Power Supply** 

**Applications** 

General electronic equipment

Factory automation
Instrumentation
Moving Sign
Telecommunications
Data communications



#### **Features**

Universal AC input / Full range Built-in active PFC function, PF>0.94 Protections: Short circuit/Over load/Over voltage Forced air cooling by built-in DC fan Fixed switching frequency at 100KHz(Optional)



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
TP-150A	5V	15A	150W	100mV	75%
	12V	6A		120mV	
	-5V	1A		100mV	
TP-150B	5V	15A	148.2W	100mV	77%
	12V	6A		120mV	
	-12V	1A		100mV	
TP-150C	5V	15A	152W	100mV	77%
	15V	4.5A		150mV	
	-15V	1A		100mV	
TP-150D	5V	15A	154.2W	100mV	78%
	24V	3A		150mV	
	12V	1A		100mV	

## **Description**

The TP-150 series is an AC-DC triple output enclosed power supply with PFC function. Forced air cooling by built-in DC fan allows an operating temperature of -10~+60°C. With a fixed switching frequency at 100KHz enabling designs to avoid interference with system clock frequencies (Optional).

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**Avanti Power Repairs Ltd** 



Universal AC input with active power factor correction, P.F.>0.95
Built in EMI filter, low ripple noise
Over load, over voltage & short circuit protection
Over temperature protection (optional)
Output voltage ±10% adjustment
Remote Control ON/OFF (optional)
Non min. load requirement
100% 50°C burn-in test
UL, cUL, TUV, ,CB, CE approved



Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
3.3V	30A	100W	50mV	69%
5V	30A	150W	70mV	75%
8V	20A	150W	80mV	70%
12V	12.5A	150W	100mV	80%
15V	10A	150W	120mV	80%
24V	6.3A	150W	150mV	83%
27V	6A	150W	180mV	84%
48V	3.2A	150W	250mV	84%
	3.3V 5V 8V 12V 15V 24V 27V	3.3V 30A 5V 30A 8V 20A 12V 12.5A 15V 10A 24V 6.3A 27V 6A	3.3V     30A     100W       5V     30A     150W       8V     20A     150W       12V     12.5A     150W       15V     10A     150W       24V     6.3A     150W       27V     6A     150W	3.3V         30A         100W         50mV           5V         30A         150W         70mV           8V         20A         150W         80mV           12V         12.5A         150W         100mV           15V         10A         150W         120mV           24V         6.3A         150W         150mV           27V         6A         150W         180mV

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# Avanti Power Repairs Ltd



Low cost, high reliability 105°C output capacitor International AC input range High efficiency, low working temperature Soft-start circuit, limiting AC surge current Short circuit, over load and over voltage protection 100% full load burn-in test Built in EMI filter, low ripple & noise



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
AD-155A	14V	10.5A	152W	150mV	80%
	13.3V	0.5A			
AD-155B	28V	5A	152W	150mV	84%
	27.1V	0.5A			
AD-155C	54V	3A	156.5W	240mV	84%
	54V	0.2A			

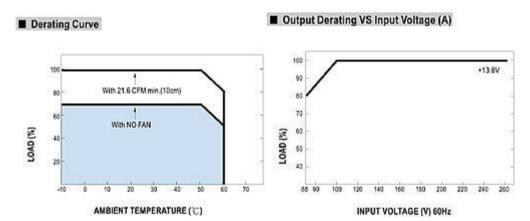
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Universal AC input / Full range
Built-in active PFC function, PF>95
Short circuit/Over load/Over voltage Protection
Battery low/battery polarity protections
Cooling by free air convection
100% full load burn-in test
Fixed switching frequency at PFC 67KHz, PWM
134KHz
UPS Function

CB( ( . AL. AE ( . R)

Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
ADD-155A	14V	10A	153W	150mV	78%
	5V	3A		100mV	
	13.3V	0.5A			
ADD-155B	28V	4.5A	153W	200mV	81%
	5V	3A		100mV	
	27.1V	0.5A			
ADD-155C	54V	2.3A	150W	240mV	81%
	5V	3A		100mV	
	54V	0.2A			



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Access control systems
Emergency lighting systems
Alarm systems
UPS systems
Central monitoring systems



#### **Features**

90-264VAC Universal AC input
L-bracket base and cover to enclose
Built-in Active PFC function
Short circuit, over load, over voltage protections
Battery low protection / Battery polarity protection by fuse
Relay contact signal output for AC OK and Battery low
Cooling by free air convection
100% full load burn-in test
6"x3" compact size

CB ( €.91/... A.E.

Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
PSC-160A-C	13.8V	7.6A	160W	150mV	88%
	13.8V	4A			
PSC-160B-C	27.6V	3.8A	160W	240mV	90%
	27.6V	2A			

## **Description**

PSC-160-C Series is our standard 160W AC/DC PCB type security power supply, with 6â€□x3â€□ footprint, but fitted with an 1-bracket and cover to encase the unit. The power supply has a universal input range between 90VAC and 264VAC and incorporates a built-in PFC function. In addition to the primary output there is a charger output that provides the backup power supply application required by access and security systems. PSC-160-C Series still delivers up to 90% high efficiency and can operate with air convection at temperatures of -30C through to 70C. This series is designed with thorough alarm features, including AC OK and battery low signalling; there is also a relay contact provided to facilitate user system design.

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Avanti Power Repairs Ltd

SPS-170P - 170W Single Output AC-DC Enclosed Power Supply



AC input 88V ~ 132V or 175V ~264V selected by switch Built-in EMI filter, low ripple noise Over load, over voltage, short circuit protection Output voltage  $\pm 10\%$  adjustment 100% 50°C burn-in test Meet UL, cUL, TUV, CB, CE standard



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
SPS-170P-3-3	5V	30A	99W	50mV	69%
SPS-170P-05	5V	30A	150W	30mV	75%
SPS-170P-7-5	8V	21A	158W	100mV	77%
SPS-170P-12	12V	14.2A	170W	100mV	80%
SPS-170P-15	15V	11.4A	170W	120mV	80%
SPS-170P-24	24V	7.1A	170W	240mV	83%
SPS-170P-28	28V	6.1A	170W	240mV	84%
SPS-170P-48	48V	4A	170W	240mV	84%

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Universal AC input/full range
Built-in active PFC function, PF≥0.94
High efficiency up to 86%
Protections: Short circuit/Overload/Over Voltage/Over
Temperature
Cooling by free air convection
1U low profile 36mm
Conformal coated
ZVS technology to reduce power dissipation



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
HDP-190	5V	20A	100W	100mV	86%

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Universal AC input/full range Built-in active PFC function, PF>0.95

Protections: Short circuit/Overload/Over voltage/Over

temperature

Cooling by free air convection

1U low profile 30mm

Optional conformal coating models (RSP-200-CC)

LED indicator for power on



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
RSP-200-2-5	2.5V	40A	100W	100mV	81.5%
RSP-200-3-3	3.3V	40A	132W	100mV	84%
RSP-200-4	4V	40A	160W	100mV	85.5%
RSP-200-5	5V	40A	200W	150mV	87%
RSP-200-7-5	7.5V	26.7A	200.25W	150mV	89%
RSP-200-12	12V	16.7A	200.4W	150mV	89%
RSP-200-13-5	13.5V	14.9A	201.15W	150mV	89%
RSP-200-15	15V	13.4A	201W	150mV	89.5%
RSP-200-24	24V	8.4A	201.6W	150mV	89.5%
RSP-200-27	27V	7.5A	202.5W	200mV	89%
RSP-200-36	36V	5.56A	200.16W	220mV	90%
RSP-200-48	48V	4.2A	201.6W	240mV	90%

## **Description**

The RSP-200 is a 200W single output enclosed power supply with PFC function >0.95. With a 1U low profile of 30mm the series are suitable for applications requiring a low profile installation. Cooling by free air convection allows an operating temperature of  $-30\sim+70$ °C, other functions of the RSP-200 series include protection for short circuit, overload, over voltage and over temperature.

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Charging
General electronic machinery or equipment
Automation
Test equipment
Charge and Sync Tablet Carry Cases



#### **Features**

Universal AC input/Full range Built-in active PFC function, PF>0.93 Protections: Short circuit/Overload/Over voltage/Over

temperature

Built-in cooling fan speed control Built-in constant current limiting circuit

Built-in fan speed control

Remote ON-OFF control (optional)

LED indicator for power on

100% full load burn-in test

Fixed switching frequency at PFC:67KHz PWM:134KHz



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
SP-200-3-3	3.3V	40A	132W	100mV	71%
SP-200-5	5V	40A	200W	100mV	77%
SP-200-7-5	8V	27A	200.2W	100mV	78.5%
SP-200-12	12V	17A	200.4W	100mV	84%
SP-200-13-5	14V	15A	201.1W	100mV	83.5%
SP-200-15	15V	13.4A	201W	100mV	84%
SP-200-24	24V	8.4A	202W	100mV	85%
SP-200-27	27V	8A	202.5W	100mV	85%
SP-200-48	48V	4.2A	202W	150mV	85%

## **Description**

A 200W single output enclosed PFC function power supply, with built in active PFC function, PF>0.93. Built-in cooling fan with speed control, LED indicator for power on and an optional ON-OFF control.

