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# SPS-N080-IDx Series

## Dual Output



159 x 95 x 38 mm  
 6.26 x 3.74 x 1.50 inch  
 cULus CB CE

### Features:

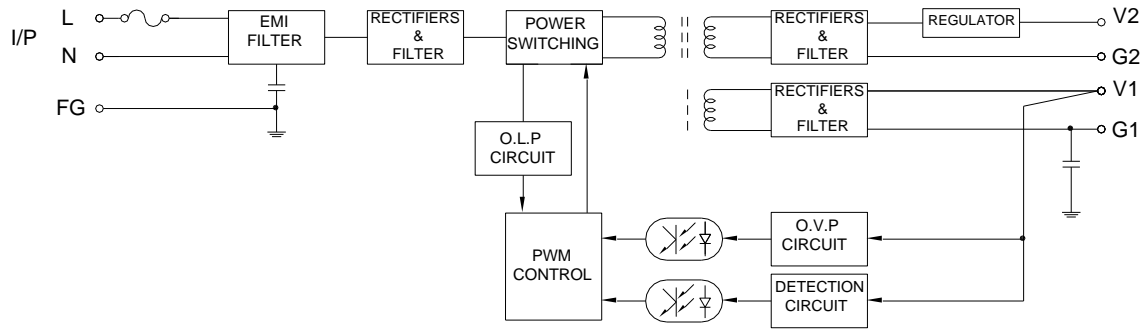
- \* Altitude during operation up to 9843ft ( 3000m )
- \* Power ON with LED indicator
- \* Built in EMI filter, low ripple noise
- \* Over voltage , over load & short circuit protection
- \* 100% full load burn-in test
- \* -20°C ~70°C Operating temperature
- \* UL, cUL, CB, CE approved
- \* 3 years warranty

### Specification:

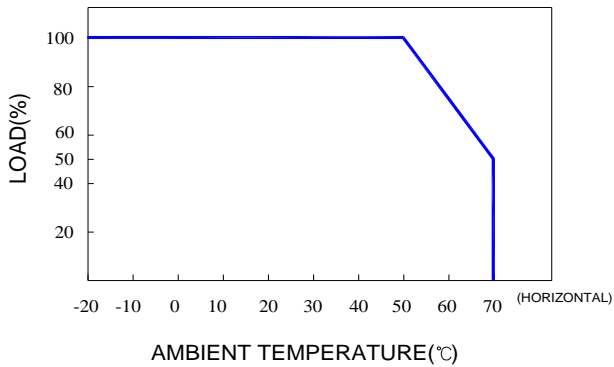
INPUT	Voltage	88V ~ 264VAC universal full range or 125V ~ 375VDC.									
	Frequency	47 ----- 63 Hz									
	Current	<2.5A@100V AC input, full load condition									
	Inrush Current (TYP.)	35A@115V , 70A@230V AC input, Cold start at 25°C ambient									
	Leakage Current	<1.0mA @264V AC input									
OUTPUT	MODEL No.	SPS-N080-ID1		SPS-N080-ID2		SPS-N080-ID3		SPS-N080-ID4		SPS-N080-ID8	
	Output	V1	V2	V1	V2	V1	V2	V1	V2	V1	V2
	Voltage	5V	12V	5V	24V	12V	-12V	15V	-15V	12V	24V
	Min Load	0.5A	0A	0.5A	0A	0.3A	0A	0.3A	0A	0.3A	0A
	Max Load	9A	4A	9A	2A	6.5A	3.4A	5A	2.6A	6.5A	2A
	Output Tolerance ②	±3%	±5%	±3%	±5%	±3%	±5%	±3%	±5%	±3%	±5%
	Ripple Noise MAX. ③	80mV	120mV	80mV	200mV	120mV	120mV	150mV	150mV	120mV	200mV
	Efficiency (TYP.)	80%		81%		82%		83%		84%	
Output MAX.	80W		80W		80W		80W		80W		
PROTECTION	Over Voltage	5.8~7V	----	5.8~7V	----	13.8~16.8V	----	17.3~21.0V	----	13.8~16.8V	----
	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									
	Hold up time (TYP.)	>50mS@230V, >10mS@115V full load condition									
	Setup time	<1 Sec@100 ~ 240V AC									
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)									
	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°C/ 70% RH									
	Safety standard	UL 62368-1 2 <sup>nd</sup> Ed, 2014-12-01, CAN/CSA C22.2 No. 62368-1-14, 2 <sup>nd</sup> 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			
	EMS	Voltage Flicker		EN 61000-3-3				---			
		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.		265.4K hours									
Dimension		159 x 95 x 38 mm (L*W*H)									
Packing		N.W.: 0.516Kg / 1pc ; 30pcs / 1.2 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. The regulation is measured at the condition : when any of output is with 20% ~ 100% <b>max load</b> and the rest of each outputs are with 60% <b>max load</b> , Each output could work within <b>max load</b> but must under total <b>output max</b> .										
	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.										

