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# 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



## 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:

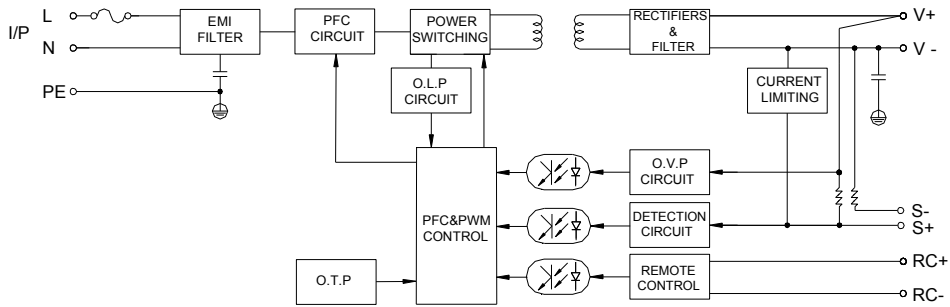
INPUT	<b>Voltage</b>	85V ~ 264VAC universal full range or 120V ~ 375VDC.							
	<b>Frequency</b>	47 ---- 63 Hz							
	<b>Current</b>	<4.3A @100V AC input, full load condition							
	<b>Inrush Current</b>	<35A@115V , <70A@230V AC input. Cold start at 25°C ambient							
	<b>Leakage Current</b>	<1.5mA@264V AC input							
	<b>Power Factor</b>	PF > 0.95							
OUTPUT	<b>MODEL No.</b>	SPS-320P-3.3	SPS-320P-05	SPS-320P-7.5	SPS-320P-12	SPS-320P-15	SPS-320P-24	SPS-320P-30	SPS-320P-48
	<b>Voltage</b>	3.3V	5V	7.5V	12V	15V	24V	30V	48V
	<b>Min Load</b>	0A	0A	0A	0A	0A	0A	0A	0A
	<b>Max Load</b>	50A	50A	40A	26.7A	21.4A	13.4A	10.7A	6.7A
	<b>Output Tolerance</b> ②	$\pm 3\%$	$\pm 2\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$
	<b>Ripple Noise MAX.</b> ③	70mV	70mV	80mV	120mV	120mV	200mV	200mV	200mV
	<b>Efficiency (TYP.)</b>	72%	79%	81%	82%	84%	86%	86%	87%
	<b>Output MAX.</b>	165W	250W	300W	320W	321W	322W	321W	322W
PROTECTION	<b>Over Voltage</b>	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.							
	<b>OverLoad &amp; ShortCircuit</b>	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.							
	<b>Over Temperature</b>	Optional, Over 95°C $\pm 5^\circ\text{C}$ Shutdown, recovers automatically after fault condition has been removed.							
ELEC. CHAR.	<b>Rise time</b>	<20mS							
	<b>Hold up time</b>	>20mS@230V, full load condition							
	<b>Setup time</b>	<2.0S@100 ~ 240V AC							
	<b>Remote sensing</b>	Optional, (RS+, RS-).							
	<b>Remote Control</b>	Optional, RC+/RC-: 0~0.7V= Power On; 3~5V= Power Off. Sink Current: 3~10 mA							
ENVIRONMENT	<b>Temperature</b> ④	Operating: -10 ~ +70°C ; De-rating: 50 ~ 70°C : 2.0%/°C ; Storage: -20 ~ +85°C							
	<b>Humidity</b>	Operating: 20% ~ 90% RH (non condensing) ; Storage: 10% ~ 95% RH (non condensing)							
SAFETY	<b>Withstand voltage</b>	I/P-O/P:3KVAC, I/P-PE:1.5KVAC, O/P-PE:0.5KVDC, 1minute							
	<b>Isolation resistance</b>	I/P-O/P, I/P-PE, O/P-PE > 100MΩ/500VDC at 25°C/ 70% RH							
	<b>Safety standard</b>	UL 60950 <sup>3rd</sup> , CSA C22.2 No.60950 <sup>3rd</sup> , IEC 60950, approved.							
EMC	<b>EMI</b>	EN 55022 CLASS B · FCC CFR 47 PART 15 CLASS B · CNS 13438 CLASS B.							
		Compliance to EN61000-3-2 CLASS D, EN61000-3-3							
	<b>EMS</b>	EN 55024 : EN 61000-4-2,3,4,5,6,8,11							
OTHERS	<b>Cooling</b>	Forced airflow cooling with DC fan, the fan will be active when internal temperature reach 35°C $\pm 5^\circ\text{C}$							
	<b>M.T.B.F.</b>	195.2 K hours							
	<b>Dimension</b>	212*115*50 mm (L*W*H)							
	<b>Packing</b>	N.W.:1.2Kg / 1pc; 15pcs / 1.44 CUFT / 1 CTN							