**Page 110** 



Universal AC input Built-in active PFC function, PF>0.95

Built-in active PFC function, PF>0.95

Short circuit, over load, over voltage, over temperature protections

Forced air cooling by built-in DC fan

CH1,2 can be adjustable from -5~+10%

With power good and fail signal output(Optional)

Built-in remote sense function for CH1,2

100% full load burn-in test

CH4 can set to positive voltage, after consultation, prior to delivery

Fixed switching frequency at PFC:67KHz

PWM:134KHz(Optional)



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
QP-200D	5V	15A	203.4W	100mV	75%
	12V	4A		150mV	
	24V	3A		150mV	
	-12V	1A		150mV	
QP-200F	5V	15A	202.5W	100mV	75%
	15V	3A		150mV	
	24V	3A		150mV	
	-15V	1A		150mV	
QP-200-3A	5V	15A	200W	100mV	72%
	3.3V	15A		100mV	
	12V	6A		150mV	
	-5V	1A		150mV	
QP-200-3B	5V	15A	205W	100mV	72%
	3.3V	15A		100mV	
	12V	6A		150mV	
	-12V	1A		150mV	
QP-200-3C	5V	15A	210W	100mV	72%
	3.3V	15A		100mV	
	15V	5A		150mV	
	-15V	1A		150mV	
QP-200-3D	5V	10A	204W	100mV	74%
	3.3V	15A		100mV	
	24V	4A		150mV	
	-12V	1A		150mV	
QP-200-3E	5V	10A	206W	100mV	74%
	3.3V	15A		100mV	
	24V	4A		150mV	
	-15V	1A		150mV	

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Universal AC input
Built-in active PFC function, PF>0.95
High efficiency up to 89% (typ.)
Short circuit, over load, over voltage, over temperature protections
Withstand 300VAC surge input for 5 seconds
Cooling by free air convection
Built-in constant current limiting circuit

1U low profile 38mm
Built-in ON-OFF control
Built-in remote sense function
Stand by 5V@0.3A

No load power consumption < 0.5A



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
HRPG-200-3-3	3.3V	40A	132W	80mV	80%
HRPG-200-5	5V	35A	175W	90mV	84%
HRPG-200-7-5	8V	27A	200.3W	100mV	86%
HRPG-200-12	12V	17A	200.4W	120mV	88%
HRPG-200-15	15V	13.4A	201W	150mV	88%
HRPG-200-24	24V	8.4A	202W	150mV	88%
HRPG-200-36	36V	6A	205.2W	250mV	89%
HRPG-200-48	48V	4.3A	206.4W	250mV	89%

## **Description**

HRPG-200 Series are 200W AC/DC miniature enclosed type power supplies with PFC function that fulfil the requirement of EN61000-3-2 for harmonic current with remote ON/OFF control and 5V/0.3A standby output to achieve no load power consumption <0.5W. Other standard functions of HRPG-200 include 300VAC input surge immunity for 5 seconds, remote sense, LED indicator, heavy industry level of EMS immunity(EN61000-6-2), and protection for short-circuit, overload (constant current limiting), over voltage, and over temperature.

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Universal AC input / Full range
Built-in active PFC function, PF>0.95
High efficiency up to 89%
Short circuit, over load, over voltage, over temperature protections
Withstand 300VAC surge input for 5 seconds
Cooling by free air convection
Built-in constant current limiting circuit
1U low profile 38mm

CB ( E.AL. AE (P)

Built-in remote sense function

Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
HRP-200-3-3	3.3V	40A	132W	80mV	80%
HRP-200-5	5V	35A	175W	90mV	84%
HRP-200-7-5	8V	27A	200.3W	100mV	86%
HRP-200-12	12V	17A	200.4W	120mV	88%

## **Description**

HRP-200 Series are 200W AC/DC enclosed type power supplies with built in active PFC function. With a 1U low profile of 38mm and cooling by free air convection allows an operating temperature of -40~+70 °C.



Power ON with LED indicator
Built in EMI filter, low ripple noise
Universal AC input with active power factor correction,
P.F.>0.95
Over load, over voltage protection
Short circuit shutdown and Auto recovery
Output voltage ±10% adjustment

Remote Control ON/OFF (Optional) Non min. load requirement 100% 50°C burn-in test Built-in long life ball bearing fan UL, cUL, TUV, CB, CE approved

Over temperature protection(Optional)

( E. R.L. )

Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
SPS-220P-3-3	3.3V	40A	132W	50mV	69%
SPS-220P-05	5V	40A	200W	70mV	75%
SPS-220P-12	12V	18.4A	220W	100mV	80%
SPS-220P-15	15V	15A	220W	120mV	80%
SPS-220P-24	24V	9.2A	220W	150mV	83%
SPS-220P-27	27V	8.2A	220W	180mV	84%
SPS-220P-48	48V	5A	220W	250mV	84%

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# Avanti Power Repairs Ltd

General electronic equipment Low profile applications



U-bracket low profile:38mm
High power density 4.7w/in
Universal AC input / full range
Built in active PFC circuit
Active AC surge current limiting
Protections: Short circuit/Over load/Over voltage
Air convection for 150W (free) and 225W (forced)
\*\*Please note that values are for forced air cooling\*\*

CB ( **6.91**... **AE (P**)

Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
USP-225-3-3	3.3V	40A	132W	100mV	72%
USP-225-5	5V	40A	200W	100mV	77%
USP-225-12	12V	19A	224.4W	100mV	83%
USP-225-15	15V	15A	225W	100mV	84%
USP-225-24	24V	9.4A	226W	150mV	85%
USP-225-48	48V	5A	226W	250mV	86%

## **Description**

The USP-225 Series is a single output U-bracket power supply with PFC function. A highly efficient power supply at 93%, protections including, short circuit, overload, over voltage and over temperature. Cooling by free air convection allows an operating temperature of -20~+65°C. \*\*Please note that values are for forced air cooling\*\*

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P.F.>0.95
Built in EMI filter, low ripple noise
Over load, over voltage, short circuit protection
Output voltage ±10% adjustment
Remote Control ON/OFF (Optional)
Non min load requirement
100% 50°C burn-in test



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
SPS-230P-3-3	3.3V	40A	132W	50mV	69%
SPS-230P-05	5V	40A	200W	70mV	75%
SPS-230P-7-5	8V	31A	230W	80mV	77%
SPS-230P-12	12V	19.2A	230W	100mV	80%
SPS-230P-15	15V	15.4A	230W	120mV	80%
SPS-230P-24	24V	10A	230W	150mV	83%
SPS-230P-27	27V	9A	230W	180mV	84%
SPS-230P-48	48V	5A	230W	250mV	84%

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Avanti Power Repairs Ltd

SPU-230-D Series - 230W Dual Output AC-DC Enclosed Power Supply



High efficiency, high reliability
Built in EMI filter, low ripple noise
AC input 90~132 V / 180~264V auto sensing
Over load, over voltage, short circuit protection
Built-in long life Ball-bearing FAN
100% 50° burn-in test
UL, cUL, TUV, CB, CE standard



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
SPU-230-D1	8V	30A	230W	80mV	73%
	5V	4A		70mV	
SPU-230-D2	12V	18A	230W	120mV	75%
	5V	4A		70mV	
SPU-230-D3	24V	9A	230W	240mV	76%
	5V	4A		70mV	



High efficiency, high reliability Built in EMI filter, low ripple noise AC 90~132 V / 180~264V auto sensing Frequency 47~63 Hz Over load, over voltage, short circuit protection Built-in long life Ball-bearing FAN 100% 50° burn-in test UL, cUL, TUV, ,CB, CE standard



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
SPU-230-Q1	5V	35A	230W	50mV	74%
	12V	12A		120mV	
	-12V	2A		240mV	
	-5V	2A		100mV	
SPU-230-Q2	5V	30A	230W	50mV	74%
	15V	10A		150mV	
	-15V	2A		300mV	
	-5V	2A		100mV	
SPU-230-Q3	5V	25A	230W	50mV	74%
	12V	10A		100mV	
	-12V	2A		240mV	
	24V	3A		240mV	

Industrial automation Moving sign Electronic equipment Instrumentation



#### **Features**

Universal AC input / Full Range
Built-in active PFC function, PF>0.95
Short circuit, over load, over voltage, over temperature protections
Forced air cooling by built-in DC fan
Built-in fan ON/OFF control
LED indicator for power on
UL, cUL, TUV, CE & CB Approvals
Fixed switching frequency at 90KHz



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
SP-240-5	5V	45A	225W	150mV	79%
SP-240-7-5	8V	32A	240W	150mV	83%
SP-240-12	12V	20A	240W	150mV	86%
SP-240-15	15V	16A	240W	150mV	86%
SP-240-24	24V	10A	240W	150mV	87%
SP-240-30	30V	8A	240W	150mV	87%
SP-240-48	48V	5A	240W	150mV	89%

## **Description**

SP-240 is a reduced profile version of the ever popular S-240 Series with efficiency 1~4% higher and Active PFC function. With 88 to 264VAC full range input and output voltage options of 5V, 7.5V, 12V, 15V, 24V, 30V & 48V. Standard functions include adjustable output voltage, built-in fan ON/OFF control and short circuit, over lad, over voltage and over temperature protections.



AC input 88V ~ 132V or 175V ~ 264V, select by switch P.F.C. function Built in EMI filter, low ripple noise Over load, over voltage, short circuit protection Output voltage  $\pm 10\%$  adjustment Remote Control ON/OFF (Optional) Non min load requirement 100% 50° burn-in test Meet UL, cUL, TUV, CB, CE standard



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
SPS-240P-12	12V	20A	240W	100mV	80%



Universal AC input/Full range
Built-in active PFC function, PF≥0.94
High efficiency up to 84%
Protections: Short circuit/Overload/Over voltage/Over temperature
Forced air cooling by built-in DC fan
1U low profile 36mm
Conformal coated
Built-in cooling fan ON-OFF control
ZVS technology to reduce power dissipation



LED indicator for power on

Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
HDP-240 Series	3.8V	41.5A	240W	100mV	84%
	2.8V	25A			

## **Description**

The HDP-240 series is a highly efficient enclosed type power supply with a 1U low profile, active PFC function and low voltage dual output. With a built-in DC fan and a new system design concept enabling the power supply to drive RGB LED chips by 3.8/2.8V outputs, it is ideal for LED moving sign applications.