# SPS-N080-IDx Series

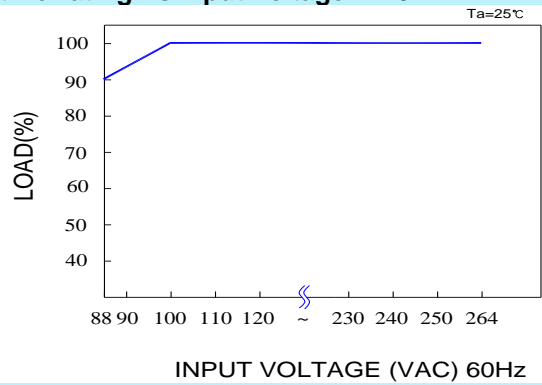
## Block Diagram : UD5-1



## De-rating Curve : E3

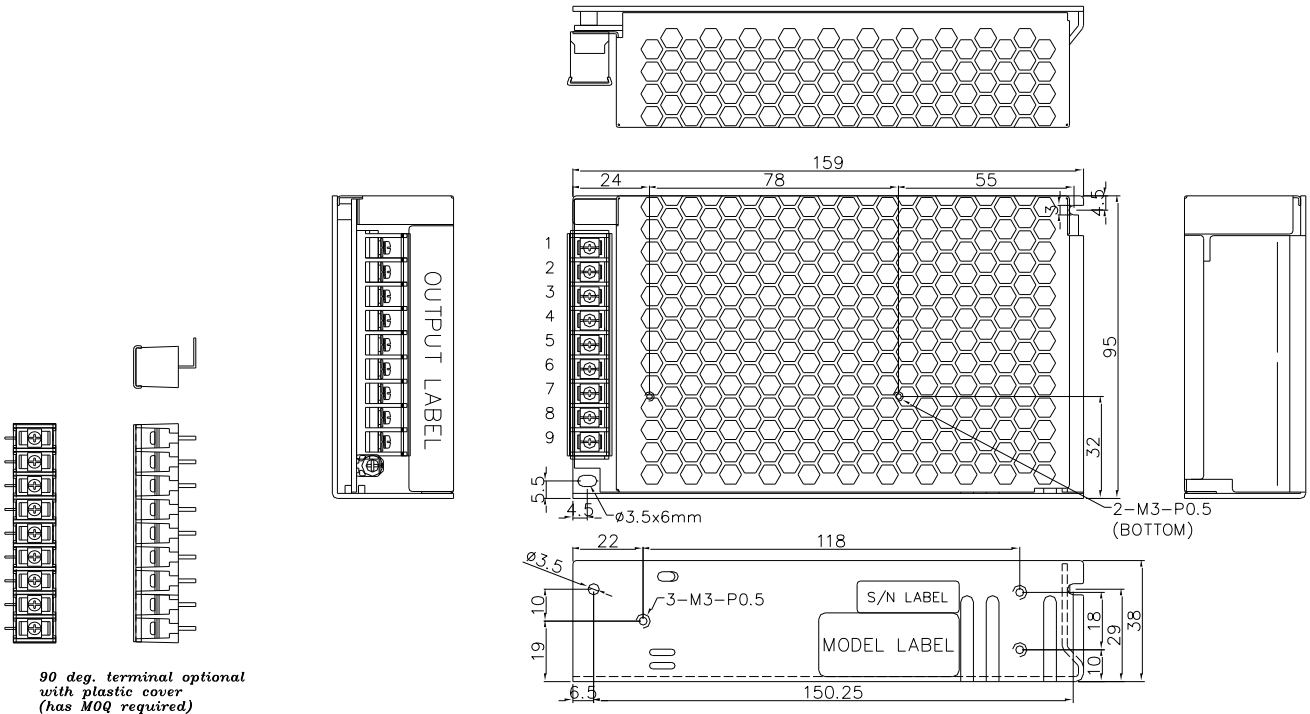


## Output De-rating Vs Input Voltage : M6



## Dimension:

(Unit: mm)



## NOTES

TERMINAL BLOCK: 9P, PITCH 7.62 mm WITH PC COVER

Model No.	1	2	3	4	5	6	7	8	9
SPS-N080-ID1/ID2/ID8	L	N	FG	N/C	N/C	G1	V1	G2	V2
SPS-N080-ID3/ID4	L	N	FG	N/C	N/C	G1	V1	V2	G2