



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
http://www.sunpower.com.tw
E-mail: sunpower@sunpower.com.tw

SPS-320P-xx Series

320W, Single Output

Active P.F.C Function



212 x 115 x 50 mm
8.35 x 4.53 x 1.97 inch
UL US CB CE

Features:

- * Universal AC input with active PFC circuit, 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
- * Output voltage remote sense (Optional)
- * Remote control ON/OFF (Optional)
- * 100% full load burn-in test
- * UL, cUL, CB, CE approved
- * 3 years warranty

Specification:

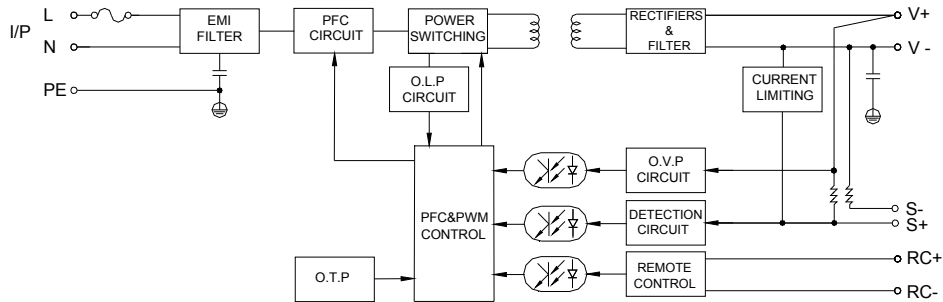
INPUT	Voltage	85V ~ 264VAC universal full range or 120V ~ 375VDC.							
	Frequency	47 ~ 63 Hz							
	Current	<4.3A @100V AC input, full load condition							
	Inrush Current	<35A@115V, <70A@230V AC input. Cold start at 25°C ambient							
	Leakage Current	<1.5mA@264V AC input							
	Power Factor	PF > 0.95							
OUTPUT	MODEL No.	SPS-320P-3.3	SPS-320P-05	SPS-320P-7.5	SPS-320P-12	SPS-320P-15	SPS-320P-24	SPS-320P-27P	SPS-320P-48
	Voltage	3.3V	5V	7.5V	12V	15V	24V	30V	48V
	Min Load	0A	0A	0A	0A	0A	0A	0A	0A
	Max Load	50A	50A	40A	26.7A	21.4A	13.4A	10.7A	6.7A
	Output Tolerance ②	$\pm 3\%$	$\pm 2\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$
	Ripple Noise MAX. ③	70mV	70mV	80mV	120mV	120mV	200mV	200mV	200mV
	Efficiency (TYP.)	72%	79%	81%	82%	84%	86%	86%	87%
	Output MAX.	165W	250W	300W	320W	321W	322W	321W	322W
PROTECTION	Over Voltage	3.8V~4.6V	5.8V~7.0V	8.6V~10.5V	13.8V~16.8V	17.3V~21.0V	27.6V~33.6V	34.5V~42.0V	55.2V~67.2V
		Shutdown and latch off, recover after re-start up.							
	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°C Shutdown, recovers automatically after fault condition has been removed.							
	Rise time	<20mS							
	Hold up time	>20mS@230V, full load condition							
	Setup time	<2.0S@100 ~ 240V AC							
ENVIRONMENT	Remote sensing	Optional, (RS+, RS-).							
	Remote Control	Optional, RC+/RC-: 0~0.7V= Power On; 3~5V= Power Off. Sink Current: 3~10 mA							
	Temperature ④	Operating: -10 ~ +70°C ; De-rating: 50 ~ 70°C: 2.0%/°C ; Storage: -20 ~ +85°C							
SAFETY	Humidity	Operating: 20% ~ 90% RH (non condensing) ; Storage: 10% ~ 95% RH (non condensing)							
	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							
EMC	Safety standard	UL 60950 ^{3rd} , CSA C22.2 No.60950 ^{3rd} , IEC 60950, approved.							
	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	Forced airflow cooling with DC fan, the fan will be active when internal temperature reach 35°C $\pm$ 5°C							
	M.T.B.F.	195.2 K hours							
	Dimension	212*115*50 mm (L*W*H)							
NOTE	Packing	N.W.:1.2Kg / 1pc; 15pcs / 1.44 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.							