AC input range selected by switch Protections: Short circuit/Over load/Over voltage Forced air cooling by built-in DC fan 100% full load burn-in test Fixed switching frequency at 75KHz Low cost High reliability

.**91**0s

Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
Q-250B	5V	20A	201W	80mV	73%
	12V	7A		120mV	
	-12V	1A		120mV	
	-5V	1A		50mV	
Q-250C	5V	20A	195W	80mV	74%
	15V	5A		150mV	
	-15V	1A		150mV	
	-5V	1A		50mV	
Q-250D	5V	10A	242W	80mV	78%
	12V	5A		120mV	
	24V	5A		240mV	
	12V	1A		120mV	
Q-250F	5V	10A	246W	80mV	78%
	15V	4A		150mV	
	24V	5A		240mV	
	-15V	1A		150mV	

## **Description**

The Q-250 Series is a low cost, highly reliable 250W quad output AC-DC enclosed power supply with a selectable AC input range. A high operating temperature of -10~+60°C due to forced air cooling by the built-in Dc fan. Protections including short circuit, over load and over voltage. Fixed switching frequency at 75KHz.

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**Avanti Power Repairs Ltd** 

HSP-250 Series - 250W Single Output AC-DC Enclosed Power Supply with PFC Function



Universal AC input / Full range
Built-in active PFC function, PF>0.95
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
Conformal coated



Built-in remote sense function

Built-in cooling fan ON-OFF control

Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
HSP-250-2-5	2.5V	50A	125W	100mV	79%
HSP-250-3-6	4V	50A	180W	100mV	83%
HSP-250-5	5V	50A	250W	100mV	87%

## **Description**

The HSP-250 series is a 250W Single Output enclosed power supply with PFC function. Forced air cooling by built-in DC fan allows an operating temperature of -40~+70°C. Protections including short circuit, overload, over voltage and over temperature.



Universal AC input / Full range Built-in active PFC function, PF>0.95 High efficiency up to 89% (typ.) Short circuit, over load, over voltage, over temperature protections

With DC OK signal output
Withstand 300VAC surge input for 5 seconds
Built-in constant current limiting circuit
1U low profile 41mm
Built-in cooling Fan ON-OFF control (load)
Built-in remote sense function



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
HRP-300-3-3	3.3V	60A	198W	80mV	79%
HRP-300-5	8V	40A	300W	100mV	82%
HRP-300-7-5	8V	40A	300W	100mV	86%
HRP-300-12	12V	27A	324W	120mV	88%
HRP-300-15	15V	22A	330W	150mV	88%
HRP-300-24	24V	14A	336W	150mV	87%
HRP-300-36	36V	9A	324W	250mV	88%
HRP-300-48	48V	7A	336W	250mV	89%

## **Description**

HRP-300 are a range of miniature high reliability enclosed power supplies featuring high efficiency, active PFC function and a miniature 1U rack style profile. Possessing up to 89% of high efficiency, it can be cooled by the built-in long life DC fan from -30°C to +50°C ambient temperature under full load condition. Other features include 300VAC input surge immunity for 5 seconds, remote sense function and short circuit, over load (constant current mode), over voltage and over temperature protections.



Universal AC input / Full range
Built-in active PFC function, PF>0.95
High efficiency up to 89% (typ.)
Short circuit, over load, over voltage, over temperature protections
With DC OK signal output
Withstand 300VAC surge input for 5 seconds
Built-in constant current limiting circuit
1U low profile 41mm
Built-in cooling Fan ON-OFF control
Built-in remote sense function

Built-in remote ON-OFF control Standby 5V@0.3A No load power consumption<0.5W



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
HRPG-300-3-3	3.3V	60A	198W	80mV	80%
HRPG-300-5	5V	60A	300W	90mV	82%
HRPG-300-7-5	8V	40A	300W	100mV	86%
HRPG-300-12	12V	27A	324W	120mV	88%
HRPG-300-15	15V	22A	330W	150mV	88%
HRPG-300-24	24V	14A	336W	150mV	87%
HRPG-300-36	36V	9A	324W	250mV	88%
HRPG-300-48	48V	7A	336W	250mV	89%

## **Description**

HRPG-300 are a range of miniature high reliability enclosed power supplies with +5Vsb featuring no load power consumption <0.5W, high efficiency, active PFC function and a miniature 1U rack style profile. Possessing up to 89% of high efficiency, it can be cooled by the built-in long life DC fan from -30°C to +50°C ambient temperature under full load condition. Other features include 300VAC input surge immunity for 5 seconds, remote sense function and short circuit, over load (constant current mode), over voltage and over temperature protections.

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Universal AC input / Full range
Built-in active PFC function, PF>0.95
Short circuit, over load, over voltage, over temperature protections
Forced air cooling by built in DC fan
Built in fan speed control
Fixed switching frequency at 100KHz
Output voltage programmable from 20~110% by
1~5.5VDC external control signal



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
SPV-300-12	12V	25A	300W	150mV	84%
SPV-300-24	24V	12.5A	300W	150mV	85%
SPV-300-48	48V	6.25A	300W	240mV	86.5%

## **Description**

SPV-300 Series are a programmable output 300W single output enclosed power supply range with efficiency uo to 83% and built in active PFC >0.94. These enclosed power supplies also have remote on/off control, fan speed control and full protections.



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 fan speed control

Fixed switching frequency at 100KHz

CB ( **( .91** ... **AE (R**)

Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
SP-320-3-3	3.3V	55A	182W	150mV	74%
SP-320-5	5V	55A	275W	150mV	79%
SP-320-7-5	8V	40A	300W	150mV	83%
SP-320-12	12V	25A	300W	150mV	86%
SP-320-13-5	14V	22A	297W	150mV	86%
SP-320-15	15V	20A	300W	150mV	86%
SP-320-24	24V	13A	312W	150mV	87%
SP-320-27	27V	12A	316W	200mV	88%
SP-320-36	36V	9A	317W	220mV	87%
SP-320-48	48V	7A	322W	240mV	89%

## **Description**

The SP-320 series is a single output power supply with built-in active PFC function. Protections including short circuit, overload, over voltage and over temperature. Forced air cooling by built-in DC fan with fan speed control.



30mm low profile design for 1U installation Universal AC input range 88~264V Built-in active PFC function High efficiency up to 90%

Forced air cooling by built-in DC fan with speed control

-30~+70°C operating temperature

Protection: Short circuit/Overload/Over voltage/Over

temperature LED indicator

Optional conformal coating models (RSP-320-CC)



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
RSP-320-2-5	2.5V	60A	150W	100mV	79.5%
RSP-320-3-3	3.3V	60A	198W	100mV	82%
RSP-320-4	4V	60A	240W	100mV	84.5%
RSP-320-5	5V	60A	300W	150mV	85%
RSP-320-7-5	7.5V	40A	300W	150mV	88%
RSP-320-12	12V	26.7A	320.4W	150mV	88%
RSP-320-13-5	13.5V	23.8A	321.3W	150mV	88%
RSP-320-15	15V	21.4A	321W	150mV	88.5%
RSP-320-24	24V	13.4A	321.6W	150mV	89%
RSP-320-27	27V	11.9A	321.3W	200mV	89%
RSP-320-36	36V	8.9A	320.4W	220mV	89.5%
RSP-320-48	48V	6.7A	321.6W	240mV	90%

## **Description**

The RSP-320 series is a 320W economical enclosed power supply with a 30mm low profile design for 1U installations. Standard features of the RSP-320 series are, PFC function, high efficiency of up to 90% and forced air cooling by built-in DC fan. Suitable applications include general industrial control systems, mechanical & electrical industry instruments and LED displays or any systems requiring a low profile.

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## **Avanti Power Repairs Ltd**

QP-320 Series - 320W Quad Output PFC Enclosed Power Supply

**Applications** 

Motor based machinery Gaming machines, Lottery vending machines Factory automation Instrumentation Other general electronics



#### **Features**

Universal AC input/full range
20A peak load capability for 25V channel
Built-in active PFC circuit
Short circuit, over load, over voltage and over temperature
protection
Built in remote sense function
Power fail/Power good signal output

CH1 & CH2 can be adjusted -5 to +10% rated voltage



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
QP-320D	5V	20A	316W	100mV	83%
	12V	10A		150mV	
	24V	3A		150mV	
	-12V	2A		150mV	
QP-320F	5V	20A	316W	100mV	83%
	15V	8A		150mV	
	24V	3A		150mV	
	-15V	2A		150mV	

## **Description**

QP-320 Series are 320W quad output enclosed type switching power supplies with power factor correction (PFC) function. Featuring 20A/1ms peak current capability for the 24V channel, which is repeatable every 100ms, QP-320 series can provide the power demand for operating motor based machinery. Alongside the standard functions of remote sense and PF/PG signal output the output voltage of CH1 & CH2 can be adjusted from -5 to +10%, which gives users more flexibility for use in different kinds of application.

