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# SPS-210-xx Series

## 210W, Single Output



212 x 115 x 50 mm  
 8.35 x 4.53 x 1.97 inch



### Features:

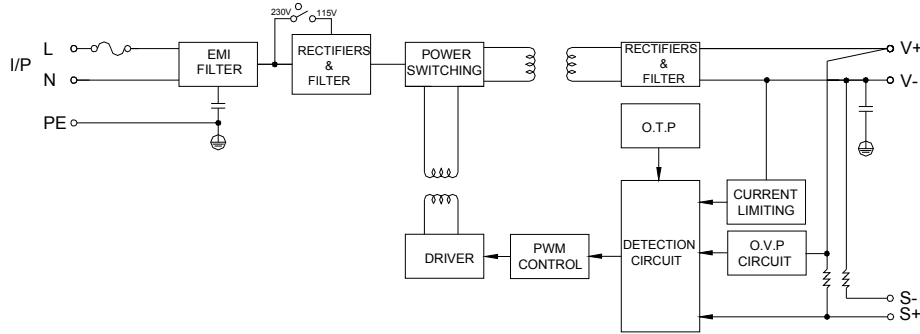
- \* Power ON with LED indicator
- \* Built in EMI filter, low ripple noise
- \* Over voltage protection
- \* Over load & short circuit, over temperature protection
- \* Output voltage  $\pm 10\%$  adjustment
- \* Output voltage remote sense
- \* 100% full load burn-in test
- \* Meet UL, cUL, TUV, CE standard, CB, approved
- \* 1 year warranty

### Specification:

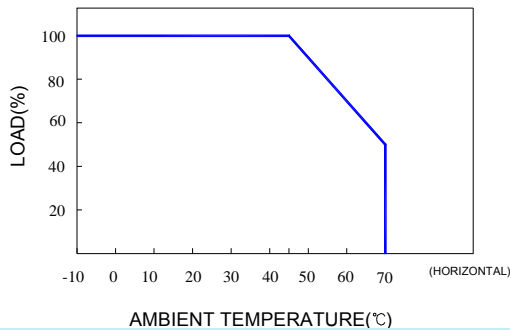
INPUT	Voltage ②	AC 90V ~ 132V or 176V ~ 264V selected by SW · DC 250V ~ 375V.								
	Frequency	47 ---- 63 Hz								
	Current	<4.5A @ 115V , <2.5A @ 230V AC input, full load condition								
	Inrush Current	<40A@115V , <70A@230V AC input, Cold start at 25°C ambient								
	Leakage Current	<1.5mA@264V AC input								
OUTPUT	MODEL No.	SPS-210-05	SPS-210-7.5	SPS-210-12	SPS-210-15	SPS-210-24	SPS-210-30	SPS-210-36	SPS-210-48	
	Voltage	5V	7.5V	12V	15V	24V	30V	36V	48V	
	Min Load	0A	0A	0A	0A	0A	0A	0A	0A	
	Max Load	40A	28A	17.5A	14A	8.8A	7.0A	5.9A	4.5A	
	Output Tolerance ③	$\pm 2\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	
	Ripple Noise MAX. ④	100mV	100mV	120mV	150mV	200mV	200mV	240mV	250mV	
	Efficiency (TYP.)	76%	78%	82%	82%	84%	84%	85%	86%	
Output MAX.	200W	210W	210W	210W	211W	210W	212W	216W		
PROTECTION	Over Voltage	5.8V~7.0V	8.6V~10.5V	13.8V~16.8V	17.3V~21.0V	27.6V~33.6V	34.5V~42V	41.4V~50.4V	55.2V~67.2V	
		Shutdown and latch off, recover after re-start up.								
	Over Load & Short Circuit	When power supply over 105%~ 135% max load or short circuit acted, power supply will be shutdown and auto recovery when fault condition been removed.								
	Over Temperature	Over 95°C $\pm 5^\circ\text{C}$ Shutdown, recovers automatically after fault condition has been removed.								
ELEC. CHAR.	Rise time	<30mS								
	Hold up time	>20mS@230V, full load condition								
	Setup time	<1.0 S@115V , <1.0 S@230V								
	Remote sensing	(RS+, RS-).								
ENVIRONMENT	Temperature ⑤	Operating: -10 ~ +70°C ; De-rating: 45 ~ 70°C: 2.0%/°C ; Storage: -20 ~ +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-PE:1.5KVAC, O/P-PE:0.5KVDC, 1minute								
	Isolation resistance	I/P-O/P, I/P-PE, O/P-PE > 100M $\Omega$ /500VDC at 25°C / 70% RH								
	Safety standard	UL 60950-1 2 <sup>nd</sup> , CSA C22.2 No. 60950-1- 07 1 <sup>st</sup> , TUV EN 60950-1:2006, standard IEC 60950-1:2005, approved								
EMC	EMI	Reference EN 55022 CLASS B, FCC CFR 47 PART 15 CLASS B, CNS 13438 CLASS B.								
	EMS	Compliance to EN61000-3-2 CLASS A, EN61000-3-3								
OTHERS	EMS	EN 55024 : EN 61000-4-2,3,4,5,6,8,11								
	Cooling	Natural cooling.								
	M.T.B.F.	272 K hours								
	Dimension	212 x 115 x 50 mm (L*W*H)								
	Packing	N.W.: 0.95 Kg / 1pc; 15pcs / 1.44 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 If the input voltage is DC 250~375V, <b>the AC slide switch must stay at 230V range.</b>								
		③ Output tolerance included set up voltage, line regulation and load regulation.								
		④ Ripple & noise are measured at 115/230VAC 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.								
		⑤ 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 100/200VAC..								
		⑥ The power supply is considered a component of end-equipment. The end-equipment must be re-confirmed whether comply with EMC directives.								

