

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Selected official Mean Well product data

MEAN WELL SP-240 SERIES

SP-240-24

240 W ENCLOSED SWITCHING POWER SUPPLY

This package includes the official manufacturer specification page for the SP-240 family, including the SP-240-24 model column.

REFERENCE PACKAGE OFFICIAL DOCUMENT: SP-240-SPEC

Manufacturer source pagination and visual content are retained after this Amikon cover.



■ 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 ON / OFF control
- LED indicator for power on
- Fixed switching frequency at 90KHz
- 3 years warranty

User's Manual



SPECIFICATION

MODEL		SP-240-5	SP-240-7.5	SP-240-12	SP-240-15	SP-240-24	SP-240-30	SP-240-48
OUTPUT	DC VOLTAGE	5V	7.5V	12V	15V	24V	30V	48V
	RATED CURRENT	45A	32A	20A	16A	10A	8A	5A
	CURRENT RANGE	0 ~ 45A	0 ~ 32A	0 ~ 20A	0 ~ 16A	0 ~ 10A	0 ~ 8A	0 ~ 5A
	RATED POWER	225W	240W	240W	240W	240W	240W	240W
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	4 ~ 6V	6 ~ 9V	10 ~ 14V	12 ~ 18V	20 ~ 28V	27 ~ 33V	41 ~ 56V
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±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%
	SETUP, RISE TIME	800ms, 50ms/230VAC 1500ms, 50ms/115VAC at full load						
HOLD UP TIME (Typ.)	20ms/230VAC 20ms/115VAC at full load							
INPUT	VOLTAGE RANGE Note.5	88 ~ 264VAC 124 ~ 370VDC						
	FREQUENCY RANGE	47 ~ 63Hz						
	POWER FACTOR (Typ.)	PF>0.95/230VAC PF>0.98/115VAC at full load						
	EFFICIENCY (Typ.)	79%	83%	86%	86%	87%	88%	89%
	AC CURRENT (Typ.)	3.6A/115VAC 1.8A/230VAC						
	INRUSH CURRENT (Typ.)	25A/115VAC 40A/230VAC						
LEAKAGE CURRENT	<2mA / 240VAC							
PROTECTION	OVERLOAD	105 ~ 135% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed						
	OVER VOLTAGE	6.3 ~ 7.5V 9.4 ~ 10.9V 14.7 ~ 17.5V 19 ~ 22.5V 29.5 ~ 35V 34.7 ~ 41V 57.6 ~ 67.2V Protection type : Shut down o/p voltage, re-power on to recover						
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down						
	FAN CONTROL	RTH2≥40℃ FAN ON, ≤35℃ FAN OFF(Typ.)						
ENVIRONMENT	WORKING TEMP.	-20 ~ +70℃ (Refer to output load derating curve)						
	WORKING HUMIDITY	20 ~ 90% RH non-condensing						
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH						
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)						
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes						
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60950-1 approved						
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC						
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH						
	EMI CONDUCTION & RADIATION	Compliance to EN55032 (CISPR32) Class B						
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3						
OTHERS	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, light industry level, criteria A						
	MTBF	284K hrs min. MIL-HDBK-217F (25℃)						
	DIMENSION	190*93*50mm (L*W*H)						
	PACKING	0.8Kg; 18pcs/15.4Kg/1.05CUFT						
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. 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) 5. Derating may be needed under low input voltages. Please check the derating curve for more details. ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx							