



SUNPOWER TECHNOLOGY CORP.  
 16F.-1, No.150, Jian 1st Rd., Zhonghe Dist., New Taipei City 235, Taiwan (R.O.C.).  
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# SPE-320-xx Series

320W, Single Output  
 Active P.F.C Function



212 x 115 x 30 mm  
 8.35 x 4.53 x 1.18 inch

## Features:

- \* Universal AC input with active PFC circuit, P.F.>0.95
- \* 1U low profile 30mm
- \* Altitude during operation up to 16404ft ( 5000m )
- \* Power ON with LED indicator
- \* Built in EMI filter, low ripple noise
- \* Over voltage 、 over load & short circuit protection
- \* Over temperature protection
- \* Output voltage  $\pm 10\%$  adjustment
- \* 100% full load burn-in test
- \* UL, cUL, TUV, CB, CE pending
- \* 3 years warranty

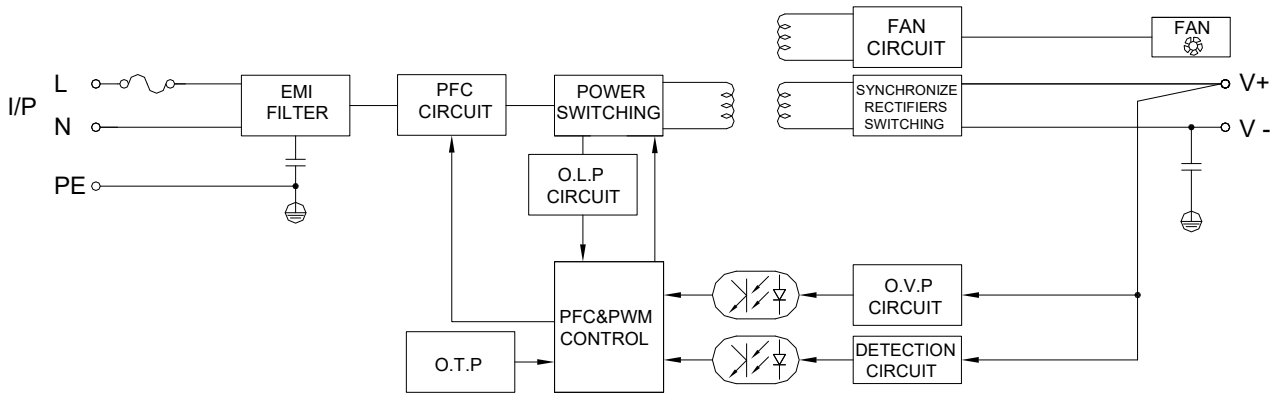
## Specification:

INPUT	Voltage	88V ~ 264VAC universal full range or 124V ~ 375VDC.				
	Frequency	47 ---- 63 Hz				
	Current	4.3A @100V AC input, full load condition				
	Inrush Current(TYP)	20A@115V , 40A@230V AC input. Cold start at 25°C ambient				
	Leakage Current	<1.5mA@264V AC input				
	Power Factor	PF > 0.95				
OUTPUT	MODEL No.	SPE-320-05	SPE-320-12	SPE-320-24	SPE-320-36	SPE-320-48
	Voltage	5V	12V	24V	36V	48V
	Min Load	0A	0A	0A	0A	0A
	Max Load	60A	26.7A	13.4A	8.9A	6.7A
	Output Tolerance ②	$\pm 2\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$
	Ripple Noise MAX. ③	150mV	150mV	150mV	220mV	240mV
	Efficiency (TYP.)	83%	88%	89%	89.5%	90%
	Output MAX.	300W	320.4W	321.6W	320.4W	321.6W
PROTECTION	Over Voltage	5.75V~7.0V	13.8V~16.8V	27.6V~33.6V	41.4V~50.4V	55.2V~67.2V
		Shutdown and latch off, recover after re-start up.				
	OverLoad & ShortCircuit	When power supply over 105%~ 135% max load or short circuit acted, power supply will go into hiccup mode and recover automatically after the fault is removed.				
	Over Temperature	Shutdown o/p voltage, recovers automatically after temperature goes down				
ELEC. CHAR.	Rise time	<20mS				
	Hold up time	>8mS@230V, full load condition				
	Setup time	<3.0S@100 ~ 240V AC				
ENVIRONMENT	Temperature ④	Operating: -30 ~ +70°C ; De-rating: 50 ~ 70°C : 2.5%/°C ; Storage: -40 ~ +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:0.5KVAC, 1minute				
	Isolation resistance	I/P-O/P, I/P-PE, O/P-PE > 100MΩ/500VDC at 25°C / 70% RH				
	Safety standard	UL 60950-1 2 <sup>nd</sup> ,CAN/CSA C22.2 No. 60950-1- 07 2 <sup>nd</sup> ,UL 62368-1 2 <sup>nd</sup> (edition dated 2014-12-01) , IEC60950-1:2005+A1+A2, IEC 62368-1:2014 (2 <sup>nd</sup> .Edition),TUV EN 62368-1:2014 pending				
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 EN 55024 : EN 61000-4-2,3,4,5,6,8,11				
OTHERS	Cooling	Forced airflow cooling with DC fan				
	M.T.B.F.	K hours				
	Dimension	212 x 115 x 30 mm (L*W*H)				
	Packing	N.W.: Kg / 1pc; pcs / CUFT / 1 CTN				
NOTE	① All measurements which not mentioned are based on 230VAC input, <b>output Max</b> 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.					

