



# PS-600W-48V

Enclosed AC-to-DC Power Supply

UNIT CODE	DESCRIPTION
PS-600W-48V	600 Watt, 48V DC, Single Output Enclosed Switching AC-to-DC Power Supply

SPECIFICATIONS		
Input	Output	Agency approvals
Universal AC input 90-132/180-264VAC @47-63Hz	+48VDC@0-12.5A	UL/CUL

## Features at a Glance:

### Low cost, high reliability

- AC input range selectable by switch
- Protections: Short circuit, Over load, Over voltage, Over temp.
- Built-in remote sense function
- High power density 4.9 W/in<sup>3</sup>
- Forced air cooling by built-in DC fan
- 100% full load burn-in test
- 2 years warranty
- AC input voltage range: 90~132VAC/  
180~264VAC selectable by switch
- DC adjustment range: 10% rated output voltage
- Working temps: -20~+40°C@100%,  
60°C@60% load
- Safety standards: UL60950-1 approved
- EMC standards: Refer to EN55022 class B
- Efficiency: **88%**
- MTBF hours: **197,000 hrs min.**  
MIL-HDBK-217F (25 )
- Weight: 4.6 lbs. 2.1 kg.
- Dimensions: 9.7 x 5 x 2.5 inches  
247 x 127 x 63.5 mm



This workhorse is sure to become one of our most popular in the mid to high power range of AC-to-DC enclosed power supplies. A Full 600 watts of power is available over the ambient temperature range of -20°C to 40°C. With derating the range extends to +60°C.

PS600 series supplies are particularly well suited for providing power to two of our 200-watt enclosure airconditioners simultaneously (in the same or different cabinets) and may be used in a wide variety of other configurations and applications.

Pricing:	1+ \$ 248.00
	10+ 232.50
	25+ 199.00
ELECTRACOOL.COM	



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■ Features :

- High power density 4.9w/in<sup>3</sup>
- AC input active surge current limiting
- AC input range selected by switch
- Protections: Short circuit/Over load/Over voltage/Over temperature
- Forced air cooling by built-in DC fan
- Built-in remote sense function
- UL approved
- Low cost
- 2 years warranty

