



SUNPOWER TECHNOLOGY CORP.
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SPP-230P-xy Series

230W, Single Output
 Active P.F.C Function
 High efficiency



222 x 62 x 32 mm
 8.74 x 2.44 x 1.26 inch



Features:

* Altitude during operation up to 13123ft (4000m)	* Output terminal block type A / type B(optional)
* Universal AC input with active power factor correction, P.F.>0.95	* Output voltage $\pm 10\%$ adjustment
* Built-in EMI filter, low ripple noise	* 100% full load burn-in test
* Over voltage, over load & short circuit protection	* CE approved
* Over temperature protection (Optional)	* 3 years warranty

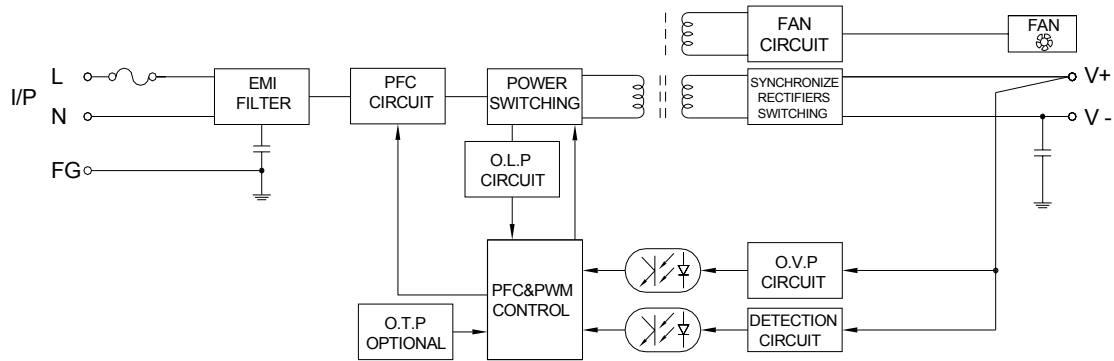
Specification:

INPUT	Voltage	88V ~ 264VAC universal full range or 125V ~ 375VDC.		
	Frequency	47 ----- 63 Hz		
	Current	<3.2A@100V AC input, full load condition		
	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.	SPP-230P-12	SPP-230P-24	SPP-230P-27
	Voltage	12V	24V	27V
	Min Load	0A	0A	0A
	Max Load	19.2A	9.6A	8.6A
	Output Tolerance ②	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$
	Ripple Noise MAX. ③	120mV	200mV	240mV
	Efficiency (TYP.)	85%	86%	86%
	Output MAX.	230W	230W	232W
PROTECTION	Over Voltage	13.8~16.8V	27.6~33.6V	31.0~37.8V
	Over Load & Short Circuit	Shutdown and latch off, recover after re-start up. When power supply over 105%~ 150% max. load or short circuit acted, power supply will go into hiccup mode and recover automatically after the fault is removed.		
ELEC. CHAR.	Rise time	<30mS @230V, full load condition		
	Hold up time	>20mS@230V, full load condition		
	Setup time	<3S@115VAC, <3S@230VAC		
ENVIRONMENT	Temperature ④	Operating: -20 ~ 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-FG:1.8KVAC, O/P-FG:0.5KVAC, 1minute		
	Isolation resistance	I I/P-O/P, I/P-FG, O/P-FG > 100MΩ/500VDC at 25°C / 70% RH		
	Safety standard	IEC 62368-1 : 2014(Second Edition) and/or EN 62368-1 : 2014+A11 : 2017 approved		
EMC	EMI	EN 55032 CLASS B · FCC CFR 47 PART 15 CLASS B Compliance to EN61000-3-2 CLASS D, EN61000-3-3,		
	EMS	EN 55035 : EN 61000-4-2,3,4,5,6,8,11		
OTHERS	Cooling	Natural Cooling, when output exceed 160W max load a 10.1CFM (MIN) fan is required.		
	M.T.B.F.	241.7 K hours		
	Dimension	222 x 62 x 32 mm (L*W*H)		
	Packing	N.W.: ---- Kg / 1pc : 15pcs / 1.44 CUFT / 1 CTN		

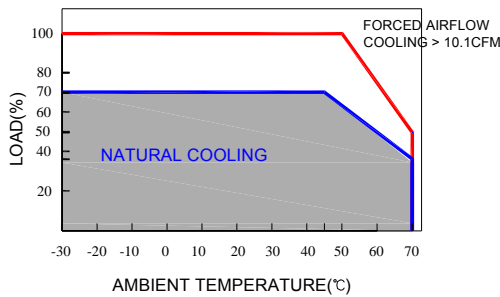
NOTE	① All measurements which not mentioned are based on 230VAC input, output Max at ambient 25°C / 70%RH
	② Output tolerance included set up voltage, line regulation and load regulation.
	③ Ripple & noise are measured at 10~50°C condition and 20MHz of bandwidth by using a 10" ~15" twisted pair-wire 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.

