



240W Level VI Desktop Type Power Supply

ENP-240 series



■ Features

- Universal AC input / Full range
- Built-in active PFC function
- Energy efficiency Level VI
- No load power consumption <0.15W
- Comply with EISA 2007/DoE, NRCan and EU ErP
- 125% peak load capability
- Fanless design, cooling by free air convection
- Protection: Short circuit / Overload / Over voltage / Over temperature
- 3 years warranty

■ Applications

- Land mobile radio system
- Surveillance system
- TV antenna facility

■ Description

ENP-240 series is a 240W desktop type power supply working perfectly for communication related applications. Observing the standard 7" width size in the land mobile radio field, it provides the most frequently used voltage in the communication field. With the rugged mechanical design along with the high efficiency circuitry, it operates for the ambient temperature range -30°C~+70°C under free air convection.

■ Model Encoding

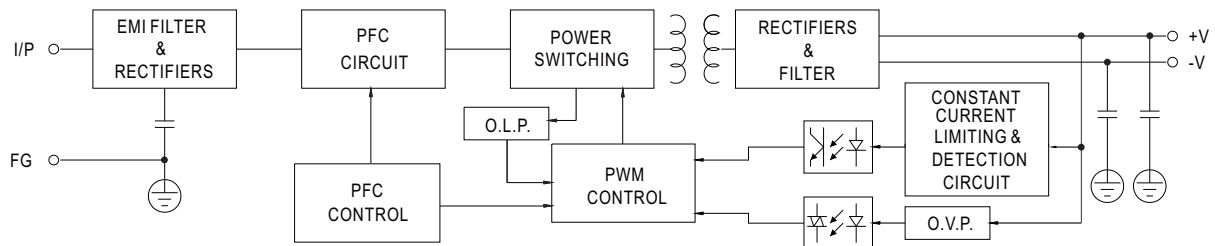
ENP - 240 - 24

Nominal voltage
Rated wattage
Series name

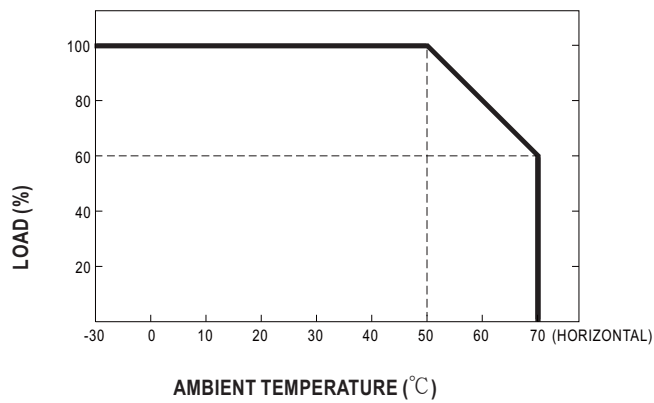
SPECIFICATION

MODEL		ENP-240-12		ENP-240-24		ENP-240-48				
OUTPUT	DC VOLTAGE		13.8V		27.6V		55.2V			
	RATED CURRENT		17.4A		8.7A		4.4A			
	CURRENT	RATED	0 ~ 17.4A		0 ~ 8.7A		0 ~ 4.4A			
		PEAK Note.2	21.7A		10.9A		5.5A			
	WATTAGE	RATED	240.1W		240.1W		243W			
		PEAK Note.2	300W		300W		304W			
	RIPPLE & NOISE (max.) Note.3		150mVp-p		150mVp-p		350mVp-p			
	VOLTAGE ADJ. RANGE		11.5 ~ 15V		23.5 ~ 30V		47.5 ~ 58.8V			
	VOLTAGE TOLERANCE Note.4		±1.0%		±1.0%		±1.0%			
	LINE REGULATION Note.5		±0.5%		±0.5%		±0.5%			
	LOAD REGULATION Note.6		±2.0%		±1.0%		±0.5%			
SETUP, RISE TIME Note.7		1000ms, 100ms at full load								
HOLD UP TIME (Typ.)		20ms at full load								
INPUT	VOLTAGE RANGE Note.8		90 ~ 264VAC 127 ~ 370VDC							
	FREQUENCY RANGE		47 ~ 63Hz							
	POWER FACTOR (Typ.)		PF>0.98/115VAC, PF>0.95/230VAC at full load							
	EFFICIENCY (Typ.)		91%				93.5%		94%	
	AC CURRENT (Typ.)		2.5A/115VAC 1.25A/230VAC							
	INRUSH CURRENT (Typ.)		COLD START 75A at 230VAC							
	LEAKAGE CURRENT		<3.5mA / 240VAC							
	NO LOAD POWER CONSUMPTION		<0.15W							
PROTECTION	SHORT CIRCUIT		Protection type : Constant current limiting, recovers automatically after fault condition is removed							
	OVERLOAD		Normally works within 110 ~ 125% rated output power for more than 3 seconds and switches to constant current limiting, with auto-recovery after the peak load condition is removed							
			Constant current limiting, if >125% rated power, with auto-recovery after the overload condition is removed							
	OVER VOLTAGE		15.5 ~ 18.2V		31 ~ 36.5V		62.1 ~ 72.9V			
			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								
ENVIRONMENT	WORKING TEMP.		-30 ~ +70℃ (Refer to "Derating Curve")							
	WORKING HUMIDITY		20 ~ 95% RH non-condensing							
	STORAGE TEMP., HUMIDITY		-40 ~ +85℃, 10 ~ 95% RH non-condensing							
	TEMP. COEFFICIENT		±0.05%/℃ (0 ~ 50℃)							
	VIBRATION		10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes							
SAFETY & EMC (Note 9)	SAFETY STANDARDS		IEC60950-1, UL60950-1, EAC TP TC 004 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							
	EMC EMISSION		Parameter		Standard		Test Level / Note			
			Conducted		EN55032 (CISPR32) / FCC PART15 (CISPR22)		Class B			
			Radiated		EN55032 (CISPR32) / FCC PART15 (CISPR22)		Class B			
			Harmonic Current		EN61000-3-2		-----			
			Voltage Flicker		EN61000-3-3		-----			
	EMC IMMUNITY		EN55024							
			Parameter		Standard		Test Level / Note			
			ESD		EN61000-4-2		Level 3, 8KV air ; Level 2, 4KV contact			
			Radiated		EN61000-4-3		Level 2, 3V/m			
			EFT / Burst		EN61000-4-4		Level 2, 1KV			
			Surge		EN61000-4-5		Level 2, 1KV/Line-Line,Level 3, 2KV/Line-Earth			
			Conducted		EN61000-4-6		Level 2, 3Vrms			
Magnetic Field			EN61000-4-8		Level 1, 1A/m					
Voltage Dips and Interruptions			EN61000-4-11		>95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250 periods					
OTHERS	MTBF		170.5K hrs min. MIL-HDBK-217F (25℃)							
	DIMENSION		192*178*45.5mm (L*W*H)							
	PACKING		1.23Kg; 10pcs/13.3Kg /1.34CUFT							
NOTE		1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Peak current or peak power up to 3 seconds is provided. 3. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 4. Tolerance : includes set up tolerance, line regulation and load regulation. 5. Line regulation is measured from low line to high line at rated load. 6. Load regulation is measured from 0% to 100% rated load. 7. Length of set up time is measured at cold first start. Turning ON/OFF the power supply very quickly may lead to increase of the set up time. 8. Derating may be needed under low input voltages. Please check the derating curve for more details. 9. The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the 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) 10. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft).								

