

100W Single Output with PFC Function

SP-100 series



■ Features :

- Universal AC input / full range
- Built-in active PFC function, PF>0.93
- Protections: Short circuit / Overload / Over voltage
- Built-in constant current limiting circuit
- Remote ON-OFF control(Optional)
- LED indicator for power on
- 100% full load burn-in test
- Fixed switching frequency at PFC:67KHz PWM:134KHz
- 3 years warranty

SPECIFICATION



MODEL		SP-100-3.3	SP-100-5	SP-100-7.5	SP-100-12	SP-100-13.5	SP-100-15	SP-100-24	SP-100-27	SP-100-48	
OUTPUT	DC VOLTAGE	3.3V	5V	7.5V	12V	13.5V	15V	24V	27V	48V	
	RATED CURRENT	20A	20A	13.5A	8.5A	7.5A	6.7A	4.2A	3.8A	2.1A	
	CURRENT RANGE	0 ~ 20A	0 ~ 20A	0 ~ 13.5A	0 ~ 8.5A	0 ~ 7.5A	0 ~ 6.7A	0 ~ 4.2A	0 ~ 3.8A	0 ~ 2.1A	
	RATED POWER	66W	100W	101.25W	102W	101.25W	100.5W	100.8W	102.6W	100.8W	
	RIPPLE & NOISE (max.) Note.2	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	150mVp-p	150mVp-p	250mVp-p	
	VOLTAGE ADJ. RANGE	3.14 ~ 3.63V	4.75 ~ 5.5V	7.13 ~ 8.25V	11.4 ~ 13.2V	12.8 ~ 14.9V	14.3 ~ 16.5V	22.8 ~ 26.4V	25.7 ~ 29.7V	45.6 ~ 52.8	
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%	
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	SETUP, RISE TIME	600ms, 30ms at full load									
	HOLD UP TIME (Typ.)	20ms at full load									
INPUT	VOLTAGE RANGE	85 ~ 264VAC 120 ~ 370VDC									
	FREQUENCY RANGE	47 ~ 63Hz									
	POWER FACTOR (Typ.)	PF>0.93/230\	/AC PF>(0.97/115VAC a	t full load						
	EFFICIENCY (Typ.)	75%	79%	82%	82.5%	83%	84%	87%	86%	84%	
	AC CURRENT (Typ.)	1.7A/115VAC 0.8A/230VAC									
	INRUSH CURRENT (Typ.)	COLD START 35A/230VAC									
	LEAKAGE CURRENT	<2mA / 240VAC									
PROTECTION		105 ~ 150% rated output power									
	Protection type: Constant current limiting, recovers automatically after fault condition is removed										
	OVERVOLTAGE	3.63 ~ 4.46V 5.5 ~ 6.75V 8.25 ~ 10.13V 13.2 ~ 16.2V 14.85 ~ 18.23V 16.5 ~ 20.25V 26.4 ~ 32.4V 29.7 ~ 36.45V 52.8 ~ 64.8°									
	OVER VOLTAGE	Protection type : Shut down o/p voltage, re-power on to recover									
FUNCTION	REMOTE CONTROL(OPTION)	CN1:4 ~ 10VDC POWER ON, <0 ~ 0.8VDC POWER OFF									
ENVIRONMENT	WORKING TEMP.	-10 \sim +60 $^{\circ}\mathrm{C}$ (Refer to output load derating curve)									
	WORKING HUMIDITY	20 ~ 90% RH non-condensing									
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH									
	TEMP. COEFFICIENT	$\pm 0.05\%$ °C (0~50°C)									
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes									
	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 approved									
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC									
EMC	ISOLATION RESISTANCE	LATION RESISTANCE I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25 / 70% RH									
(Note 4)	EMC EMISSION	Compliance to EN55032 (CISPR32) Class B,EN61000-3-2,-3									
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, light industry level, criteria A									
OTHERS	MTBF	211.3K hrs min. MIL-HDBK-217F (25°C)									
	DIMENSION	179*99*45mm (L*W*H)									
	PACKING	0.66Kg; 20pc	s/14.3Kg/1.170	CUFT							
NOTE	Ripple & noise are measure Tolerance : includes set up The power supply is consid a 360mm*360mm metal pla	All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Tolerance: includes set up tolerance, line regulation and load regulation. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)									



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