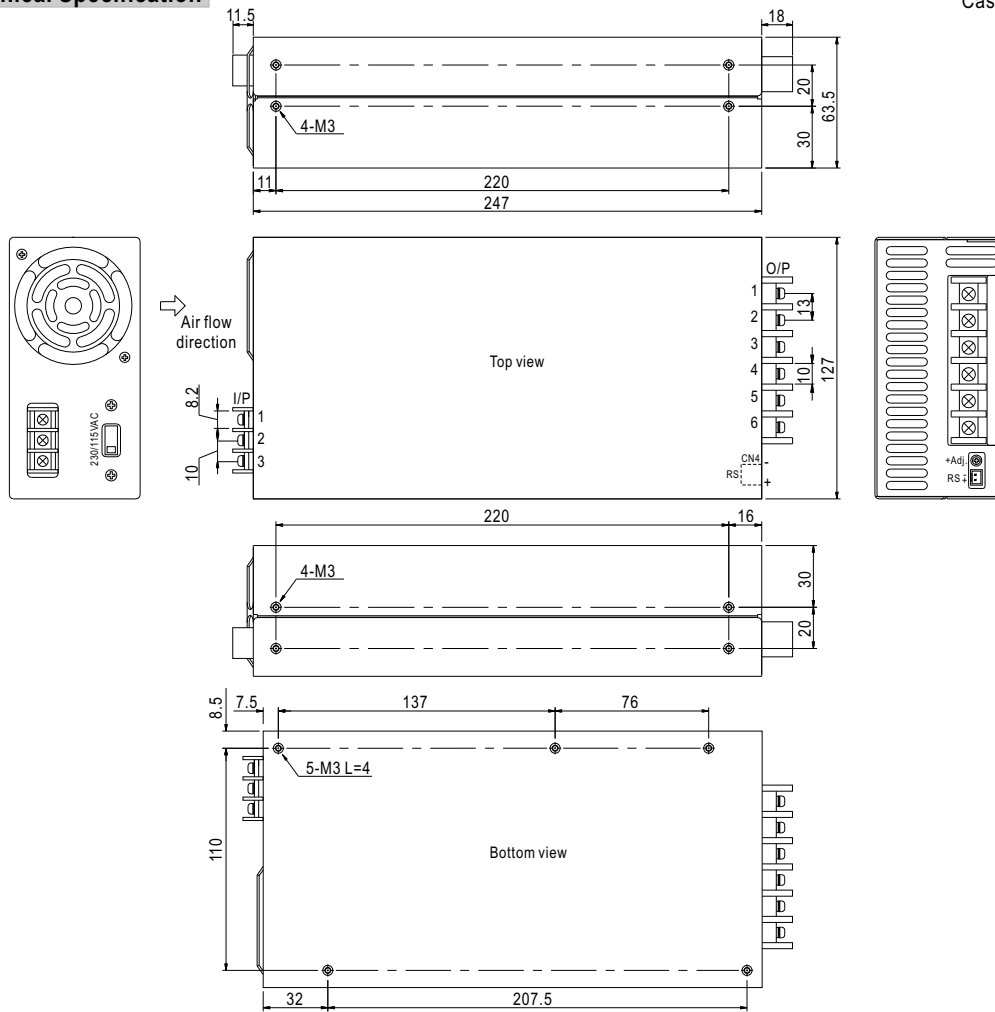


SPECIFICATION

MODEL	SE-600-5	SE-600-12	SE-600-15	SE-600-24	SE-600-27	SE-600-48	
OUTPUT	DC VOLTAGE	5V	12V	15V	24V	27V	48V
	RATED CURRENT	100A	50A	40A	25A	22.2A	12.5A
	CURRENT RANGE	0 ~ 100A	0 ~ 50A	0 ~ 40A	0 ~ 25A	0 ~ 22.2A	0 ~ 12.5A
	RATED POWER	500W	600W	600W	600W	599.4W	600W
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p
	VOLTAGE ADJ. RANGE	4.75 ~ 5.5V	10 ~ 13.5V	13.5 ~ 16.5V	22 ~ 26.4V	24 ~ 30V	43 ~ 56V
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
LOAD REGULATION	±2.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
SETUP, RISE, HOLD TIME	1000ms, 50ms, 16ms/230VAC      1000ms, 50ms, 14ms/115VAC at full load						
INPUT	VOLTAGE RANGE	90 ~ 132VAC / 180 ~ 264VAC selected by switch      254 ~ 370VDC					
	FREQUENCY RANGE	47~63Hz					
	EFFICIENCY (Typ.)	78%	83%	84%	87%	87%	88%
	AC CURRENT	12A/115VAC	7.5A/230VAC				
	INRUSH CURRENT (max.)	30A/115VAC	50A/230VAC				
LEAKAGE CURRENT	<2.0mA / 240VAC						
PROTECTION	OVER LOAD	105 ~ 125% rated output power Protection type : Shut down o/p voltage, re-power on to recover					
	OVER VOLTAGE	5.75 ~ 6.3V	13.8 ~ 16.2V	18 ~ 21V	27.6 ~ 32.4V	31 ~ 36.5V	57.6 ~ 67.2V
	OVER TEMPERATURE	85°C ±5°C (TSW1) Detect on heatsink of power transistor Protection type : Shut down o/p voltage, recovers automatically after temperature goes down					
ENVIRONMENT	WORKING TEMP.	-20 ~ +60°C (Refer to output load derating curve)					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.05%/°C (0 ~ 50°C)					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes					
SAFETY & EMC	SAFETY STANDARDS	UL60950 Approved					
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC    I/P-FG:1.5KVAC    O/P-FG:0.5KVAC					
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC					
OTHERS	MTBF	197K hrs min.    MIL-HDBK-217F (25°C)					
	DIMENSION	247*127*63.5mm (L*W*H)					
	PACKING	2.1Kg; 6pcs/13.4Kg/1.2CUFT					
NOTE	<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p>						

**Mechanical Specification**

Case No. 926 Unit:mm



AC input terminal :

Pin No.	Assignment
1	AC/L
2	AC/N
3	FG

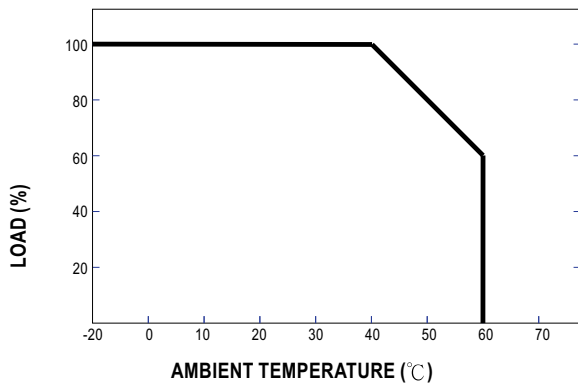
DC Output terminal :

Pin No.	Assignment
1~3	+V
4~6	-V

RS Connector (CN4) : JST B-XH or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	+S	JST XHP or equivalent	JST SXH-001T or equivalent
2	-S		

**Derating Curve**



**Static Characteristics**

