



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-N150-xx Series

Single Output
Green mode function



159 x 95 x 38 mm
6.26 x 3.74 x 1.50 inch



Features:

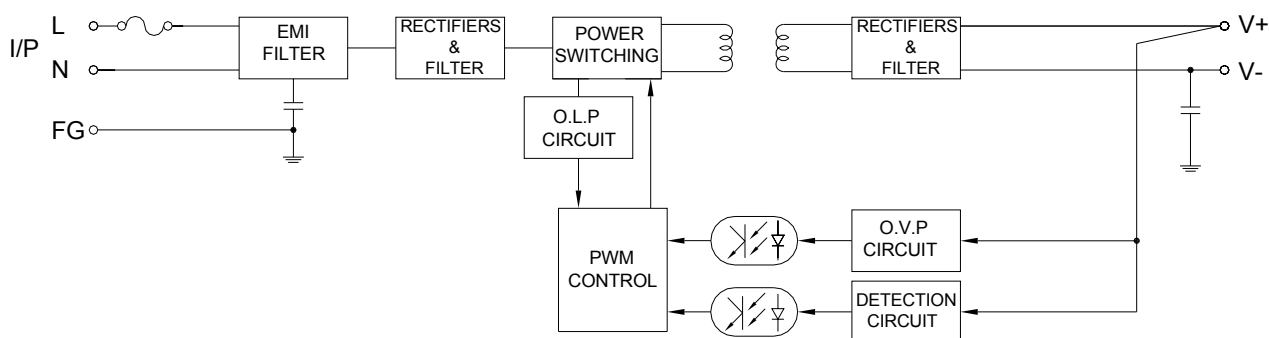
- * Green mode design, no load < 1W
- * Altitude during operation up to 9843ft (3000m)
- * Power ON with LED indicator
- * Built in EMI filter, low ripple noise
- * Over voltage , over load & short circuit protection
- * Output voltage $\pm 10\%$ adjustment
- * 100% full load burn-in test
- * $-20^{\circ}\text{C} \sim 70^{\circ}\text{C}$ Operating temperature
- * UL, cUL, CB, CE approved
- * 3 years warranty

Specification:

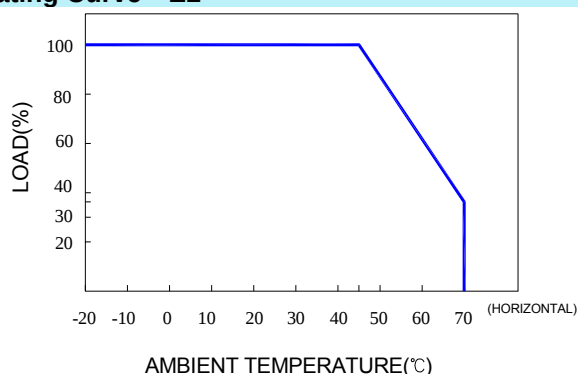
INPUT	Voltage	88V ~ 264VAC universal full range or 125V ~ 375VDC.				
	Frequency	47 ----- 63 Hz				
	Current	<4A@100V AC input, full load condition				
	Inrush Current (TYP.)	35A@115V , 70A@230V AC input, Cold start at 25℃ ambient				
	Leakage Current	<1.0mA@264V AC input				
OUTPUT	MODEL No.	SPS-N150-12	SPS-N150-15	SPS-N150-24	SPS-N150-27	SPS-N150-48
	Voltage	12V	15V	24V	27V	48V
	Min Load	0A	0A	0A	0A	0A
	Max Load	11A	9.2A	5.8A	5.2A	3A
	Output Tolerance ②	± 1%	± 1%	± 1%	± 1%	± 1%
	Ripple Noise MAX. ③	150mV	150mV	200mV	200mV	200mV
	Efficiency (TYP.)	85%	86%	87%	87%	88%
	Output MAX.	132W	138W	139.2W	140.4W	144W
PROTECTION	Over Voltage	13.8~16.8V	17.3~21.0V	27.6~33.6V	31.0V~37.8V	55.2~67.2V
		Shutdown and latch off, recover after re-start up or Auto Recovery.				
	Over Load & Short Circuit	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				
	Hold up time (TYP.)	>50mS@230V, >12mS@115V full load condition				
	Setup time	<1 Sec@100 ~ 240V AC				
	Green mode function	Power consumption at no load < 1W at 240VAC input				
ENVIRONMENT	Temperature ④	Operating: -20 ~ +70℃ ; De-rating: 45 ~ 70℃: 2.5%/℃ ; Storage: -40 ~ +85℃				
	Humidity	Operating: 20% ~ 90% RH (non condensing) ; Storage: 10% ~ 95% RH (non condensing)				
	Altitude	9843 ft (≈ 3000 m) operating				
SAFETY	Withstand voltage	I/P-O/P:3KVAC, I/P-FG:1.8KVAC, O/P-FG:0.5KVAC, 1minute				
	Isolation resistance	I/P-O/P, I/P-FG, O/P-FG > 100MΩ/500VDC at 25℃/ 70% RH				
	Safety standard	UL 62368-1 2 nd Ed, 2014-12-01, CAN/CSA C22.2 No. 62368-1-14, 2 nd Ed, Issued: 2014-12-01, IEC 62368-1:2014				
EMC	EMI	Test Items	Standard		Test Level	
		Conducted	EN 55032		Class B	
		Radiated	EN 55032		Class B	
		Harmonic	EN 61000-3-2		Class A	
		Voltage Flicker	EN 61000-3-3		---	
	EMS	Test Items	Standard		Test Level	
		ESD	EN 61000-4-2		Level 3, 8KV air ; Level 2, 4KV contact	
		Radiated	EN 61000-4-3		Level 2	
		EFT / Burst	EN 61000-4-4		Level 2	
		Surge	EN 61000-4-5		Level 3, 1KV/Line-Line , 2KV/Line-Earth	
		Conducted	EN 61000-4-6		Level 2	
		Magnetic Field	EN 61000-4-8		Level 2	
		Voltage Dips and Interruptions	EN 61000-4-11		>95% dip 0.5 period, 30% dip 25 periods >95% interruptions 250 periods	
OTHERS	Cooling	Natural cooling.				
	M.T.B.F.	288.8K hours				
	Dimension	159 x 95 x 38 mm (L*W*H)				
	Packing	N.W.: 0.497Kg / 1pc ; 30pcs / 1.20 CUFT / 1 CTN				
NOTE	① All measurements which not mentioned are based on 230VAC input, output Max at ambient 25℃ / 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℃ 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.					

