

SPECIFICATION



Features:

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

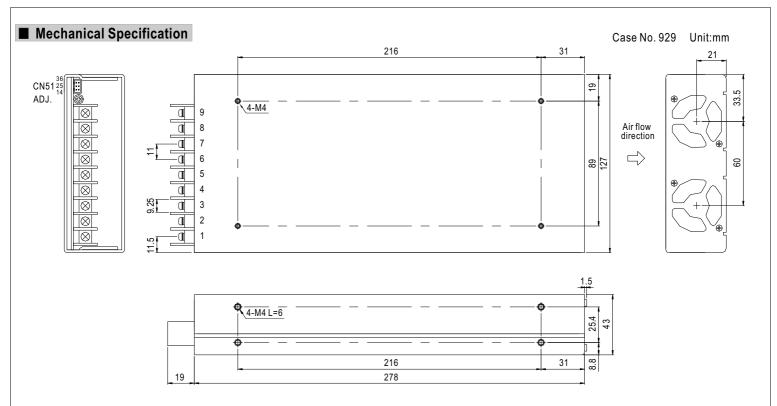


MODEL		SP-480-3.3	SP-480-5	SP-480-12	SP-480-15	SP-480-24	SP-480-48		
	DC VOLTAGE	3.3V	5V	12V	15V	24V	48V		
	RATED CURRENT	85A	85A	40A	32A	20A	10A		
	CURRENT RANGE	0 ~ 85A	0 ~ 85A	0 ~ 43A	0 ~ 35A	0 ~ 22A	0 ~ 11A		
	RATED POWER	280.5W	425W	480W	480W	480W	480W		
	PEAK LOAD(10min.) Note.5	280.5W	425W	516W	525W	528W	528W		
OUTPUT	RIPPLE & NOISE (max.) Note.2	80mVp-p	80mVp-p	120mVp-p	150mVp-p	150mVp-p	240mVp-p		
	VOLTAGE ADJ. RANGE	2.9 ~ 3.6V	4.5 ~ 5.5V	10.8 ~ 13.2V	13.5 ~ 18V	22 ~ 27.6V	41~ 56V		
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±1.5%	±1.5%	±1.0%	±1.0%		
	LINE REGULATION	±0.5%	±0.5%	±0.3%	±0.3%	±0.2%	±0.2%		
	LOAD REGULATION	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%		
	SETUP, RISE, HOLD TIME	1000ms, 80ms, 18ms/230VAC 2500ms, 80ms, 18ms/115VAC at full load							
	VOLTAGE RANGE Note.7	85 ~ 264VAC 120 ~ 370VDC							
	FREQUENCY RANGE	47~63Hz							
	POWER FACTOR	PF>0.95/230VAC PF>0.98/115VAC at full load							
INPUT	EFFICIENCY (Typ.)	73%	79%	85%	85%	87%	89%		
	AC CURRENT	6.5A/115VAC 3.5A/230VAC							
	INRUSH CURRENT (max.)	25A/115VAC 40A/230VAC							
	LEAKAGE CURRENT	<2mA / 240VAC							
	OVER LOAD	87 ~ 103A	87 ~ 103A	45.15 ~ 58.05A	36.75 ~ 47.25A	23.1 ~ 29.7A	11.55 ~ 14.85A		
		Protection type: Constant current limiting, recovers automatically after conditions is removed							
DOTECTION	OVER VOLTAGE	3.8 ~ 4.45V	5.75 ~ 6.75V	13.8 ~ 16.2V	18 ~ 21V	28.8 ~ 33.6V	57.6 ~ 67.2V		
ROTECTION		Protection type : Shut down o/p voltage, re-power on to recover							
	OVER TEMPERATURE Note.4	80°C (TSW1) Detect on heatsink of power transistor 90°C (TSW2) Detect on heatsink of power diode							
		Protection type : Shut down o/p voltage, recovers automatically after temperature goes down							
FUNCTION	REMOTE CONTROL	RC+/RC-: 0 ~ 0.8V=power on ; 4 ~ 10V=power off							
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	±0.03%/°C (0 ~ 50°C)							
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes							
SAFETY & EMC (Note 6)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 Approved							
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:Short							
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG:100M Ohms/500VDC							
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B							
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3							
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN61000-6-2 (EN50082-2) light industry level, criteria A							
OTHERS	MTBF	120.5K hrs min. MIL-HDBK-217F (25°C)							
	DIMENSION	278*127*43mm (L*W*H)							
		1.7Kg; 6pcs/11.3Kg/0.67CUFT							

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.
- TSW1: Detect on heatsink of power transistor. TSW2: Detect on heatsink of output diode.
- 5. 33% Duty cycle maximum within every 30 minute. Average output power should not exceed the rated power.
- 6. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.
- 7. Derating may be needed under low input voltages. Please check the derating curve for more details.





Terminal pin number assignment:

Pin No.	Assignment	Pin No.	Assignment	
1	AC/L	4~6	-V	
2	AC/N	7~9	+V	
3	FG			

Connector pin number assignment (CN51): JST B6B-PHDSS or equivalent

Pin No.	Assignment	Pin No.	Assignment	Mating Housing	Terminal
1	GND	4	N.C.	IOT DUDD 001/0	ICT CDUD AGAT DA C
2	RC-	5	RC+	JST PHDR-06VS or equivalent	JST SPHD-002T-P0.5 or equivalent
3	-S	6	+S	or oquivaloni	or oquivalent