# SPS-210-xx Series

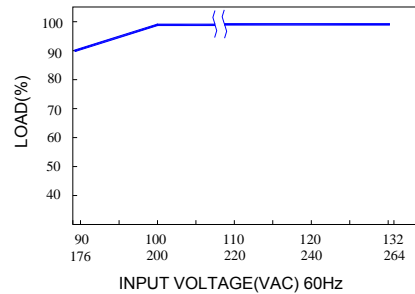
## Block Diagram : SS8



## De-rating Curve :

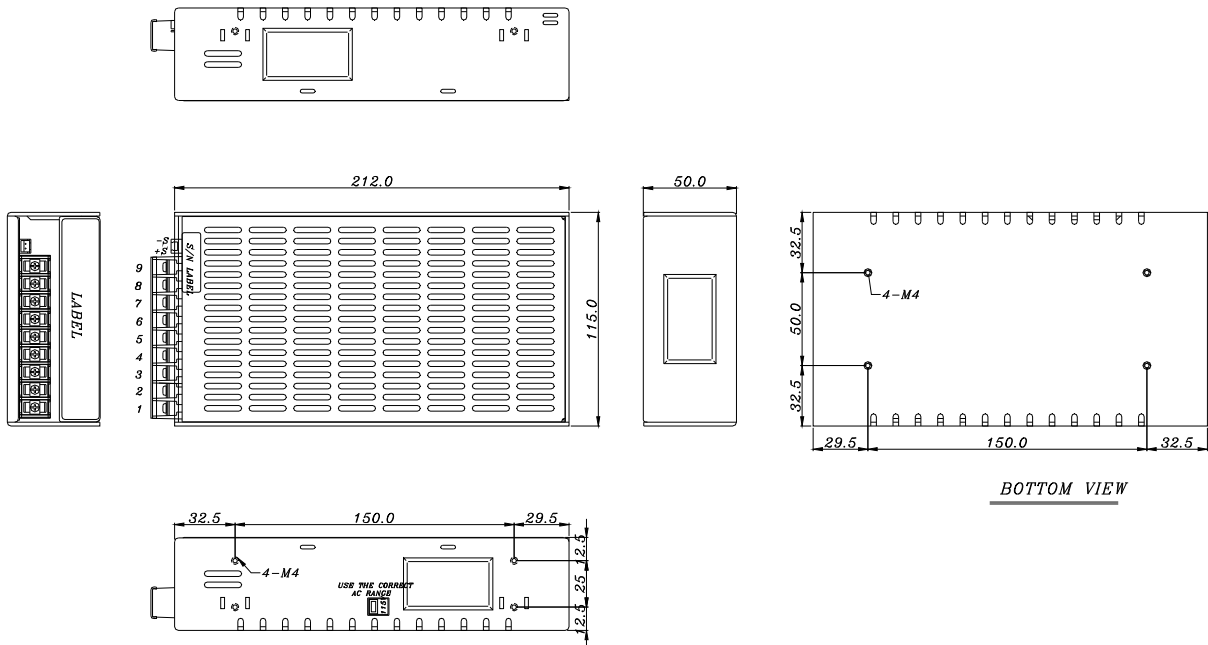


## Output De-rating Vs Input Voltage :



## Dimension:

(Unit: mm)



## NOTES:

TERMINAL BLOCK: 9P, PITCH 9.5mm WITH PC COVER.

MODEL No.	1	2	3	4	5	6	7	8	9
SPS-210-xx	L	N	PE	-V	-V	-V	+V	+V	+V