## NOTE

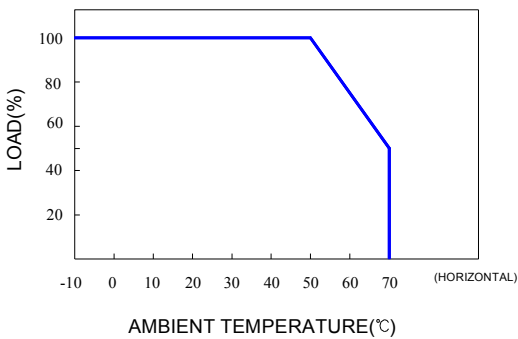
- ① All measurements which not mentioned are based on 230VAC input, **output Max** at ambient 25°C / 70%RH
- ② Output tolerance included set up voltage, line regulation and load regulation.
- ③ Ripple & noise are measured at 100~254VAC input with 0~50°C condition and 20MHz of bandwidth by using a 10" ~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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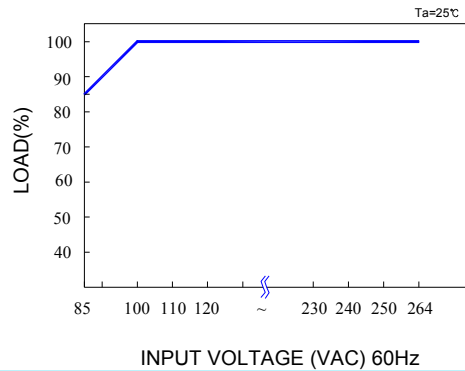
## Block Diagram : PS6-1



## De-rating Curve :

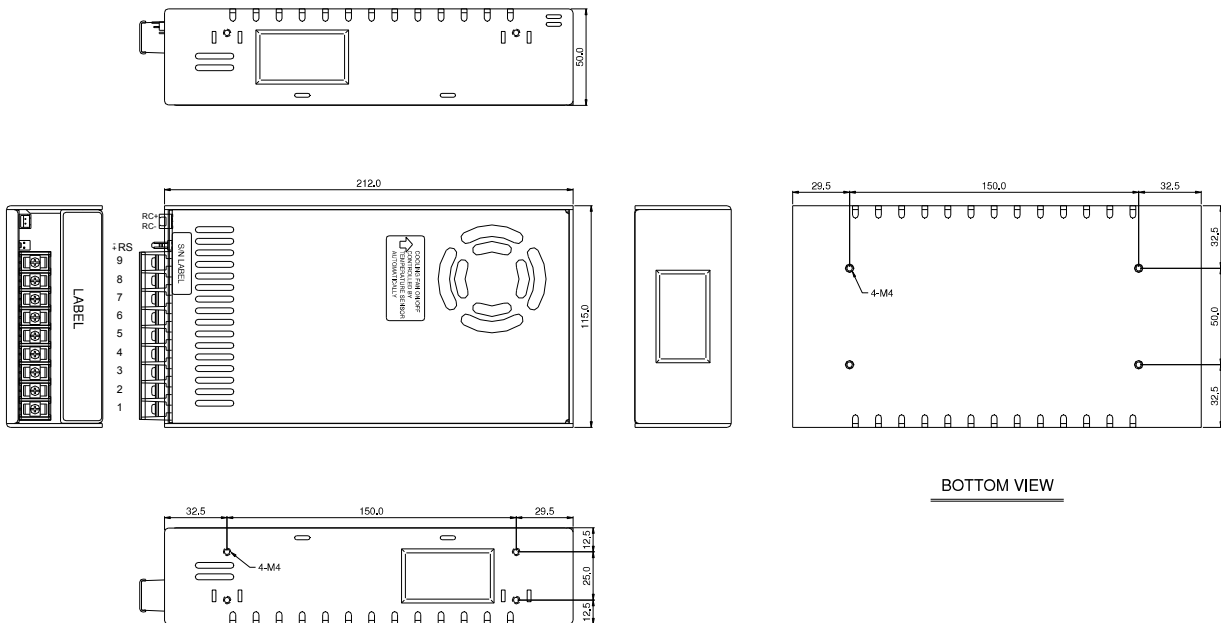


## Output De-rating Vs Input Voltage :



## 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