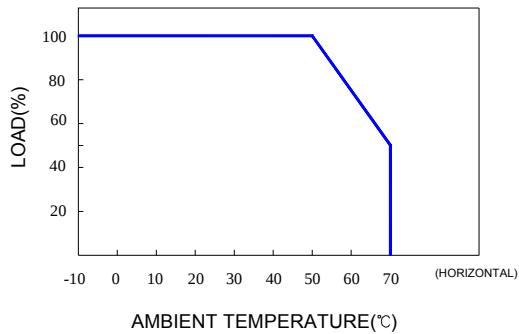
SUNPOWER TECHNOLOGY CORP.
 16F-1, No.150, Jian 1st Rd., Zhonghe Dist., New Taipei City 235, Taiwan (R.O.C.).
 TEL: 886-2-8226-3100 FAX: 886-2-8226-3111
<http://www.sunpower.com.tw>
 E-mail: sunpower@sunpower.com.tw

SPS-320P-xx Series

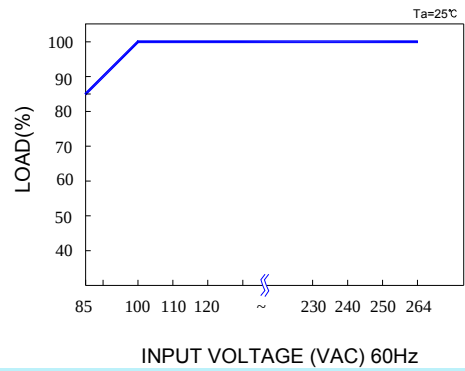
Block Diagram : PS6-1



De-rating Curve :

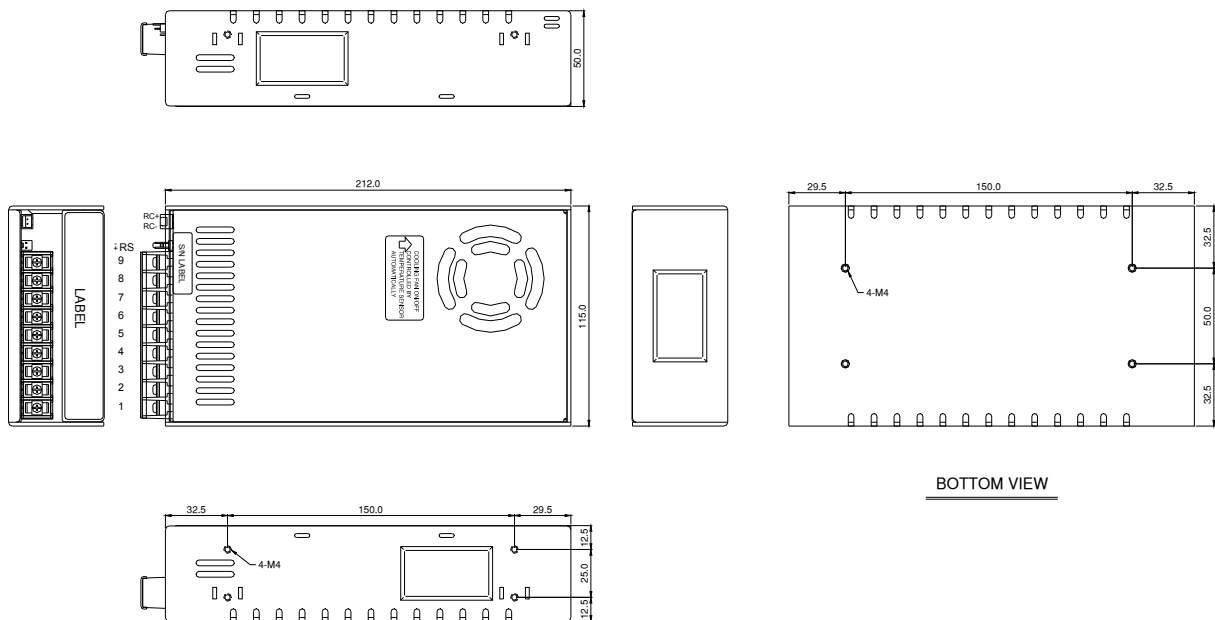


Output De-rating Vs Input Voltage :



Dimension:

(Unit: mm)



NOTES:

TERMINAL BLOCK: 9P, PITCH 9.5mm WITH PC COVER.

MODEL No.	1	2	3	4	5	6	7	8	9
SPS-320P-xx	L	N	PE	-V	-V	-V	+V	+V	+V