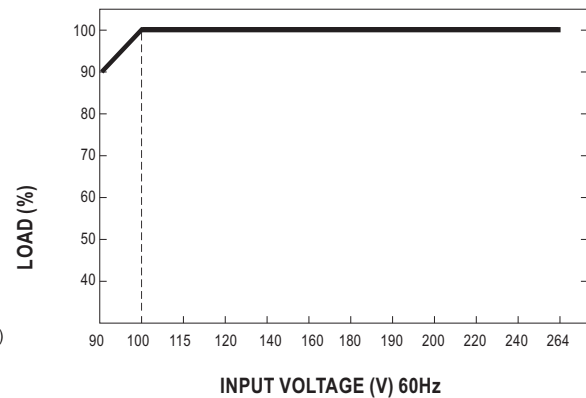
■ Block Diagram



■ Derating Curve

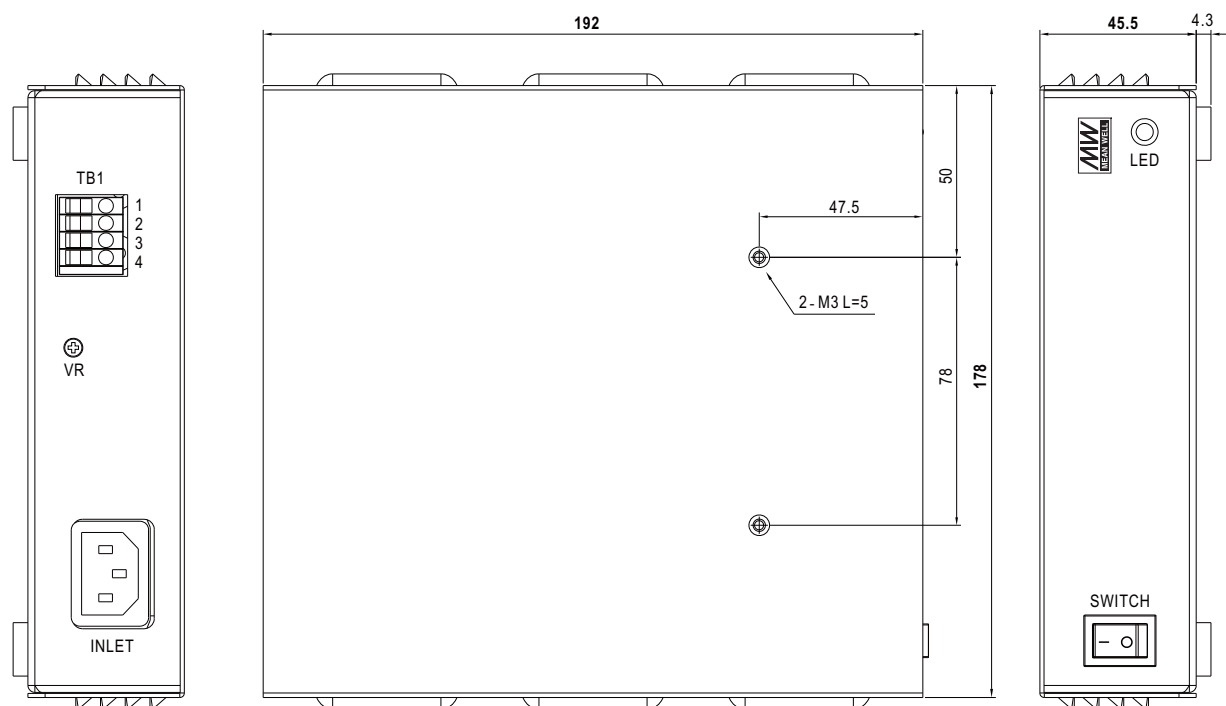


■ Static Characteristics



Mechanical Specification

Case No. 252 Unit:mm



Terminal Pin No. Assignment (TB1):

Pin No.	Assignment
1,2	+V
3,4	-V

Installation Manual

Please refer to : <http://www.meanwell.com/manual.html>