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**Avanti Power Repairs Ltd** 

USP-350 Series - 350W Single Output U-Bracket PSU with PFC Function

**Applications** 

General electronic equipment Low profile applications Embedded power solutions



Universal AC input / Full range

Built in active PFC circuit compliance to EN61000-3-2 Protections: Short circuit/Over load/Over voltage/Over temperature

Free air convection for 300W and 350W with 23.5CFM forced air

High power density 5.6w/in<sup>3</sup> Active AC surge current limiting U-bracket low profile: 38mm

ZVS technology to reduce power dissipation

\*\*Please note that values are for forced air cooling, please see PDF for convection cooled values\*\*



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
USP-350-3-3	3.3V	70A	131W	80mV	78%
USP-350-5	5V	70A	350W	80mV	84%
USP-350-12	12V	29.2A	350.4W	100mV	88%
USP-350-15	15V	23.4A	351W	100mV	88%
USP-350-24	24V	15A	350.4W	150mV	88%
USP-350-48	48V	7.3A	350.4W	150mV	89%

#### **Description**

The USP-350 series single output U-bracket power supply with PFC function. A high power density of 5.6w/in<sup>3</sup> and a low profile of 38mm. Protections including short circuit, over load, over voltage and over temperature.\*\*Please note that values are for forced air cooling, please see PDF for convection cooled values\*\*

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# **Avanti Power Repairs Ltd**

## **QP-375 Series - 375W Quad Output PFC Function Power Supply**

**Applications:** General electronic machinery, Factory automation, Instrumentation, Moving Signs, Telecommunications

#### **Features**

Universal AC input Built-in active PFC function PF>0.95

Short circuit, Over load, Over voltage, Over temperature



protections

Forced air cooling by built-in DC fan

3rd & 4th output are isolated from other outputs and the polarity can be reversed

No minimum load requirement for 2nd, 3rd & 4th output

Outputs adjustable from  $-5 \sim +10\%$ 

Power good and fail signal output

Built-in remote ON-OFF control

Fixed switching frequency at 100KHz



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
QP-375-5A	5V	30A	378W	100mV	77%
	12V	10A		150mV	
	12V	6A		150mV	
	12V	3A		50mV	
QP-375-5B	5V	30A	357W	100mV	77%
	12V	10A		120mV	
	12V	6A		120mV	
	5V	3A		50mV	
QP-375-5C	5V	30A	378W	100mV	77%
	12V	9A		150mV	
	15V	4A		150mV	
	15V	4A		240mV	
QP-375-5D	5V	30A	378W	100mV	78%
	12V	9A		120mV	
	12V	4A		120mV	
	24V	3A		240mV	
QP-375-5E	5V	30A	378W	100mV	78%
	12V	9A		120mV	
	24V	3A		120mV	
	24V	2A		240mV	
QP-375-24B	24V	10A	386W	240mV	78%
	5V	10A		50mV	
	12V	4A		120mV	
	12V	4A		120mV	
QP-375-24C	24V	10A	410W	240mV	80%
	5V	10A		50mV	
	15V	4A		150mV	
	15V	4A		150mV	

## **Description**

The QP-375 series is a 375W quad output enclosed power supply with built-in active PFC function. Protections including, short circuit, overload, over voltage and over temperature. Forced air cooling by built-in DC fan allows an operating temperature of  $-10\sim+60$ °C. With a fixed switching frequency at 100KHz enabling designs to avoid interference with system clock frequencies.

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Factory Automation Instrumentation Moving signs Telecommunications Data communications



#### **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

CH3,4 are isolated from other output and the polarity can be

eversec

No minimum load requirement for CH2,3,4 All outputs can be adjustable from -5~+10% With power good and fail signal output Built-in remote ON-OFF control Fixed switching frequency at 100KHz



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
QP-375-24B	24V	10A	386W	240mV	78%
	5V	10A		50mV	
	12V	4A		120mV	
	12V	4A		120mV	
QP-375-24C	24V	10A	410W	240mV	80%
	5V	10A		50mV	
	15V	4A		150mV	
	15V	4A		150mV	

## **Description**

The QP-375-24 Series is a 375W quad output enclosed power supply with built-in active PFC function. Protections including short circuit, overload, over voltage and over temperature. Forced air cooling by built-in DC fan allows an operating temperature of -10~+60°C. Channel 3 and 4 are isolated from other outputs so the polarity can be reversed. With fixed switching frequency at 100Khz enabling designs to avoid interference with system clock frequencies.

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Universal AC input / Full range
Built-in active PFC function, PF>0.95
High efficiency up to 89.5% (typ.)
Short circuit, over load, over voltage, over temperature protections
With DC OV signal output

With DC OK signal output
Withstand 300VAC surge input for 5 seconds
Built-in constant current limiting circuit
1U low profile 41mm
Built-in cooling Fan ON-OFF control (load)
Built-in remote sense function

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Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
HRP-450-3-3	3.3V	90A	297W	80mV	80%
HRP-450-5	5V	90A	450W	80mV	83%
HRP-450-7-5	8V	60A	450W	100mV	86.5%
HRP-450-15	15V	30A	450W	150mV	89%
HRP-450-24	24V	19A	451.2W	150mV	88%
HRP-450-36	36V	12.5A	450W	240mV	89%
HRP-450-48	48V	10A	456W	240mV	90%

## **Description**

HRP-450 are a range of miniature high reliability enclosed power supplies featuring high efficiency, active PFC function and a miniature 1U rack style profile. Possessing up to 89.5% of high efficiency, it can be cooled by the built-in long life DC fan from -40°C to +85°C ambient temperature under full load condition. Other features include 300VAC input surge immunity for 5 seconds, remote sense function and short circuit, over load (constant current mode), over voltage and over temperature protections.



Universal AC input
Built-in active PFC function, PF>0.95
High efficiency up to 88% (typ.)
Short circuit, over load, over voltage, over temperature protections
Withstand 300VAC surge input for 5 seconds
Cooling by free air convection
Built-in constant current limiting circuit
1U low profile 38mm
Built-in ON-OFF control
Built-in remote sense function
Stand by 5V@0.3A



No load power consumption < 0.5A

Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
HRPG-450-3-3	3.3V	90A	297W	80mV	80%
HRPG-450-5	5V	90A	450W	80mV	83%
HRPG-450-7-5	8V	60A	450W	100mV	86.5%
HRPG-450-12	12V	38A	450W	120mV	88%
HRP-450-12	12V	38A	450W	120mV	88%
HRPG-450-15	15V	30A	450W	150mV	89%
HRPG-450-24	24V	19A	451.2W	150mV	88%
HRPG-450-36	36V	12.5A	450W	240mV	89%
HRPG-450-48	48V	10A	456W	240mV	90%

#### **Description**

HRPG-150 Series are 150W AC/DC miniature enclosed type power supplies with PFC function that fulfil the requirement of EN61000-3-2 for harmonic current with remote ON/OFF control and 5V/0.3A standby output to achieve no load power consumption <0.5W. Other standard functions of HRPG-150 include 300VAC input surge immunity for 5 seconds, remote sense, LED indicator, heavy industry level of EMS immunity(EN61000-6-2), and protection for short-circuit, overload (constant current limiting), over voltage, and over temperature.



Universal input voltage

Uses ZVS technology to reduce power dissipation and improve efficiency

Large range of output configurations available

Remote control on each module

Remote sense on MS-75, 150 & 300 modules

Built in active PFC, PF>0.95

Built in parallel function on MS-300

Fan alarm function

Forced air cooling



MS-75 Series - 75W Single Output 1 Slot Modular Power Supplies



## **Features**

For installation in MP450, MP650 & MP1K0 Modules

Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)
MS-75L	3.3V	15A	75W	80mV
MS-75M	5V	15A	75W	80mV
MS-75N	12V	0.63A	75W	150mV
MS-750	15V	5A	75W	150mV
MS-75P	24V	3.2A	75W	150mV
MS-75Q	48V	1.6A	75W	250mV



For installation in MP450, MP650 & MP1K0 Modules

Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)
MS-150A	2V	25A	150W	50mV
MS-150B	3.3V	25A	150W	80mV
MS-150C	5V	25A	150W	80mV
MS-150D	7.5V	18A	150W	100mV
MS-150E	12V	13A	150W	150mV
MS-150F	15V	10A	150W	150mV
MS-150G	18V	8.5A	150W	150mV
MS-150H	24V	6.5A	150W	150mV
MS-150I	27V	5.8A	150W	150mV
MS-150J	33V	4.7A	150W	250mV
MS-150K	48V	3.2A	150W	250mV

## MS-300 Series - 300W Single Output parallel able 2 Slot Modular Power Supplies



## **Features**

For installation in MP450, MP650 & MP1K0 Modules

Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)
MS-3002A	2V	50A	300W	80mV
MS-3002B	3.3V	50A	300W	80mV
MS-3002C	5V	50A	300W	80mV
MS-3002D	7.5V	40A	300W	100mV
MS-3002E	12V	25A	300W	150mV
MS-3002F	15V	20A	300W	150mV
MS-3002G	18V	16.7A	300W	150mV
MS-3002H	24V	12.5A	300W	150mV
MS-3002I	27V	11.2A	300W	200mV
MS-3002J	33V	9.1A	300W	250mV
MS-3002K	48V	6.3A	300W	300mV

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For installation in MP450, MP650 & MP1K0 Modules

Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)
MD-100R	5V	10A	90W	100mV
	5V	8A	90W	100mV
MD-100S	5V	10A	100.4W	100mV
	12V	5.8A	100.4W	150mV
MD-100T	5V	15A	101W	100mV
	10V	4.7A	101W	150mV
MD-100U	24V	3A	100W	200mV
	5V	10A	100W	100mV
MD-100V	24V	3A	100.8W	240mV
	12V	4.7A	100.8W	120mV
MD-100W	12V	5A	100.8W	120mV
	12V	5.8A	100.8W	120mV
MD-100X	15V	4.7A	100.5W	150mV
	15V	4.7A	100.5W	150mV

## **Description**

Switching power supplies with modular design that consists of 2 stages; Front end PFC and output modules. Using zero voltage switching technology to realize the power factor correction, the line input is rectified into high DC voltage 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 to 53V. There are currently 75W, 150W, 300W single output modules and 100W dual output modules to fulfil all kinds of applications up to 14 isolated outputs. There are millions of combinations available for the modular series. You can configure the DC outputs needed to get the fastest solution for your power requirements with safety and EMC certificates. No more NRE/safety application charges and long periods of waiting for certificates to come through! This is a revolutionary standard power solution that fulfils your custom made request!