SPP-230P-xy Series

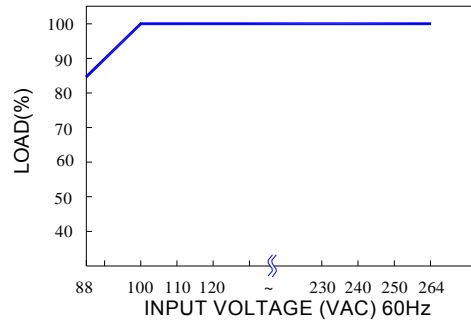
Block Diagram : PS58



De-rating Curve :



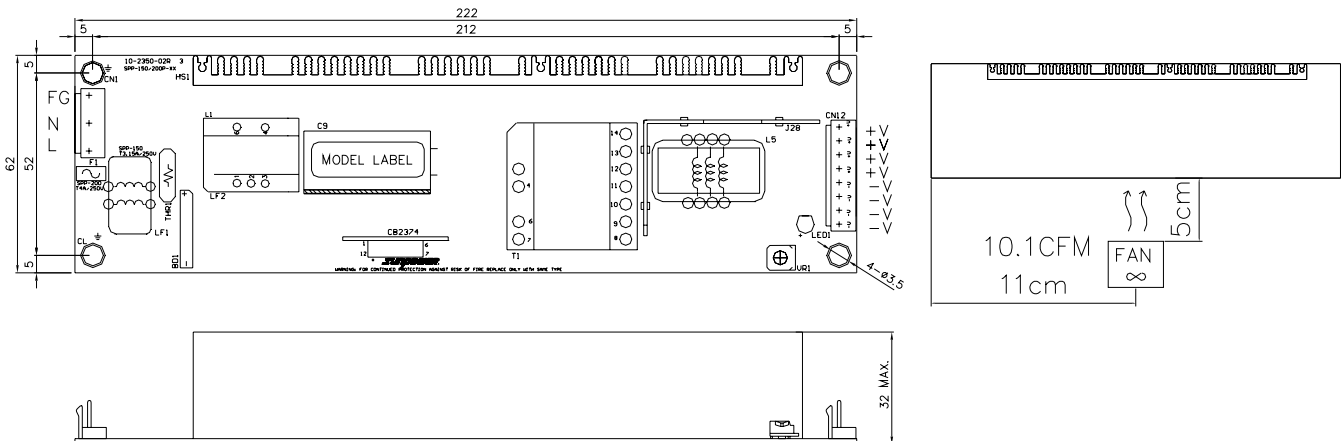
Output De-rating Vs Input Voltage :



Dimension:

(Unit: mm)

TYPE A :



NOTES:

AC Input Connector (CN1) : 5 PIN, P=3.96mm (Pin 2、4 CUT), FEMALE JST VHR-5N or compatible

MODEL No.	1	2	3	4	5
SPP-230P-12/24/27	L	N/C	N	N/C	FG

DC Output Connector (CN12) : 8 PIN, P=3.96mm, FEMALE JST VHR-8N or compatible

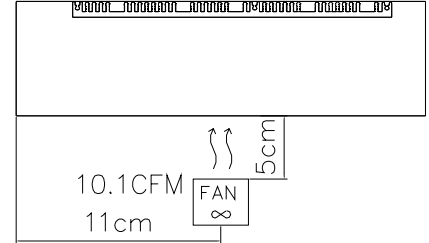
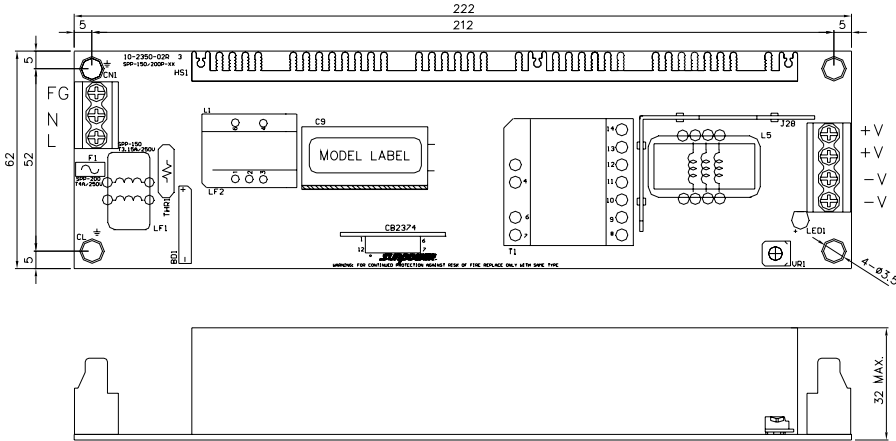
MODEL No.	1	2	3	4	5	6	7	8
SPP-230P-12/24/27	+V	+V	+V	+V	-V	-V	-V	-V



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TYPE B : (Optional)



NOTES:

TERMINAL BLOCK (CN1) : 3 PIN

MODEL No.	1	2	3
SPP-230P-12/24/27	L	N	FG

TERMINAL BLOCK (CN12) : 4 PIN

MODEL No.	1	2	3	4
SPP-230P-12/24/27	+V	+V	-V	-V