



SUNPOWER TECHNOLOGY CORP.
16F-1, No.150, Jian 1st Rd., Zhonghe Dist., New Taipei City 235, Taiwan (R.O.C.).
TEL: 886-2-8226-3100 FAX: 886-2-8226-3111
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SPS-120P-xx Series

120W, Single Output

Active P.F.C Function



178 x 99 x 35 mm

7 x 3.9 x 1.38 inch



Features:

- * Universal AC input with active power factor correction, P.F.>0.95
- * Power ON with LED indicator
- * Built in EMI filter, low ripple noise
- * Over voltage protection
- * Over load & short circuit protection
- * Over temperature protection (Optional)
- * Output voltage $\pm 10\%$ adjustment
- * Remote control ON/OFF (Optional)
- * 100% full load burn-in test
- * UL, cUL, TUV, CB, CE approved
- * 3 years warranty

Specification:

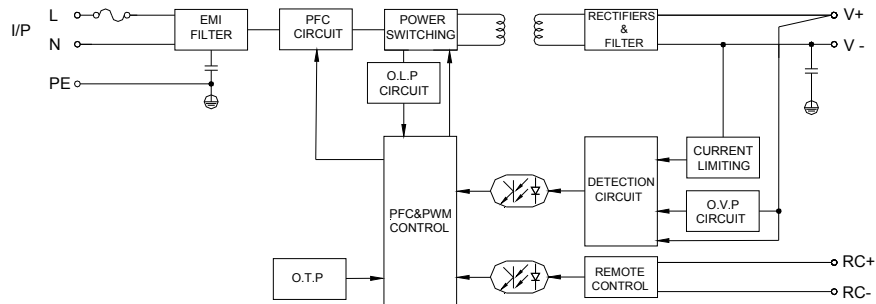
INPUT	Voltage	85V ~ 264VAC universal full range or 120V ~ 375VDC.					
	Frequency	47 ---- 63 Hz					
	Current	<2.0A @100V AC input.					
	Inrush Current	<35A@115V, <70A@230V AC input. Cold start at 25°C ambient					
	Leakage Current	<1.0mA@264V AC input					
	Power Factor	PF > 0.95					
OUTPUT	MODEL No.	SPS-120P-05	SPS-120P-7.5	SPS-120P-12	SPS-120P-15	SPS-120P-24	SPS-120P-48
	Voltage	5V	7.5V	12V	15V	24V	48V
	Min Load	0A	0A	0A	0A	0A	0A
	Max Load	20A	16A	10A	8A	5A	2.5A
	Output Tolerance ②	$\pm 2\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$
	Ripple Noise MAX. ③	70mV	80mV	120mV	120mV	200mV	200mV
	Efficiency (TYP.)	76%	78%	81%	82%	85%	86%
	Output MAX.	100W	120W	120W	120W	120W	120W
PROTECTION	Over Voltage	5.8V~7.0V	8.6V~10.5V	13.8V~16.8V	17.3V~21.0V	27.6V~33.6V	55.2V~67.2V
		Limiting voltage latch					
	OverLoad & ShortCircuit	When power supply over 105%~ 150% max load or short circuit acted, power supply will be constant current limiting and recover automatically after the fault is removed.					
ELEC. CHAR.	Over Temperature	Optional, Over 95°C $\pm 5^\circ\text{C}$ Shutdown, recovers automatically after fault condition has been removed.					
	Rise time	<50mS					
	Hold up time	>20mS@230V					
	Setup time	<2.0S@100 ~ 240V AC					
ENVIRONMENT	Remote Control	Option. RC+/RC-: 0~0.7V= Power On; 3~10V= Power Off. Sink Current: 3~10 mA					
	Temperature ④	Operating: -10 ~ +70°C ; De-rating: 40°C ~70°C : 2.5%/°C. (for 5V, 7.5V) · De-rating: 45 ~ 70°C : 2.5%/°C (for 12V, 15V, 24V, 48V) ; Storage: -20 ~ +85°C					
	Humidity	Operating: 20% ~ 90% RH (non condensing) ; Storage: 10% ~ 95% RH (non condensing)					
SAFETY	Withstand voltage	I/P-O/P:3KVAC, I/P-PE:1.5KVAC, O/P-PE:0.5KVDC, 1minute					
	Isolation resistance	I/P-O/P, I/P-PE, O/P-PE > 100M Ω /500VDC at 25°C / 70% RH					
	Safety standard	UL 60950-1 2 nd , CSA C22.2 No. 60950-1-07 2 nd , TUV EN 60950-1:2006+A11, IEC 60950-1:2005, approved.					
EMC	EMI	EN 55022 CLASS B, FCC CFR 47 PART 15 CLASS B, CNS 13438 CLASS B.					
	EMS	Compliance to EN61000-3-2 CLASS D, EN61000-3-3					
OTHERS	EMS	EN 55024 : EN 61000-4-2,3,4,5,6,8,11					
	Cooling	Natural Cooling.					
	M.T.B.F.	228 K hours					
	Dimension	178 x 99 x 35 mm (L*W*H)					
NOTE	Packing	N.W.:0.73Kg / 1pc; 18pcs / 1.38 CUFT / 1 CTN					
	①	All measurements which not mentioned are based on 230VAC input, output Max at ambient 25°C / 70%RH					
	②	Output tolerance included set up voltage, line regulation and load regulation.					
	③	Ripple & noise are measured at 100~254VAC input with 10~50°C condition and 20MHz of bandwidth by using a 10" ~ 15" twisted pair-wire terminated with a 0.1uF & a 47uF parallel capacitor.					
	④	The operating temperature shall follow the de-rating curve in spec The output load may be requested for decreasing as de-rating curve in spec when low input voltage is under 100VAC..					
	⑤	The power supply is considered a component of end-equipment. The end-equipment must be re-confirmed whether comply with EMC directives.					



