



## Features:

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- Protections:Short circuit/Over load/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-320-5	SP-320-7.5	SP-320-12	SP-320-13.5	SP-320-15	SP-320-24	SP-320-27	SP-320-48
ОИТРИТ	DC VOLTAGE	5V	7.5V	12V	13.5V	15V	24V	27V	48V
	RATED CURRENT	55A	40A	25A	22A	20A	13A	11.7A	6.7A
	CURRENT RANGE	0 ~ 55A	0~40A	0 ~ 25A	0 ~ 22A	0 ~ 20A	0 ~ 13A	0 ~ 11.7A	0 ~ 6.7A
	RATED POWER	275W	300W	300W	297W	300W	312W	315.9W	321.6W
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	240mVp-p
	VOLTAGE ADJ. RANGE	4.5 ~ 5.5V	6~9V	10 ~ 13.2V	12 ~ 15V	13.5 ~ 18V	20 ~ 26.4V	26 ~ 31.5V	41 ~ 56V
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.3%	±0.3%	±0.3%	±0.2%	±0.2%	±0.2%
	LOAD REGULATION	±1.0%	±1.0%	±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 TIME (Typ.)	16ms/230VAC 16ms/115VAC at full load							
INPUT	VOLTAGE RANGE Note.5	88 ~ 264VAC 120 ~ 370VDC							
	FREQUENCY RANGE	47 ~ 63Hz							
	POWER FACTOR (Typ.)	PF>0.95/230VAC							
	EFFICIENCY (Typ.)	79%	83%	86%	86%	86%	87%	88%	89%
	AC CURRENT (Typ.)	5A/115VAC	2.5A/230VAC	•		,	•		
	INRUSH CURRENT (Typ.)	20A/115VAC 40A/230VAC							
	LEAKAGE CURRENT	<1mA/240VA0	;						
PROTECTION	OVER LOAD	105 ~ 135% rated output power							
		Protection type	: Hiccup mode,	recovers autom	natically after fa	ult condition is r	emoved		
	OVER VOLTAGE	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	57.6 ~ 67.2V
		Protection type	: Shut down o/p	o voltage, re-pov	wer on to recove	r			
	OVER TEMPERATURE	80°C ±5°C (70°C ±5°C 5V only) (TSW1 : Detect on heatsink of power transistor)							
	OVER TEMPERATURE	Protection type: Shut down o/p voltage, recovers automatically after temperature goes down							
ENVIRONMENT	WORKING TEMP.	-20 ~ +65 $^{\circ}$ C (Refer to output load derating curve)							
	WORKING HUMIDITY	20 ~ 90% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-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 Approved							
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC							
SAFETY &	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC							
EMC	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B							
(Note 4)	HARMONIC CURRENT	Compliance to EN61000-3-2,-3							
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, Light industry level, criteria A							
OTHERS	MTBF	207K hrs min. MIL-HDBK-217F ( $25^{\circ}$ C)							
	DIMENSION	215*115*50mm	n (L*W*H)						
	PACKING	1.1Kg; 12pcs/1	4Kg/0.92CUFT						
NOTE	Ripple & noise are measure     Tolerance : includes set up     The power supply is conside EMC directives.	pecially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.  Passured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.  Bet up tolerance, line regulation and load regulation.  Considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets led under low input voltages. Please check the derating curve for more details.							
								File Name:SP-32	0-SPEC 2005-10-

5V

30

AMBIENT TEMPERATURE (°C)

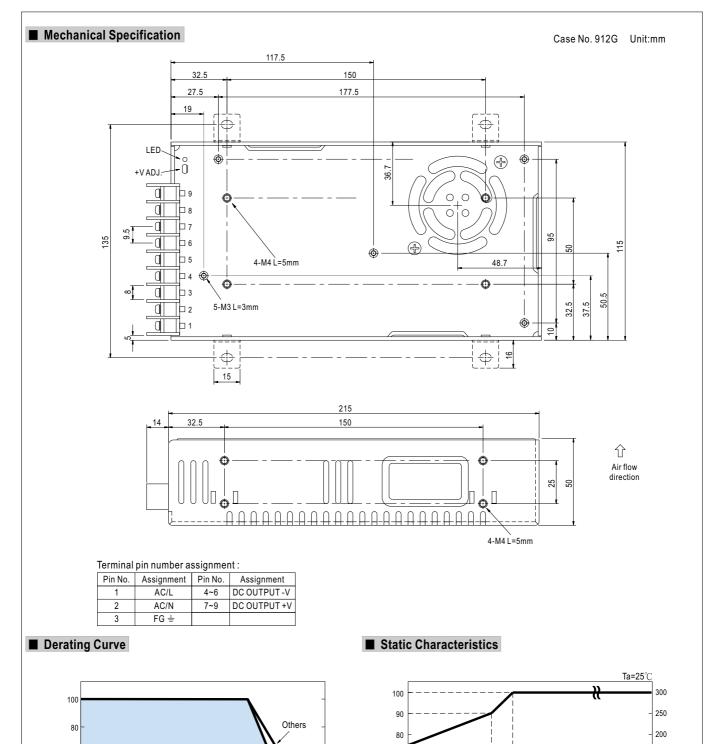


60

40

20

LOAD (%)



LOAD (%)

60

50

115 135 155 175

INPUT VOLTAGE (VAC) 60Hz

150

100

50

25