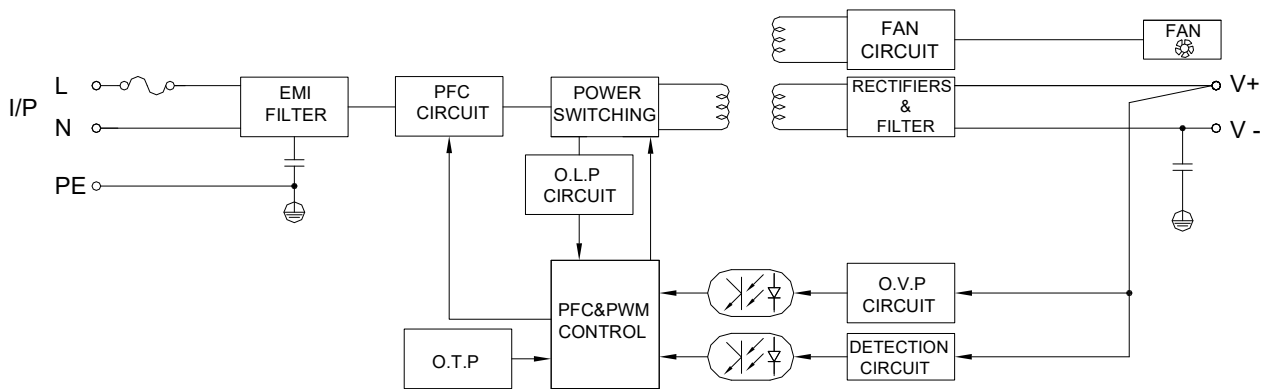
# SPE-320-xx Series

Block Diagram : PS37、PS37-1

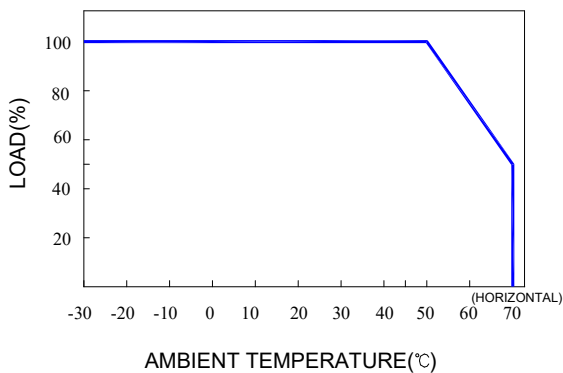
SPE-320-05~12



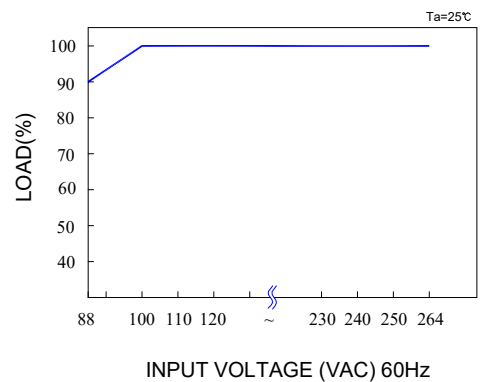
SPE-320-24~48



## De-rating Curve :



## Output De-rating Vs Input Voltage :



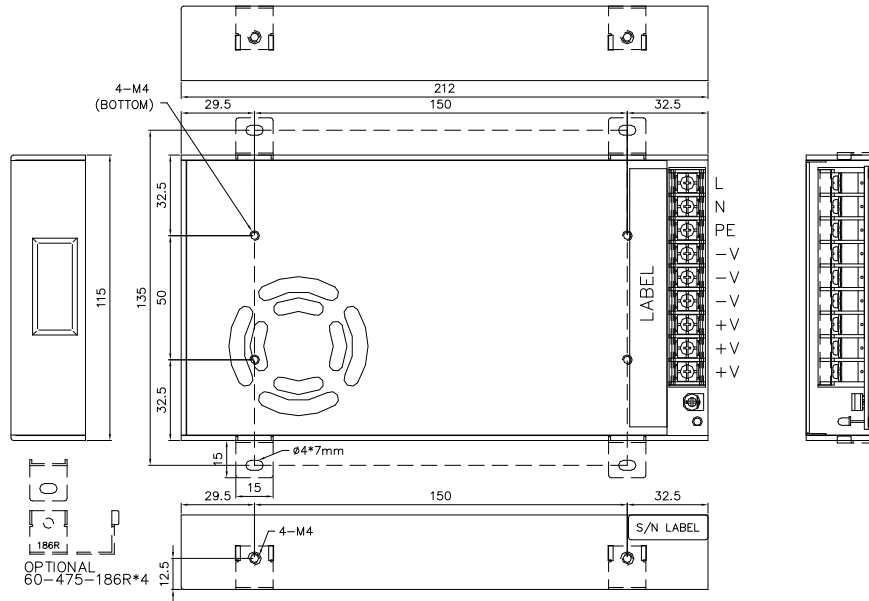


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Dimension:

(Unit: mm)



**NOTES:**

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

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