SPS-N150-xx Series

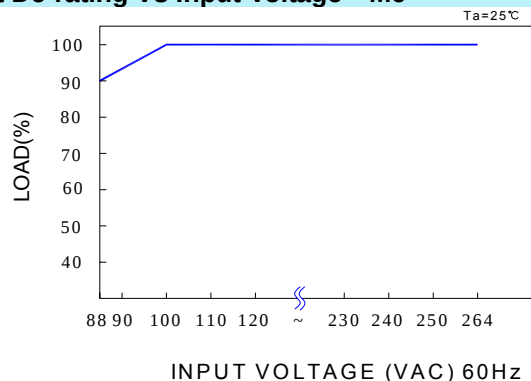
Block Diagram : US2-1



De-rating Curve : E2

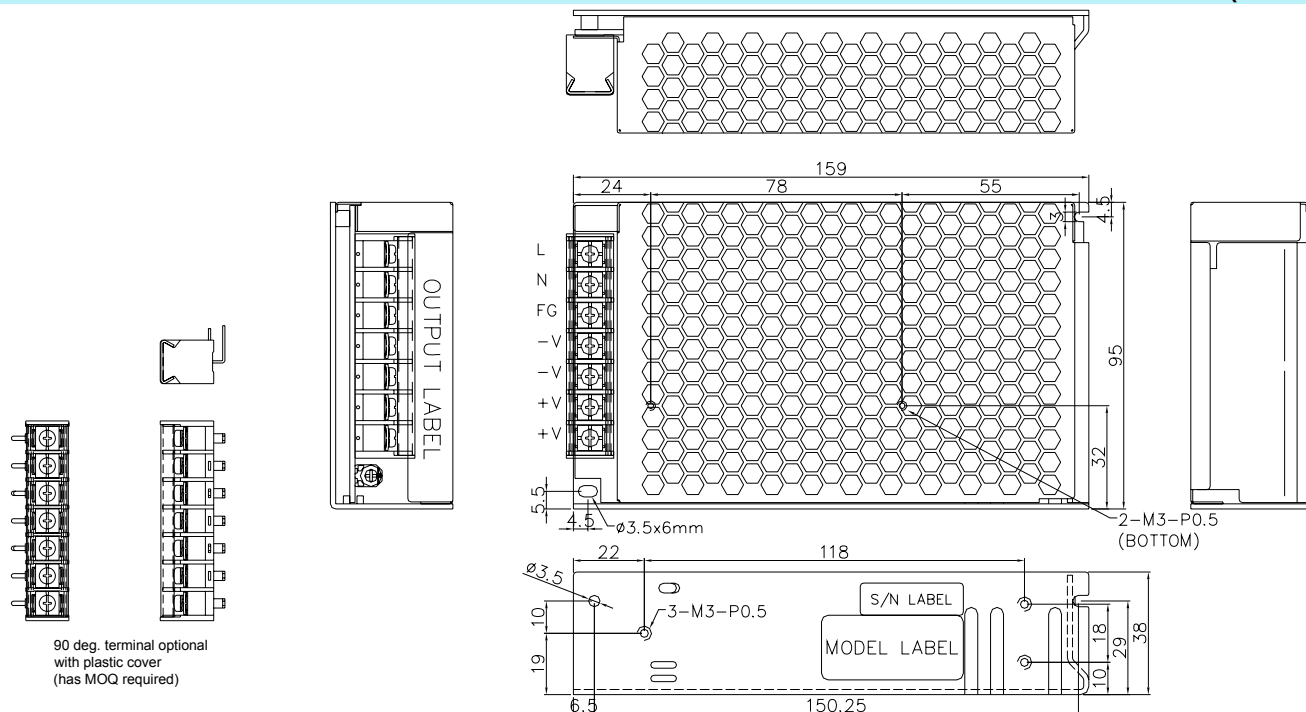


Output De-rating Vs Input Voltage : M6



Dimension:

(Unit: mm)



NOTES:

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

Model No.	1	2	3	4	5	6	7
SPS-N150-xx	L	N	FG	-V	-V	+V	+V