



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-N100-xx Series

Single Output
Green mode function



129 x 95 x 38 mm
5.08 x 3.74 x 1.50 inch



Features:

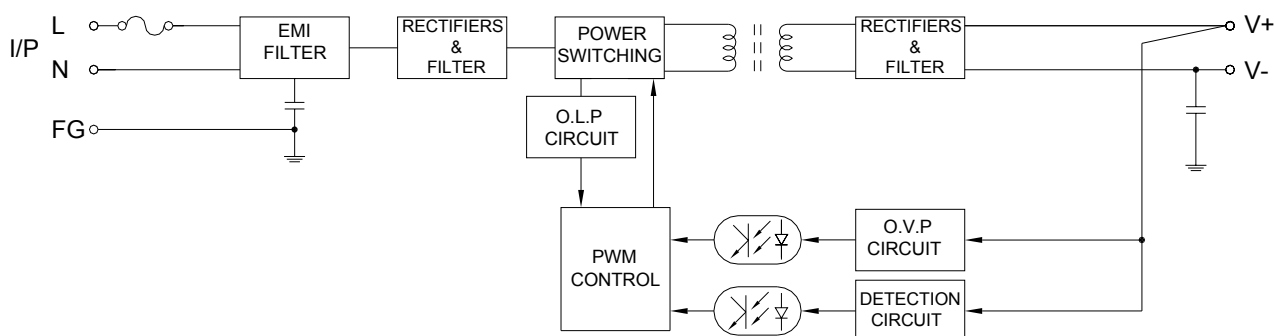
- * Green mode design, no load < 0.5W
- * Altitude during operation up to 16404ft (5000m)
- * Power ON with LED indicator
- * Built in EMI filter, low ripple noise
- * Over voltage · over load & short circuit protection
- * Output voltage $\pm 10\%$ adjustment
- * 100% full load burn-in test
- * $-20^{\circ}\text{C} \sim 70^{\circ}\text{C}$ Operating temperature
- * UL, cUL, CB, CE approved
- * 3 years warranty

Specification:

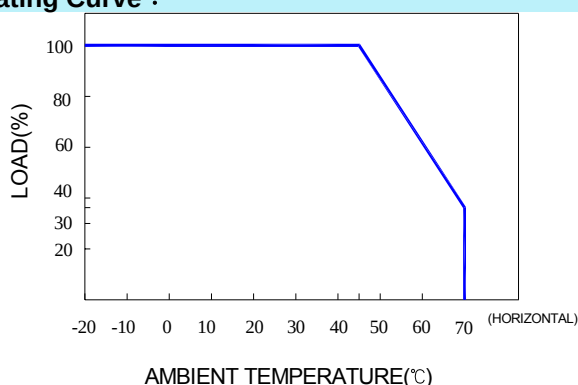
INPUT	Voltage	88V ~ 264VAC universal full range or 125V ~ 375VDC.					
	Frequency	47 ----- 63 Hz					
	Current	<2.8A@100V AC input, full load condition					
	Inrush Current (TYP.)	50A@230V AC input, Cold start at 25℃ ambient					
	Leakage Current	<0.75mA@264V AC input					
OUTPUT	MODEL No.	SPS-N100-3.3	SPS-N100-05	SPS-N100-12	SPS-N100-15	SPS-N100-24	SPS-N100-48
	Voltage	3.3V	5V	12V	15V	24V	48V
	Min Load	0A	0A	0A	0A	0A	0A
	Max Load	20A	18A	8.4A	6.7A	4.2A	2.2A
	Output Tolerance ②	± 3%	± 2%	± 1%	± 1%	± 1%	± 1%
	Ripple Noise MAX. ③	70mV	70mV	120mV	150mV	150mV	200mV
	Efficiency (TYP.)	78%	82%	84%	85%	86%	87%
	Output MAX.	66W	90W	100.8W	100.5W	100.8W	105.6W
PROTECTION	Over Voltage	3.8~4.6V	5.8~7.0V	13.8~16.8V	17.3~21.0V	27.6~33.6V	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	>50mS@230V, full load condition					
	Setup time	<1 Sec@100 ~ 240V AC					
	Green mode function	Power consumption at no load < 0.5W 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	16404 ft (≈ 5000 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 ., Issue Date:2014-12-01, CSA C22.2 No. 62368-1-14 2 nd ED., Issue Date: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		
OTHERS	Cooling	Natural cooling.					
	M.T.B.F.	312.2K hours					
	Dimension	129 x 95 x 38 mm (L*W*H)					
	Packing	N.W.: 0.370 Kg / pc ; 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-N100-xx Series