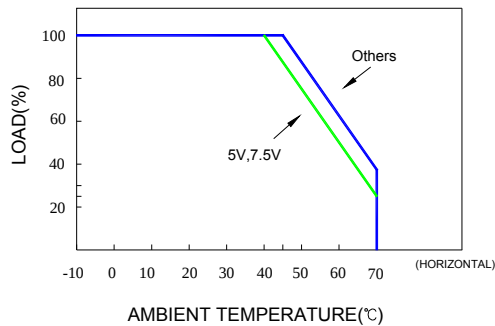
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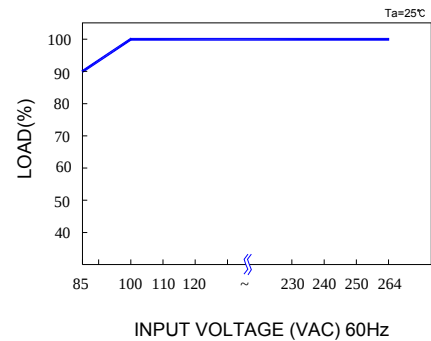
Block Diagram : PS4



De-rating Curve :

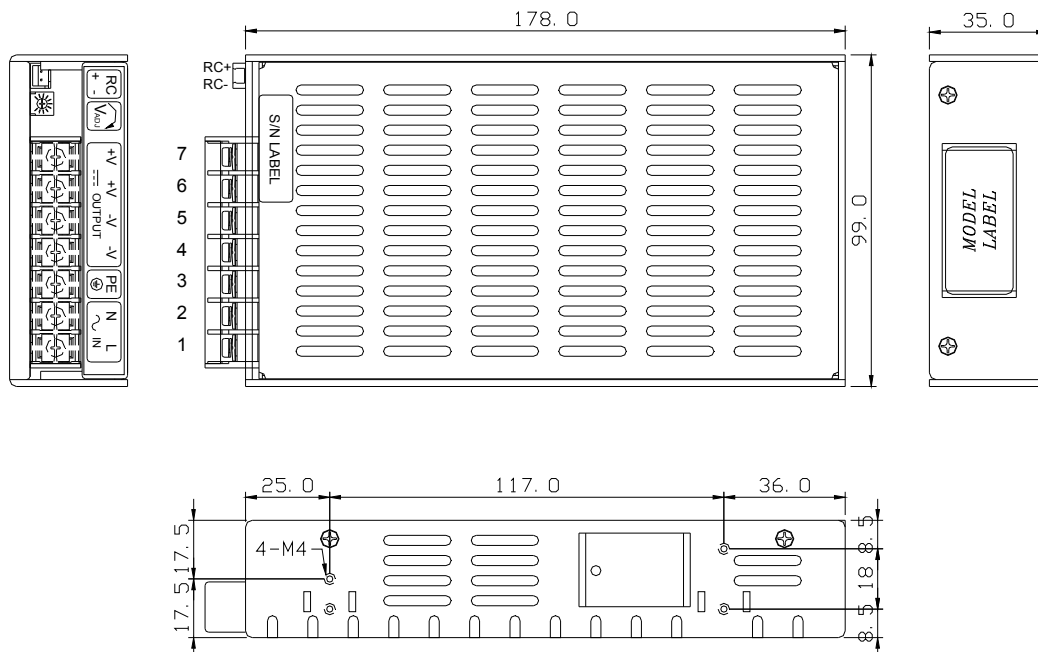


Output De-rating Vs Input Voltage :



Dimension:

(Unit: mm)



NOTES:

TERMINAL BLOCK: 7P, PITCH 9.5mm WITH PC COVER.

MODEL No.	1	2	3	4	5	6	7
SPS-120P-xx	L	N	PE	-V	-V	+V	+V



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Remote control ON/OFF:

- 1 Remote control ON/OFF becomes available by applying voltage in CN3
- 2 Table A shows the specification of remote control ON/OFF function
- 3 Fig 1 shows the example to connect remote control ON/OFF function

Table A : Specification of remote control ON/OFF

Connection Method		Fig 1	Between RC+ and RC-
SW Logic	Power ON	SW Open	0~0.7V
	Power OFF	SW Close	3~10V

Fig 1 Examples of connecting remote control ON/OFF

