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# SPS-N080-Tx Series

## Triple Output



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



### 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

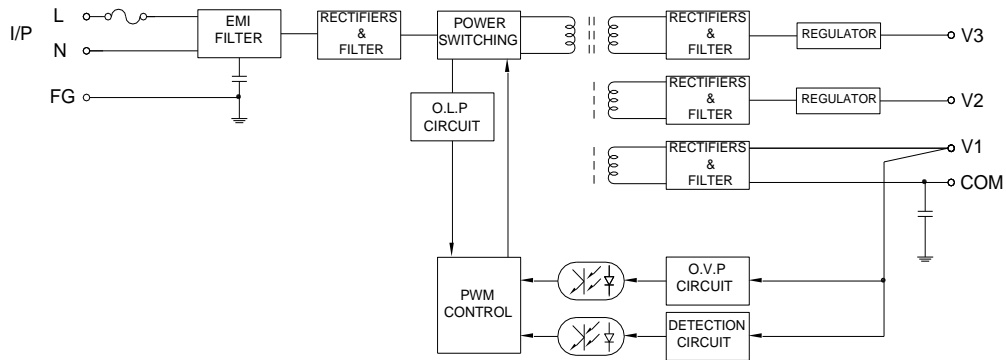
### Specification:

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-T2			SPS-N080-T3			SPS-N080-T4			
	Output	V1	V2	V3	V1	V2	V3	V1	V2	V3	
	Voltage	5V	12V	-12V	5V	15V	-15V	5V	12V	24V	
	Min Load	0.5A	0A	0A	0.5A	0A	0A	0.5A	0A	0A	
	Max Load	8A	4A	1A	8A	3.5A	1A	8A	3.5A	1.5A	
	Output Tolerance ②	±3%	±6%	±5%	±3%	±6%	±5%	±3%	±6%	±6%	
	Ripple Noise MAX. ③	80mV	120mV	150mV	80mV	150mV	200mV	80mV	120mV	240mV	
	Efficiency (TYP.)	79%			80%			82%			
	Output MAX.	80W			80W			82W			
	PROTECTION	Over Voltage	V1 : 5.8 ~ 7.0V : Shutdown and latch off, recover after re-start up.								
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, >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		
OTHERS	Cooling	Natural cooling.									
	M.T.B.F.	227.2K hours									
	Dimension	159 x 95 x 38 mm (L*W*H)									
	Packing	N.W.: 0.524Kg / 1pc ; 30pcs / 1.2 CUFT / 1 CTN									

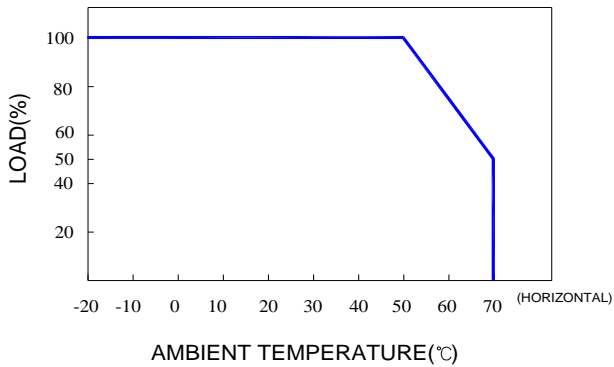
- NOTE
- ① All measurements which not mentioned are based on 230VAC input, **output Max** at ambient 25°C / 70%RH
  - ② Output tolerance included set up voltage, line regulation and load regulation.  
The regulation is measured at the condition : when any of output is with 20% ~ 100% **max load** and the rest of each outputs are with 60% **max load**, Each output could work within **max load** but must under total **output max**.
  - 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-Tx Series

