


**SPECIFICATION**

Dimension: 170 × 120 × 93mm

**Features:**

- Universal AC input / Full range
- Small volume, low weight, high efficiency
- Protections : short circuit/over load/over voltage/over temp
- Forced air cooling by built-in DC fan
- Built-in cooling fan ON-OFF control
- PFC function, PF > 0.95
- LED indicator for power on
- 100% full load burn-in test
- 1 Year warranty



	Model	SP-500-12	SP-500-15	SP-500-24	SP-500-27	SP-500-36	SP-500-48
Output	DC voltage	12V	15V	24V	27V	36V	48V
	Voltage tolerance	± 1%	± 1%	± 1%	± 1%	± 1%	± 1%
	Rated current	40A	32A	20A	18A	13.5A	10A
	Current range	0 ~ 40A	0 ~ 32A	0 ~ 20A	0 ~ 18A	0 ~ 13.5A	0 ~ 10A
	Rated power	480W	480W	480W	480W	486W	480W
	Ripple&noise	240mVp-p	240mVp-p	240mVp-p	240mVp-p	240mVp-p	240mVp-p
	DC voltage ADJ. range	± 10%	± 10%	± 10%	± 10%	± 10%	± 10%
Input	Setup, rise, hold up time	1500ms,50ms,20ms/230VAC.					
	Voltage range	90 ~ 263VAC 47 ~ 63Hz, 125 ~ 370VDC					
	AC current	7A/115V 3.5A/230VAC					
	Efficiency	83%	83%	84%	84%	85%	86%
	Inrush current	Cold start 18A/115V 36A/230VAC					
Protection	leakage current	< 3.5mA/240VAC					
	PFC function	PF > 0.95					
	Overload	Rated output power 110% ~ 135% Start overload protection Protection type: hiccup mode, auto-recovery after fault condition is removed					
	Over voltage	15 ~ 17V	18 ~ 20V	28 ~ 30V	31 ~ 32V	43 ~ 45V	56 ~ 58V
Environment	Over temperature	Protection type: hiccup mode, auto-recovery after fault condition is removed Inner temperature ≥ 50°C start fan dissipation, ≤ 45°C fan stop working, ≥ 85°C start over temp protection.					
	Working temp, humidity	Protection mode: cutoff output, auto-recovery after temperature become normal -10°C ~ +60°C; 20% ~ 90%RH (Please refer to "derating curve" )					
	Storage temp, humidity	-20°C ~ +85°C; 10% ~ 95%RH Non-condensing					
Safety	Withstand vibration	10 ~ 500Hz, 2G 10min./1Cycle, Period for 60min, Each axes					
	Withstand voltage	I/P-O/P: 1.5KVAC I/P-FG: 1.5KVAC O/P-FG: 0.5KVAC					
Fit standard	Isolation resistance	I/P-O/P: I/P-FG, O/P-FG: 100M Ohms/500VDC					
	Safety standard	Fit UL1012					
Others	EMC Standard	Fit EN55022, CLASS A					
	Weight	1.8kg 170*120*93mm ( L*W*H )					
	Packing	1.8kg/8pcs/15.5kg					

Note: 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.

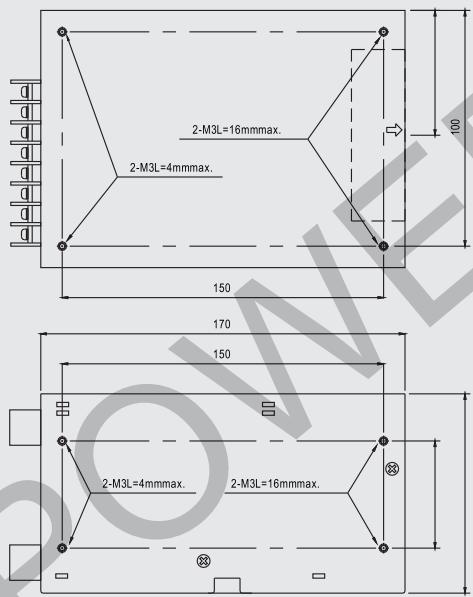
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation and load regulation.

Mechanical specification

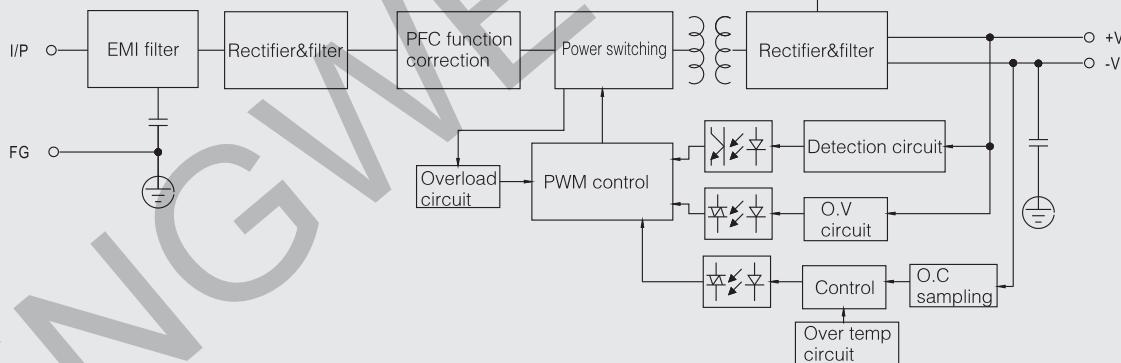
Unit:mm

Terminal Pin No.Assignment

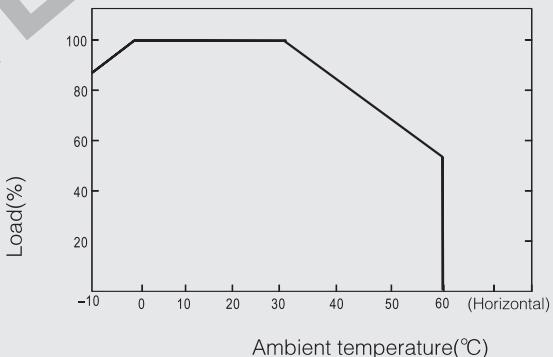
Pin No.	Assignment	Pin No.	Assignment
1	AC/L	8	+S
2	AC/N	9 ~ 11	DC OUTPUT +V
3	FG $\pm$	12 ~ 14	DC OUTPUT -V
4,5	NC	15	-S
6	R.C.G		
7	R.C		



Block diagram



Derating curve



Static characteristic

