



## Features:

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC Fan
- Built-in fan speed control
- Fixed switching frequency at 100KHz
- 3 years warranty

## **SPECIFICATION**



MODEL		SP-320-3.3	SP-320-5	SP-320-7.5	SP-320-12	SP-320-13.5	SP-320-15	SP-320-24	SP-320-27	SP-320-36	SP-320-48	
OUTPUT	DC VOLTAGE		3.3V	5V	7.5V	12V	13.5V	15V	24V	27V	36V	48V
	RATED CURRENT		55A	55A	40A	25A	22A	20A	13A	11.7A	8.8A	6.7A
	CURRENT RANGE		0 ~ 60A	0 ~ 55A	0 ~ 40A	0 ~ 25A	0 ~ 22A	0 ~ 20A	0 ~ 13A	0 ~ 11.7A	0~8.8A	0 ~ 6.7A
	RATED POWER		181.5W	275W	300W	300W	297W	300W	312W	315.9W	316.8W	321.6W
	RIPPLE & NOISE (max.) Note.2		150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	220mVp-p	240mVp-p
	VOLTAGE ADJ. RANGE		3.14 ~ 3.63V	4.5 ~ 5.5V	6~9V	10 ~ 13.2V	12 ~ 15V	13.5 ~ 18V	20 ~ 26.4V	26 ~ 31.5V	32.4 ~ 39.6V	41 ~ 56V
	VOLTAGE TOLERANCE Note.3		±1.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION		±0.5%	±0.5%	±0.5%	±0.3%	±0.3%	±0.3%	±0.2%	±0.2%	±0.2%	±0.2%
	LOAD REGULATION		±1.5%	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME		800ms, 50ms/230VAC 2500ms, 50ms/115VAC at full load									
	HOLD UP TIME (Typ.)		16ms/230VAC 16ms/115VAC at full load									
INPUT												
	FREQUENCY RANGE		47 ~ 63Hz									
	POWER FACTOR (Typ.)		PF>0.95/230VAC PF>0.98/115VAC at full load									
	EFFICIENCY (Typ.)		74%	79%	83%	86%	86%	86%	87%	88%	87%	89%
		115VAC	2.5A	5A	0070	0070	0070	0070	01 70	0070	0170	0070
	AC CURRENT (Typ.)	230VAC	1.5A	2.5A								
	INRUSH CURREN		20A/115VA		30VAC							
	LEAKAGE CURRENT		<1mA/240VAC									
PROTECTION	OVERLOAD		105 ~ 135% rated output power									
			Protection type: Hiccup mode, recovers automatically after fault condition is removed									
	OVER VOLTAGE		3.8 ~ 4.5V   5.75 ~ 6.75V   9.4 ~ 10.9V   13.8 ~ 16.2V   15.5 ~ 18.2V   18 ~ 21V   27.6 ~ 32.4V   33.7 ~ 39.2V   45 ~ 52.5V   57.6 ~ 67.2V									
			Protection type: Shut down o/p voltage, re-power on to recover									
	OVER TEMPERATURE		$80^{\circ} \pm 5^{\circ} $ ( $70^{\circ} \pm 5^{\circ} $ 3.3V,5V only) (TSW1 : detect on heatsink of power transistor)									
			Protection type: Shut down o/p voltage, recovers automatically after temperature goes down									
ENVIRONMENT	WORKING TEMP.		-20 ~ +65°C (Refer to output load derating curve)									
	WORKING HUMIDITY		20 ~ 90% RH non-condensing									
			-40 ~ +85°C, 10 ~ 95% RH									
	TEMP. COEFFICIENT		±0.03%/°C (0~50°C)									
	VIBRATION		10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes									
	SAFETY STANDARDS		UL60950-1, TUV EN60950-1, CCC GB4943(except for 3.3V, 36V) approved									
SAFETY & EMC (Note 4)	WITHSTAND VOLTAGE		I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC									
	ISOLATION RESISTANCE		I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH									
	EMI CONDUCTION & RADIATION											
	HARMONIC CURRENT											
	EMS IMMUNITY		Compliance to EN61000-3-2,-3									
	MTBF		Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, light industry level, criteria A									
OTHERS			207K hrs min. MIL-HDBK-217F (25°C)									
	DIMENSION		215*115*50mm (L*W*H)									
	PACKING		1.1Kg; 12pcs/14Kg/0.92CUFT									
NOTE	<ol> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>Tolerance: includes set up tolerance, line regulation and load regulation.</li> <li>The power supply is considered a component which will be installed into a final equipment. 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."         <ul> <li>(as available on http://www.meanwell.com)</li> </ul> </li> <li>Derating may be needed under low input voltages. Please check the derating curve for more details.</li> </ol>											