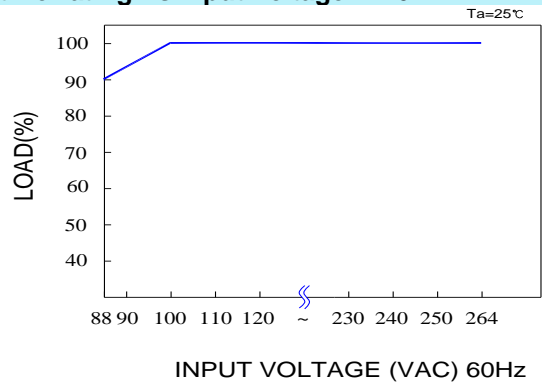
## Block Diagram : UT3-1



## De-rating Curve : E3

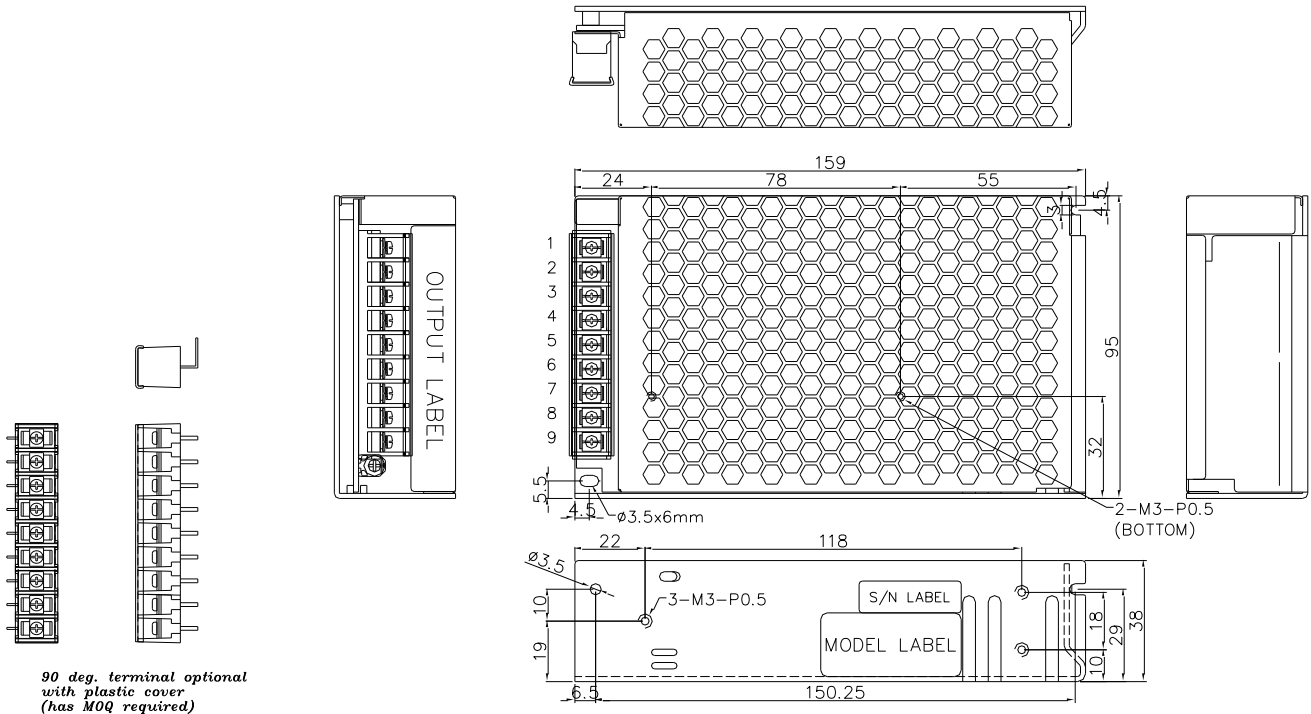


## Output De-rating Vs Input Voltage : M6



## 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-T2/T3	L	N	FG	V3	GND	GND	V1	GND	V2
SPS-N080-T4	L	N	FG	GND	V3	GND	V1	GND	V2