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## **Applications**

Industrial automation Moving sign Electronic equipment Instrumentation



#### **Features**

Universal AC input / Full range
Built in active PFC function, PF>0.95
Short circuit, over load, over voltage, over temperature protections
Forced air cooling by built-in DC fan
High power density 5.18w/in³
43mm thickness low profile
Built-in remote ON-OFF control
Built-in remote sense function
Active AC surge current limiting



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
SP-480-3-3	3.3V	85A	280.5W	80mV	73%
SP-480-5	5V	85A	425W	80mV	79%
SP-480-12	12V	40A	480W	120mV	85%
SP-480-15	15V	32A	480W	150mV	85%
SP-480-24	24V	20A	480W	150mV	87%
SP-480-48	48V	10A	480W	240mV	89%

## **Description**

The SP-480 series is a 480W single output AC-DC enclosed power supply with built-in active PFC function. Protections including short circuit, over load, over voltage and over temperature. Forced air cooling built-in DC fan allows an operating temperature of -20~+60°C. A low profile of 43mm and high power density of 5.18W/in³ means this power supply is suitable for applications where a compact design is required.

## **Applications**

Industrial control systems Mechanical industry Electrical industry Instrumentation LED displays



#### **Features**

Universal 85-264VAC input
Built-in active PFC function, PF>0.95
1U low profile 40.5mm
High efficiency up to 90.5%
Built-in remote on/off control
Built-in remote sense function
Short circuit, over load, over voltage, over temperature protections
LED indicator for power on



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
RSP-500-3-3	3.3V	90A	297W	120mV	81%
RSP-500-4	4V	90A	360W	120mV	83%
RSP-500-5	5V	90A	450W	150mV	83%
RSP-500-12	12V	41.7A	500.4W	150mV	89%
RSP-500-15	15V	33.4A	501W	150mV	88%
RSP-500-24	24V	21A	504W	150mV	89%
RSP-500-27	27V	18.6A	502.2W	150mV	89.5%
RSP-500-48	48V	10.5A	504W	150mV	90.5%

## **Description**

RSP-500 Series are a range of low profile enclosed power supplies with PFC function and output voltage options ranging from 3.3Vdc to 48Vdc. This Mean Well range of enclosed power supplies are also equipped with up to 90.5% high efficiency, remote sense, remote ON/OFF control, and fan speed control, as well as protections for short circuit, overload, over voltage and over temperature. The RSP-500 Series complies with UL, CUL, TUV, CB, and CE regulations.

General electronic applications
Factory automation
Telecommunications
Networking
Test & measurement
Audio systems
Large sized LCD TV's



### **Features**

Universal AC input

Built in active PFC circuit compliance to EN61000-3-2 Short circuit, over load, over voltage, over temperature protections

Free air convection for 400W and 500W with 23.5CFM forced air

High power density 6.2w/in3 U-bracket low profile: 41mm Built-in remote ON-OFF control Built-in remote sense function AC input active surge current limiting

Built in DC OK active signal

( ( SAL BE CB)

Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
USP-500-5	5V	80A	400W	80mV	85%
USP-500-12	12V	42A	504W	100mV	90%
USP-500-15	15V	34A	502.5W	100mV	90%
USP-500-24	24V	21A	504W	150mV	89%
USP-500-48	48V	10.5A	504W	150mV	90%

# **Description**

Featuring advanced technology for high efficiency, USP-500 possesses up to 90% of efficiency, even for the 12V model. With the capability of supplying 400W using free air convection alone, it is perfectly suitable for fanless usage; by applying 23.5CFM of system forced air, an even higher output of 500W can be obtained. With 6.2W/ in of high power density, USP-500 series is a compact 90~264V switcher that is ideal for 1U (1.75-inch) installations.

General electronics
Factory automation
Moving signs
Test and measurement equipment



### **Features**

Universal AC input
Built-in active PFC function, PF>0.95
High efficiency up to 89% (typ.)
Short circuit, over load, over voltage, over temperature protections
Withstand 300VAC surge input for 5 seconds
Built-in constant current limiting circuit
Built-in cooling Fan ON-OFF control (load)
Built-in remote sense function
All using 105°C long life electrolytic capacitors



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
HRP-600-3-3	3.3V	120A	396W	80mV	79%
HRP-600-5	5V	120A	600W	80mV	82%
HRP-600-7-5	8V	80A	600W	80mV	87%
HRP-600-12	12V	53A	636W	120mV	88%
HRP-600-15	15V	43A	645W	150mV	88%
HRP-600-24	24V	27A	648W	150mV	88%
HRP-600-36	36V	18A	630W	200mV	89%
HRP-600-48	48V	13A	624W	240mV	89%

# **Description**

HRP-600 Series are 600W AC/DC enclosed type power supplies with PFC function that fulfil the requirement of EN61000-3-2 for harmonic current with high operating efficiency and low no load power consumption. Standard functions of HRP-600 include 300VAC input surge immunity for 5 seconds, remote sense, DC OK signal, LED indicator, heavy industry level of EMS immunity(EN61000-6-2), and protection for short-circuit, overload (constant current limiting), over voltage, and over temperature.



Universal Ac input/Full range

**Built-in PFC Function** 

Protections: Short Circuit/Overload/Over Voltage/ Over

temperature

Forced air cooling by built-in DC fan

Output Voltage programmable from 20~110% by

1~5.5VDC external control signal

With DC OK signal output

Built-in remote ON-OFF control

Fixed switching frequency at PFC:88kHz PWM:100KHz



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
SPV-600-12	12V	50A	600W	240mV	84%
SPV-600-24	24V	25A	600W	240mV	86%
SPV-600-48	48V	12.5A	600W	300mV	87%

General electronics
Factory automation
Moving signs
Test and measurement equipment



### **Features**

Universal AC input
Built-in active PFC function, PF>0.95
High efficiency up to 89% (typ.)
Short circuit, over load, over voltage, over temperature protections
Withstand 300VAC surge input for 5 seconds
Built-in cooling Fan ON-OFF control (load)
DC OK signal output
Stand by 5V@0.3A
Built in remote ON-OFF control
Built-in remote sense function
No load power consumption <0.75W



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
HRPG-600-3-3	3.3V	120A	396W	80mV	79%
HRPG-600-5	5V	120A	600W	80mV	82%
HRPG-600-7-5	8V	80A	600W	80mV	86%
HRPG-600-12	12V	53A	636W	120mV	88%
HRPG-600-15	15V	43A	645W	150mV	88%
HRPG-600-24	24V	27A	648W	150mV	88%
HRPG-600-36	36V	18A	630W	200mV	89%
HRPG-600-48	48V	13A	624W	240mV	89%

### **Description**

HRPG-600 Series are 600W AC/DC enclosed type power supplies with PFC function that fulfil the requirement of EN61000-3-2 for harmonic current with high operating efficiency and low no load power consumption. Other standard functions of HRPG-600 include 300VAC input surge immunity for 5 seconds, remote sense, DC OK signal, LED indicator, heavy industry level of EMS immunity(EN61000-6-2), and protection for short-circuit, overload (constant current limiting), over voltage, and over temperature. HRPG-600 Series are different to the HPR-600's as they have additional remote ON/OFF control and 5V/0.3A standby output.

Humid and dusty industrial environments Outdoor telecommunication equipment No fan environment Signboards or billboards



### **Features**

Universal AC input / Full range (up to 264VAC)

Built-in active PFC function

No load power consumption <0.5W at remote OFF High efficiency up to 96%

Aluminium case and fully potted with heat-conducted silicone

-40 to +70C wide operating range

Withstand 5G vibration test

Short circuit, Over current, Over voltage, Over temperature protections

Fanless design, cooling by free air convection

Output current and voltage adjustable through internal potentiometer

LED indicator for power on

5 years warranty on approved installations



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
HEP-600-12	12V	40A	480W	150mV	93%
HEP-600-15	15V	36A	540W	150mV	94%
HEP-600-20	20V	28A	560W	150mV	95%
HEP-600-24	24V	25A	600W	150mV	95%
HEP-600-30	30V	20A	600W	200mV	95.5%
HEP-600-36	36V	16.7A	601.2W	250mV	95.5%
HEP-600-42	42V	14.3A	600.6W	250mV	96%
HEP-600-48	48V	12.5A	600W	250mV	96%
HEP-600-54	54V	11.2A	604.8W	350mV	96%

# **Description**

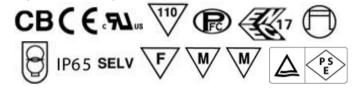
HEP-600 series is a high-efficiency and waterproof AC-to-DC industrial power supply with power up to 600Watts, fully potted by silicone and enclosed within an aluminium case. HEP-600 works outstandingly with electronics under harsh environments such as fan-less, high-vibration, dusty, humid, and oily conditions. Its remarkable features include supreme efficiency up to 96%, low no-load power consumption (<0.5Watt) at remote OFF, and wide working temperature ranges between -40 and +70C.