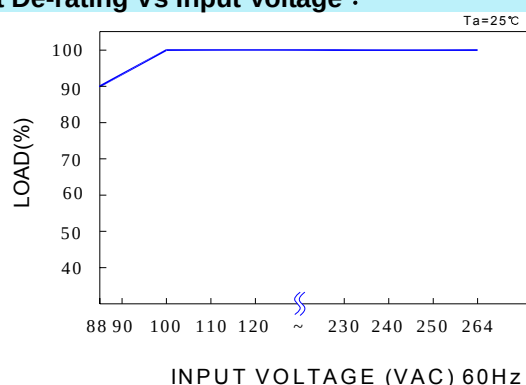
Block Diagram : US2-1



De-rating Curve :

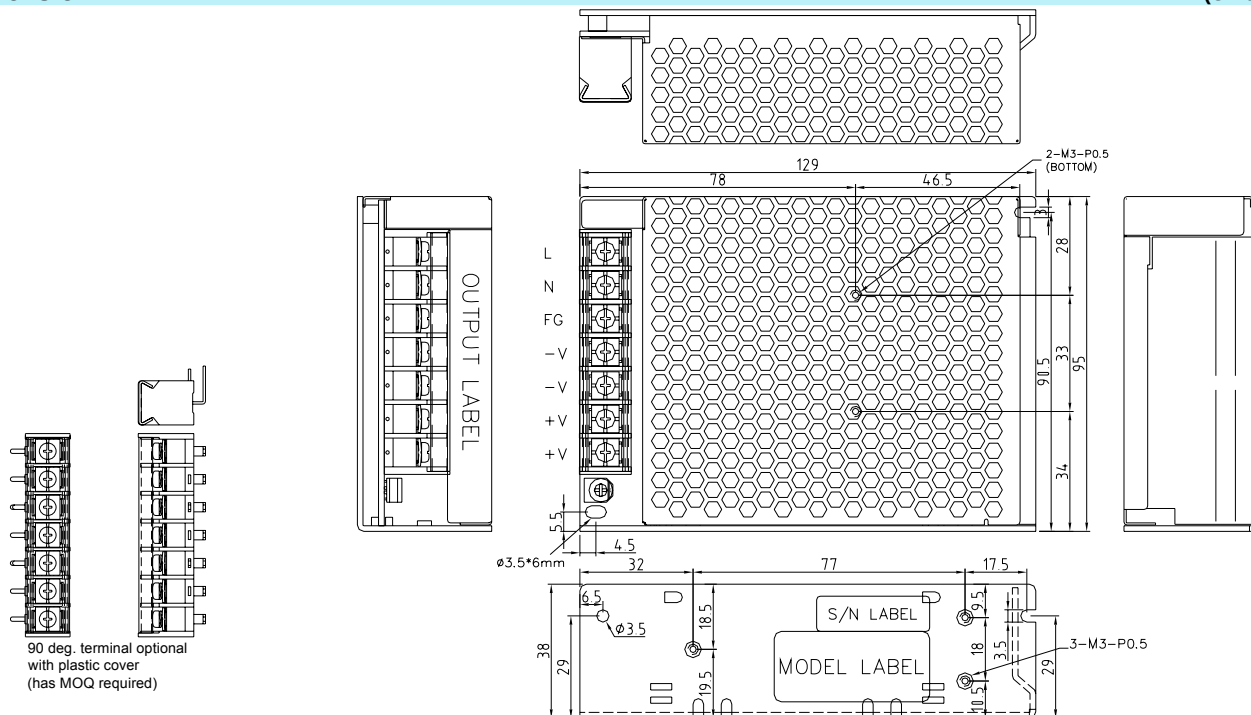


Output De-rating Vs Input Voltage :



Dimension:

(Unit: mm)



NOTES:

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

Model No.	1	2	3	4	5	6	7
SPS-N100-xx	L	N	FG	-V	-V	+V	+V