LED street lighting LED High bay lighting Parking space lighting LED searchlight LED fishing lamp



### **Features**

Universal AC input / Full range (up to 305VAC)
Built-in active PFC function
No load power consumption <0.5W at remote OFF
High efficiency up to 96%
-40°C ~ +70°C wide operating range
Short circuit, over current, over voltage & over temperature protections
Fanless design, cooling by free air convection
IP65 design for indoor or outdoor installations
Withstand 5G vibration test
LED indicator for power on
Suitable for dry, damp or wet location
5 years warranty on approved installs



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
HLG-600H-12A	12V	40A	480W	150mV	92%
HLG-600H-15A	15V	36A	540W	150mV	93.5%
HLG-600H-20A	20V	28A	560W	150mV	94.5%
HLG-600H-24A	24V	25A	600W	150mV	95%
HLG-600H-30A	30V	20A	600W	200mV	95%
HLG-600H-36A	36V	16.7A	601.2W	250mV	95.5%
HLG-600H-42A	42V	14.3A	600.6W	250mV	96%
HLG-600H-48A	48V	12.5A	600W	250mV	96%
HLG-600H-54A	54V	11.2A	604.8W	350mV	96%

### **Description**

HLG-600H-A series is a high performance dustproof and waterproof, to IP65 ingress protection ratings, AC-to-DC LED power supply. Capable of power up to 600Watts and delivering efficiency up to 96% the range tops the LED power supply field. Other features include the wide working temperature range between -40 and +70, fan-less design, adjustable output voltage and current, surge susceptibility up to 4KV (EN61000-4-5), low no-load power consumption (<0.5Watt) at remote OFF and workable at 277VAC input. These attributes, along with the fully-potted silicone and aluminium case, all make HLG-600H-A fit for indoor/outdoor LED lighting applications requiring remarkable reliability

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**Avanti Power Repairs Ltd** 

LED street lighting LED High bay lighting Parking space lighting LED searchlight LED fishing lamp



### **Features**

Universal AC input / Full range (up to 305VAC)
Built-in active PFC function
No load power consumption <0.5W at remote OF
High efficiency up to 96%
-40°C ~ +70°C wide operating range

Short circuit, over current, over voltage & over temperature protections

Fanless design, cooling by free air convection IP67 design for indoor or outdoor installations

Withstand 5G vibration test

Three in one dimming function - 0~10Vdc or PWM signal or resistive

Suitable for dry, damp or wet location 5 years warranty on approved installs



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
HLG-600H-12B	12V	40A	480W	150mV	92%
HLG-600H-15B	15V	36A	540W	150mV	93.5%
HLG-600H-20B	20V	28A	560W	150mV	94.5%
HLG-600H-24B	24V	25A	600W	150mV	95%
HLG-600H-30B	30V	20A	600W	200mV	95%
HLG-600H-36B	36V	16.7A	601.2W	250mV	95.5%
HLG-600H-42B	42V	14.3A	600.6W	250mV	96%
HLG-600H-48B	48V	12.5A	600W	250mV	96%
HLG-600H-54B	54V	11.2A	604.8W	350mV	96%

### **Description**

HLG-600H-B series is a high performance dustproof and waterproof AC-to-DC LED power supply with power up to 600Watts and three in one dimming function. The fully-potted silicone and aluminium case facilitate heat dissipation allowing the fanless design and helping to deliver efficiency up to 96%, topping that of others in the LED power supply field. Other features include wide working temperature range between -40 and +70, adjustable output voltage and current, EN61000-4-5 compliant surge susceptibility up to 4KV, <0.5Watt low no-load power consumption at remote OFF and the ability to work at 277VAC input. These attributes all make HLG-600H-B fit for indoor/outdoor LED lighting applications requiring remarkable reliability and dimming capabilities.

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Avanti Power Repairs Ltd

Medical equipment Chemical detection equipment Biological detection equipment Analysis facilities



### **Features**

Universal AC input 85-264VAC No load power consumption < 0.8W Low leakage current <300µA @ 264VAC Built-in active PFC function, PF>0.94 High efficiency up to 89% Built-in constant current limiting circuit Built-in remote sense function DC OK signal

Built-in remote ON/OFF control & 5V/0.3A standby output Parallel function for MSP-600-24/36/48 Withstand 300VAC surge for 5 seconds







Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
MSP-600-3-3	3.3V	120A	396W	100mV	78.5%
MSP-600-5	5V	120A	600W	100mV	82%
MSP-600-7-5	7.5V	80A	600W	100mV	86%
MSP-600-12	12V	53A	636W	120mV	88%
MSP-600-15	15V	43A	645W	150mV	88%
MSP-600-24	24V	27A	648W	150mV	88%
MSP-600-36	36V	17.5A	630W	200mV	89%
MSP-600-48	48V	13A	624W	240mV	89%

# **Description**

MSP-600 Series is a range of 600W medical safety regulation compliant (MOOP level) enclosed power supplies with low leakage current. Featuring 85-264VAC input the range is available in output voltages of 3.3V to 48V and possesses up to 89% high efficiency. Standard functions of MSP-600 Series include protections for short circuit, overload, over voltage, and over temperature, 300VAC input surge immunity for 5 seconds, remote ON/OFF control, remote sense, fan ON/OFF control, and DC OK signal output. To meet with requirements of higher wattage applications the 24V, 36V & 48V models are equipped with a parallel function where up to 4 units can be operated in parallel.

# Test & measurement equipment General electronic machinery



### **Features**

Universal AC input / Full range Built in active PFC function

Protections: Short circuit/Over load/Over voltage/Over

temperature

Forced air cooling by built-in DC fan

With DC OK Signal output

Current sharing up to 2400W(3+1)

Built-in remote ON-OFF control

Built-in remote sense function

Fixed switching frequency at PFC:88KHz PWM:100KHz

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Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
PSP-600-5	5V	80A	400W	180mV	79%
PSP-600-12	12V	50A	600W	240mV	84%
PSP-600-13-5	14V	44.5A	600W	240mV	85%
PSP-600-15	15V	40A	600W	240mV	85%
PSP-600-24	24V	25A	600W	240mV	86%
PSP-600-27	27V	22.2A	600W	240mV	86%
PSP-600-48	48V	12.5A	600W	300mV	87%

# **Description**

The PSP-600 Series is a 600W parallel output enclosed power supply with PFC function. Protections including short circuit, over load, over voltage and over temperature. Forced air cooling by built-in DC fan allows an operating temperature of -20~+60°C. With a fixed switching frequency at PFC: 88KHz, PWM: 100KHz enabling designs to avoid interference with system clock frequencies.



Universal input voltage

Uses ZVS technology to reduce power dissipation and improve efficiency

Large range of output configurations available

Remote control on each module

Remote sense on MS-75, 150 & 300 modules

Built in active PFC, PF>0.95

Built in parallel function on MS-300

Fan alarm function

Forced air cooling

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### Features

For installation in MP450, MP650 & MP1K0 Modules

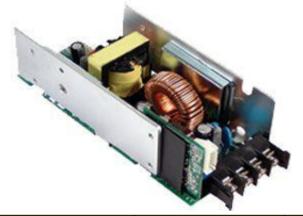
Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)
MS-75L	3.3V	15A	75W	80mV
MS-75M	5V	15A	75W	80mV
MS-75N	12V	0.63A	75W	150mV
MS-75O	15V	5A	75W	150mV
MS-75P	24V	3.2A	75W	150mV
MS-75Q	48V	1.6A	75W	250mV



For installation in MP450, MP650 & MP1K0 Modules

Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)
MS-150A	2V	25A	150W	50mV
MS-150B	3.3V	25A	150W	80mV
MS-150C	5V	25A	150W	80mV
MS-150D	7.5V	18A	150W	100mV
MS-150E	12V	13A	150W	150mV
MS-150F	15V	10A	150W	150mV
MS-150G	18V	8.5A	150W	150mV
MS-150H	24V	6.5A	150W	150mV
MS-150I	27V	5.8A	150W	150mV
MS-150J	33V	4.7A	150W	250mV
MS-150K	48V	3.2A	150W	250mV

# MS-300 Series - 300W Single Output parallel able 2 Slot Modular Power Supplies



# **Features**

For installation in MP450, MP650 & MP1K0 Modules

Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)
MS-3002A	2V	50A	300W	80mV
MS-3002B	3.3V	50A	300W	80mV
MS-3002C	5V	50A	300W	80mV
MS-3002D	7.5V	40A	300W	100mV
MS-3002E	12V	25A	300W	150mV
MS-3002F	15V	20A	300W	150mV
MS-3002G	18V	16.7A	300W	150mV
MS-3002H	24V	12.5A	300W	150mV
MS-3002I	27V	11.2A	300W	200mV
MS-3002J	33V	9.1A	300W	250mV
MS-3002K	48V	6.3A	300W	300mV

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For installation in MP450, MP650 & MP1K0 Modules

Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)
MD-100R	5V	10A	90W	100mV
	5V	8A	90W	100mV
MD-100S	5V	10A	100.4W	100mV
	12V	5.8A	100.4W	150mV
MD-100T	5V	15A	101W	100mV
	10V	4.7A	101W	150mV
MD-100U	24V	3A	100W	200mV
	5V	10A	100W	100mV
MD-100V	24V	3A	100.8W	240mV
	12V	4.7A	100.8W	120mV
MD-100W	12V	5A	100.8W	120mV
	12V	5.8A	100.8W	120mV
MD-100X	15V	4.7A	100.5W	150mV
	15V	4.7A	100.5W	150mV

# **Description**

Switching power supplies with modular design that consists of 2 stages; Front end PFC and output modules. Using zero voltage switching technology to realize the power factor correction, the line input is rectified into high DC voltage 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 to 53V. There are currently 75W, 150W, 300W single output modules and 100W dual output modules to fulfil all kinds of applications up to 14 isolated outputs. There are millions of combinations available for the modular series. You can configure the DC outputs needed to get the fastest solution for your power requirements with safety and EMC certificates. No more NRE/safety application charges and long periods of waiting for certificates to come through! This is a revolutionary standard power solution that fulfils your custom made request!

# RSP-750 Series - 750W Single Output 1U low profile Enclosed Power Supply

# **Applications**

General industrial control system IC testing equipment Instrumentation Telecom Data storage Laser-carving machine Charging system



### Features

Universal AC input/Full range AC input active surge current limiting High efficiency up to 92% Built-in 12V/0.1A auxiliary power

Built-in active PFC function, PF>0.97

Protections: Short circuit/Overload/Over voltage/Over

temperature/Fan alarm Output voltage can be trimmed between  $40 \sim 110\%$  of the

rated output voltage
Output OLP can be trimmed between 40~110% of the rated output current

Forced air cooling by built-in DC fan High power density 9.5W/inch³ 1U low profile 41mm DC OK signal

Built-in remote ON-OFF control Built-in remote sense function



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
RSP-750-5	5V	100A	500W	150mV	82%
RSP-750-12	12V	62.5A	750W	150mV	87%
RSP-750-15	15V	50A	750W	150mV	89%
RSP-750-24	24V	31.3A	751.2W	150mV	91%
RSP-750-27	27V	27.8A	750.6W	150mV	91%
RSP-750-48	48V	15.7A	753.6W	150mV	92%

### **Description**

The RSP-750 series is a 1U low profile enclosed type power supply, featuring 9.44W/inch³ of high power density. Suitable for industrial equipments with limitations on space due to its high operating temperature of -30~+50°C with cooling by the built-in DC fan and its small size. Standard functions include remote sense, remote ON/OFF control, 12V/0.1A auxiliary output and DC OK alarm signal output (TTL signal).

# SP-750 Series - 750W AC-DC Active PFC Single Output Power Supply

# **Applications**

Industrial automation Moving sign Electronic equipment Instrumentation



### **Features**

Universal AC input/Full range AC input active surge current limiting Built-in active PFC function, PF>0.95

Protections: Short circuit, overload, over voltage, over temperature

Forced air cooling by built-in DC ball bearing fan High power density 5.48/inch Built-in constant current limiting circuit With power good and fail signal output

Built-in remote ON-OFF control

Built-in remote sense function



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
SP-750-5	5V	120A	600W	120mV	81%
SP-750-12	12V	62.5A	750W	120mV	86%
SP-750-15	15V	50A	750W	120mV	87%
SP-750-24	24V	31.3A	751.2W	120mV	89%
SP-750-27	27V	28A	751W	120mV	89%
SP-750-48	48V	16A	754W	120mV	90%

# **Description**

The SP-750 series is a 750W AC-DC single output enclosed power supply with active PFC function. Protections including short circuit, overload, over voltage and over temperature. Forced air cooling by built-in Dc ball bearing fan.



Universal AC input with active power factor correction, PF>0.95

High reliability and high efficiency up to 90%

Constant current design suits for inductive load and capacitive

Inrush current limit soft start function

Over voltage, Over Load and Short Circuit, Over

**Temperature Protection** 

Output voltage ±10% adjustment

Output voltage remote sense & remote control ON/OFF

Power good signal output

Current sharing function, 2+1 up to 2250W

Built-in 12V/0.1A auxiliary output

UL, cUL, TUv, CB, CE approved

CB ( € .₹1/...

Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
SPS-750P-05	5V	120A	600W	120mV	80%
SPS-750P-12	12V	62.5A	750W	120mV	88%
SPS-750P-15	15V	50A	750W	120mV	88%
SPS-750P-24	24V	31.3A	751W	200mV	88%
SPS-750P-30	30V	25A	750W	200mV	89%
SPS-750P-36	36V	21A	756W	220mV	89%
SPS-750P-48	48V	16A	758W	240mV	90%



Universal input voltage

Uses ZVS technology to reduce power dissipation and improve efficiency

Large range of output configurations available

Remote control on each module

Remote sense on MS-75, 150 & 300 modules

Built in active PFC, PF>0.95

Built in parallel function on MS-300

Fan alarm function

Forced air cooling

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# MS-75 Series - 75W Single Output 1 Slot Modular Power Supplies



### **Features**

For installation in MP450, MP650 & MP1K0 Modules

Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)
MS-75L	3.3V	15A	75W	80mV
MS-75M	5V	15A	75W	80mV
MS-75N	12V	0.63A	75W	150mV
MS-750	15V	5A	75W	150mV
MS-75P	24V	3.2A	75W	150mV
MS-75Q	48V	1.6A	75W	250mV



For installation in MP450, MP650 & MP1K0 Modules

Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)
MS-150A	2V	25A	150W	50mV
MS-150B	3.3V	25A	150W	80mV
MS-150C	5V	25A	150W	80mV
MS-150D	7.5V	18A	150W	100mV
MS-150E	12V	13A	150W	150mV
MS-150F	15V	10A	150W	150mV
MS-150G	18V	8.5A	150W	150mV
MS-150H	24V	6.5A	150W	150mV
MS-150I	27V	5.8A	150W	150mV
MS-150J	33V	4.7A	150W	250mV
MS-150K	48V	3.2A	150W	250mV

# MS-300 Series - 300W Single Output parallel able 2 Slot Modular Power Supplies



# **Features**

For installation in MP450, MP650 & MP1K0 Modules

Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)
MS-3002A	2V	50A	300W	80mV
MS-3002B	3.3V	50A	300W	80mV
MS-3002C	5V	50A	300W	80mV
MS-3002D	7.5V	40A	300W	100mV
MS-3002E	12V	25A	300W	150mV
MS-3002F	15V	20A	300W	150mV
MS-3002G	18V	16.7A	300W	150mV
MS-3002H	24V	12.5A	300W	150mV
MS-3002I	27V	11.2A	300W	200mV
MS-3002J	33V	9.1A	300W	250mV
MS-3002K	48V	6.3A	300W	300mV

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For installation in MP450, MP650 & MP1K0 Modules

Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)
MD-100R	5V	10A	90W	100mV
	5V	8A	90W	100mV
MD-100S	5V	10A	100.4W	100mV
	12V	5.8A	100.4W	150mV
MD-100T	5V	15A	101W	100mV
	10V	4.7A	101W	150mV
MD-100U	24V	3A	100W	200mV
	5V	10A	100W	100mV
MD-100V	24V	3A	100.8W	240mV
	12V	4.7A	100.8W	120mV
MD-100W	12V	5A	100.8W	120mV
	12V	5.8A	100.8W	120mV
MD-100X	15V	4.7A	100.5W	150mV
	15V	4.7A	100.5W	150m

# **Description**

Switching power supplies with modular design that consists of 2 stages; Front end PFC and output modules. Using zero voltage switching technology to realize the power factor correction, the line input is rectified into high DC voltage 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 to 53V. There are currently 75W, 150W, 300W single output modules and 100W dual output modules to fulfil all kinds of applications up to 14 isolated outputs. There are millions of combinations available for the modular series. You can configure the DC outputs needed to get the fastest solution for your power requirements with safety and EMC certificates. No more NRE/safety application charges and long periods of waiting for certificates to come through! This is a revolutionary standard power solution that fulfils your custom made request!

# RSP-1000 Series - 1000W PFC Parallel Function Enclosed Power Supply

# **Applications**

Front end power systems
Factory Automation
Instrumentation
Moving Signs
Telecommunications
Data Communications
Charging Lockers



### **Features**

Universal AC input
1U low profile
High power density 10.67/in3
Built in Active PFC circuit
Short circuit, over load, over voltage & over temperature protections
Built in ON/OFF control and remote sense
Trimable output voltages
DC OK signal output
Built in active current sharing
High efficiency up to 90%
Built in 5V/0.5A auxiliary output



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
RSP-1000-12	12V	60A	720W	150mV	84%
RSP-1000-15	15V	50A	750W	150mV	86%
RSP-1000-24	24V	40A	960W	150mV	89%
RSP-1000-27	27V	37A	999W	150mV	89%
RSP-1000-48	48V	21A	1008W	150mV	90%

### **Description**

With power factor correction and parallel function this series targets 1U low profile and high wattage applications. Featuring 10.67W/in3 extremely high power density RSP-1000 series can provide rated output wattage even at 100VAC input because of its high efficiency design. With built in trimming function the output voltage can be adjusted between 40% and 110% rated value by adding an external voltage source or resistors. Other standard features include remote sense, remote ON/OFF control, 5V/0.5A auxiliary output and DC OK signal. Using constant current limiting as the overload protection makes it a suitable unit for capacitive/inductive loads and if you need more power the built in active current sharing function allows up to 3 units to be connected in parallel.

# SPS-1000P Series - 1000W Single Output AC/DC PFC Enclosed Power Supply

# **Applications**

Automatic control systems General electronic systems



### **Features**

Universal AC input with active power factor correction, P.F.>0.95

Inrush current limit soft start function

Over voltage, over load, short circuit protection

Over temperature protection

Output voltage ±10% adjustment

Output voltage remote sense & remote control ON/OFF

Power good signal output

Current sharing function, 3+1 up to 4KW

Forced air cooling by built in DC fan

Built in 5V/0.5A auxiliary output

1U low profile

UL, cUL, TUV, CB, CE standard



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
SPS-1000P-12	12V	63A	756W	150mV	83%
SPS-1000P-24	24V	40A	960W	150mV	87%
SPS-1000P-36	36V	28A	1000W	240mV	87%
SPS-1000P-48	48V	21A	1008W	240mV	88%

# **Description**

SPS-1000P Series are 1000W single output power supplies with high efficiency and wide operating temperatures from -20C to +70C. Standard features include remote control, remote sense, power good signal and over voltage, over load, short circuit and over temperature protections. SPS-1000P also has current sharing function for parallel use.

# SPV-1500 Series - 1500W Single Output Enclosed Power Supply

# **Applications**

LCD panel burn-in systems
IC testing equipment
Telecommunications
Data communications
Laser-carving machines
Factory automation
Battery charging



### **Features**

Universal AC input/Full range
ZVS new technology
AC input active surge current limiting
Built-in active PFC function,PF>0.95
Short circuit, over load, over voltage, over temperature protections
Forced air cooling by built-in DC ball bearing fan

Forced air cooling by built-in DC ball bearing fan High power density 8.3W/inch Current sharing up to 4500W(2+1)

Alarm signal output

Built-in 12V/0.1A auxiliary output for remote control

Built-in remote ON-OFF control

Built-in remote sense function

UL, cUL, TUV, CB, CE Approvals



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
SPV-1500-12	12V	125A	1500W	150mV	86.5%
SPV-1500-24	24V	63A	1512W	150mV	90%
SPV-1500-48	48V	32A	1536W	200mV	90%

### **Description**

1500W single output ac/dc enclosed power supplies with parallel function and programmable output voltage function. SPV-1500 Series are a high reliability range of enclosed power supplies with high efficiency up to 90% and high power density 8.3W/in3. Built-in parallel function (2+1) enabling total wattages up to 4500W, remote ON/OFF control and remote sense function, Alarm signal output & Built-in 12V/0.1A auxiliary output are other notable features of SPV-1500.

# RSP-1500 Series - 1500W Parallel Output PFC Function Power Supply

# **Applications**

Front end power systems
Factory automation
Instrumentation
Moving signs
Telecommunications
Data communications



### **Features**

Universal AC input
ZVS new technology
AC input active surge current limiting
High efficiency up to 91%
Built in active PFC function,PF>0.95
Forced air cooling by built-in DC fan
Output voltage can be trimmed between 70~100% of the rated output voltage
High power density 8.3W/inch³
Current sharing up to 6000W(3+1)
Alarm signal output
Built-in 12V/0.1A auxiliary output for remote control
Built-in remote ON-OFF control
Built-in remote sense function



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
RSP-1500-5	5V	240A	1200W	150mV	80%
RSP-1500-12	12V	125A	1500W	150mV	87%
RSP-1500-15	15V	100A	1500W	150mV	87%
RSP-1500-24	24V	63A	1512W	150mV	90%
RSP-1500-27	27V	56A	1512W	150mV	90%
RSP-1500-48	48V	32A	1536W	200mV	91%

# **Description**

With power factor correction and parallel function this series targets 1U low profile and high wattage applications. Featuring 8.3W/in3 extremely high power density RSP-1500 series can provide rated output wattage even at 100VAC input because of its high efficiency design. With built in trimming function the output voltage can be adjusted between 70% and 100% rated value by adding an external voltage source or resistors. Other standard features include remote sense, remote ON/OFF control, 12V/0.1A auxiliary output and DC OK signal. Using constant current limiting as the overload protection makes it a suitable unit for capacitive/inductive loads and if you need more power the built in active current sharing function allows up to 3 units to be connected in parallel.



Universal AC input/Full range Ac input active surge current limiting 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

Output voltage can be trimmed between 20~110% of the rated output voltage

Forced air cooling by built-in DC fan

Forced air cooling by built-in DC fan High power density 21.4W/inch³
1U low profile 41mm
Active current sharing
DC OK signal

Built-in remote ON-OFF control Built-in remote sense function



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
RSP-2000-12	12V	100A	1200W	150mV	86%
RSP-2000-24	24V	80A	1920W	200mV	80.5%
RSP-2000-48	48V	42A	2016W	300mV	92%

# **Description**

Offering up to 2000W of regulated DC output voltages from 12~48V and parallel capability up to 6KW; the new range of universal input high power RSP-2000. With a high power density of 21.4W/inch³ these small footprint modules lead the way in high power switching technology.

# RSP-2400 Series - 2400W AC/DC Enclosed Parallel Power Supply

# **Applications**

LCD panel burn-in systems
IC testing equipment
Instrumentation
Telecommunications
Data communications
Laser-carving machines
Factory automation
Battery charging



### **Features**

AC input 180 ~ 264VAC

AC input active surge current limiting

High efficiency up to 91%

Built-in active PFC function, PF>0.95

Short circuit, over load, over voltage, over temperature, Fan Alarm protections

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

Current sharing up to 2 units

Alarm signal output (relay contact and TTL signal)

Built-in 12V/0.1A auxiliary output for remote control

Built-in remote ON-OFF control

Built-in remote sense function



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
RSP-2400-12	12V	167A	2000.4W	150mV	87%
RSP-2400-24	24V	100A	2400W	150mV	90%
RSP-2400-48	48V	50A	2400W	200mV	92%

### **Description**

RSP-2400 is a 2400W enclosed switching power supply with power factor correction (PFC) function. Featuring 12.5W/ in3 of extreme high power density, full output power up to 50°C and output voltages that can be adjusted from 20% to 110% rated voltage by adding 1~5.5V of external control voltage, which provide users great flexibility for their system design. Other standard features include remote sense, remote ON/OFF control, 12V/0.1A auxiliary output, and alarm signal output (both relay and TTL signal), RSP-2400 series use constant current limiting plus delay shutdown€• as the overload protection which enable the unit to power capacitive/inductive load and still provide full protection for customers system.

# RSP-3000 Series - 3000W AC/DC Enclosed Parallel Power Supply

# **Applications**

Front-end power systems
Factory automation
Instrumentation
Moving signs
Telecom/datacom's
Laser-carving machines
IC testing equipment
LCD panel burn-in systems
Battery charging



### **Features**

180~264VAC input

AC input active surge current limiting

High efficiency up to 90%

Built-in active PFC function, PF>0.95

Short circuit, over load, over voltage, over temperature, Fan Alarm protections

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

Current sharing up to 3 units

Alarm signal output

Built-in 12V/0.1A auxiliary output for remote control

Built-in remote ON-OFF control

Built-in remote sense function



Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
RSP-3000-12	12V	200A	2400W	150mV	86%
RSP-3000-24	24V	125A	3000W	150mV	90%
RSP-3000-48	48V	62.5A	3000W	200mV	90.5%

### **Description**

RSP-3000 is a 3000W enclosed switching power supply with power factor correction (PFC) function. Featuring 15.6W/ in3 of extreme high power density, full output power up to 50°C and output voltages that can be adjusted from 20% to 110% rated voltage by adding 1~5.5V of external control voltage, which provide users great flexibility for their system design. Other standard features include remote sense, remote ON/OFF control, 12V/0.1A auxiliary output, and alarm signal output (both relay and TTL signal), RSP-3000 series use constant current limiting plus delay shutdown as the overload protection which enable the unit to power capacitive/inductive load and still provide full protection for customers system.

# RST-5000 Series - 5000W Enclosed Power Supplies with PFC and Parallel Function

**Applications** 

Fuel energy Automation

Lasers

**Telecommunications** 

Battery charging



### **Features**

3 Phase 3 wire △ AC 196 ~ 305V or 3 Phase 4 wire Y AC 340 ~ 530V wide range input

High efficiency up to 91%

Built-in active PFC function

Short circuit, Overload, Over voltage, Over temperature, Fan fail protections

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

Output current can be adjusted between 20~100% of the rated output current

Current sharing up to 3 units

Alarm signal output (relay contact and open collector signal):

AC fail, DC OK, fan fail, OTP

Built-in 12V/0.1A auxiliary output for remote control

Built-in remote ON-OFF control

Built-in remote sense function

5 years warranty









Model No	Voltage (Max)	Current (Amps)	Power (Watts)	R&N (mV)	Efficiency (%)
RST-5000-24	24V	200A	4800W	150mV	89%
RST-5000-48	48V	105A	5040W	200mV	91%

### **Description**

RST-5000 Series is a 5000W enclosed power supply with PFC and parallel function. The units can use either 196~305V or 340~550VAC three phase input and up to 3 units can be connected in parallel for current sharing. Other features include adjustable output voltage and current, forced air cooling, with fan speed control function and alarm signal outputs for AC fail, DC OK, fan fail and OTP.

# RST-10000 Series - 10000W Enclosed Power Supplies with Parallel Function and PFC

### **Applications**

Industrial control equipment Automation equipment Laser engravers Telecommunication systems



### **Features**

3 Phase 3 wire  $\triangle$  AC 196 ~ 305V or 3 Phase 4 wire Y AC 340 ~ 530V wide range input

High efficiency up to 91%

Built-in active PFC function

Short circuit, Over load, Over voltage, Over temperature, Fan fail protections

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 by 1-6VDC external control signal Output current can be adjusted between 20~100% of the rated output current by 1-5VDC external control signal Current sharing up to 2 units

Alarm signal output (relay contact and open collector signal):

AC fail, DC OK, fan fail, OTP

Built-in 12V/0.1A auxiliary output for remote control

Built-in remote ON-OFF control

Built-in remote sense function

5 years warranty



Model No	Voltage (Max)	<b>Current (Amps)</b>	Power (Watts)	R&N (mV)	Efficiency (%)
RST-10000-24	24V	400A	9600W	150mV	89%
RST-10000-36	36V	276A	9936W	200mV	90%
RST-10000-48	48V	210A	10080W	200mV	91%

### **Description**

RST-10000 Series are 10000W single output AC/DC power supplies with wide range 3 phase AC input and output voltage options of 24VDC, 36VDC and 24VDC. RST-10000 have wide range, external control signal, voltage and current adjustment functions and two over load protection mechanisms in the form of continuous constant current limiting mode and constant current limiting with delay shutdown after 5 seconds mode; increasing the flexibility in its within high power system design.

RST-10000 Series have built-in active PFC function and working efficiency up to 91%; the built-in fan enables the series to supply full load output at ambient temperatures fewer than 50°C. The Parallel function is built in to allow 2 units to be connected and supply an even higher power output. Other functions include remote sense function, 12V/0.1A auxiliary power, alarm signal output for AC fail, DC OK, fain fail and over temperature protections.

# **Avanti Power Repairs**

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