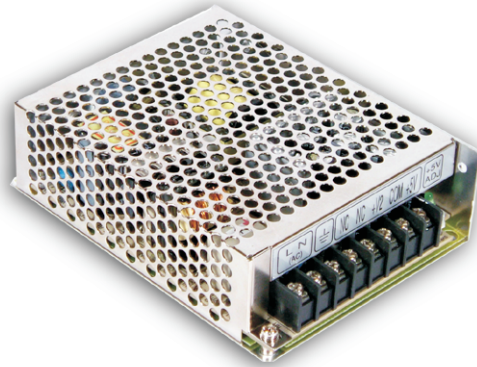




# 50W Triple Output Switching Power Supply

# NET-50 series

Authorized Distributor: Total Power International, Inc. Toll Free: 877-646-0900(US) PH# (978)453-7272 www.total-power.com



### Features :

- Universal AC input/Full range
- Protections:Short circuit/Over load/Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- 2 years warranty

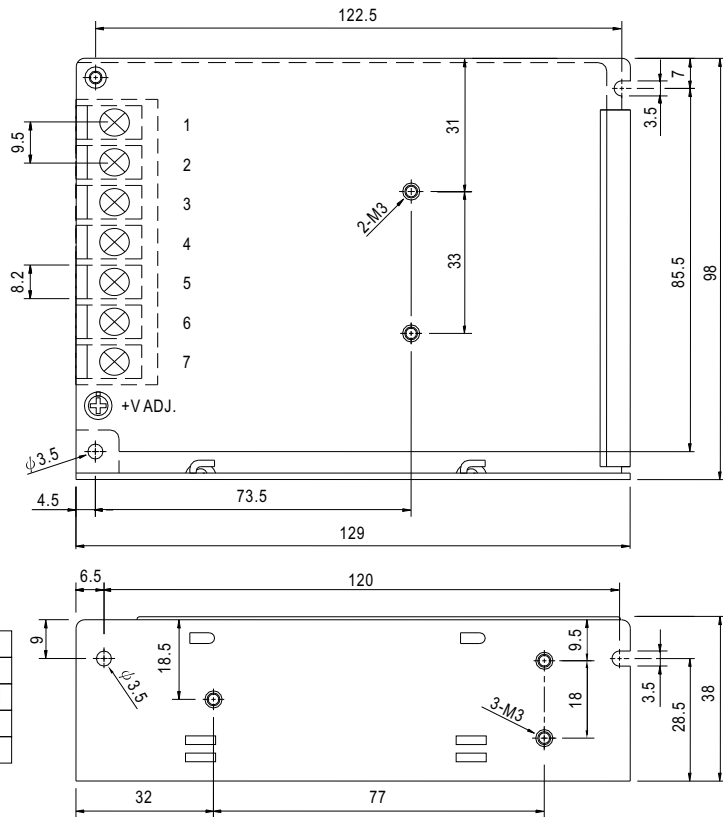


### SPECIFICATION

MODEL	NET-50A			NET-50B			NET-50C			NET-50D			
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH3	CH1	CH2	CH3	CH1	CH2	CH3	CH1	CH2	CH3
	DC VOLTAGE	5V	12V	-5V	5V	12V	-12V	5V	15V	-15V	5V	24V	12V
	RATED CURRENT	4A	2A	0.5A	4A	2A	0.5A	4A	1.5A	0.5A	3A	1A	1A
	CURRENT RANGE Note.6	0.6 ~ 5A	0.2 ~ 2.5A	0.1 ~ 0.7A	0.6 ~ 5A	0.2 ~ 2.5A	0.1 ~ 0.7A	0.6 ~ 5A	0.1 ~ 2A	0.1 ~ 0.7A	0.6 ~ 5A	0.1 ~ 1.5A	0.1 ~ 1.5A
	RATED POWER	46.5W			50W			50W			51W		
	RIPPLE & NOISE (max.) Note.2	80mVp-p	120mVp-p	120mVp-p	80mVp-p	120mVp-p	120mVp-p	80mVp-p	150mVp-p	150mVp-p	80mVp-p	200mVp-p	120mVp-p
	VOLTAGE ADJ. RANGE	CH1:4.75 ~ 5.5V			CH1: 4.75 ~ 5.5V			CH1: 4.75 ~ 5.5V			CH1: 4.75 ~ 5.5V		
	VOLTAGE TOLERANCE Note.3	±2.0%	±6.0%	±5.0%	±2.0%	±6.0%	±5.0%	±2.0%	±8.0%	±5.0%	±2.0%	±8.0%	±6.0%
	LINE REGULATION Note.4	±0.5%	±1.0%	±1.0%	±0.5%	±1.0%	±1.0%	±0.5%	±1.0%	±1.0%	±0.5%	±1.0%	±1.0%
	LOAD REGULATION Note.5	±1.5%	±3.0%	±1.0%	±1.5%	±3.0%	±1.0%	±1.5%	±3.0%	±1.0%	±1.5%	±3.0%	±3.0%
SETUP, RISE TIME	500ms, 30ms/230VAC			1200ms, 30ms/115VAC at full load									
HOLD TIME (Typ.)	50ms/230VAC			10ms/115VAC at full load									
INPUT	VOLTAGE RANGE	85 ~ 264VAC			120 ~ 370VDC								
	FREQUENCY RANGE	47 ~ 63Hz											
	EFFICIENCY (Typ.)	76%			78%			78%			80%		
	AC CURRENT (Typ.)	1.1A/115VAC			0.65A/230VAC								
	INRUSH CURRENT (Typ.)	COLD START 45A											
LEAKAGE CURRENT	<2mA / 240VAC												
PROTECTION	OVER LOAD	110 ~ 150% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed											
	OVER VOLTAGE	CH1: 5.75 ~ 6.75V Protection type : Shut down o/p voltage, re-power on to recover											
ENVIRONMENT	WORKING TEMP.	-20 ~ +60°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 ~ 45°C)											
VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes												
SAFETY & EMC (Note 6)	SAFETY STANDARDS	UL60950-1, CB(IEC60950-1) Approved											
	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											
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B											
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3											
EMS IMMUNITY	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, ENV50204, EN55024, EN61000-6-1 Light industry level, criteria A												
OTHERS	MTBF	348.4K hrs min. MIL-HDBK-217F (25°C)											
	DIMENSION	129*98*38mm (L*W*H)											
	PACKING	0.44Kg; 45pcs/21Kg/1.24CUFT											
NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. 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>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. Line regulation is measured from low line to high line at rated load.</li> <li>5. Load regulation is measured from 20% to 100% rated load, and other output at 60% rated load.</li> <li>6. Each output can work within current range. But total output power can't exceed rated output power.</li> <li>7. 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.</li> </ol>												

**Mechanical Specification**

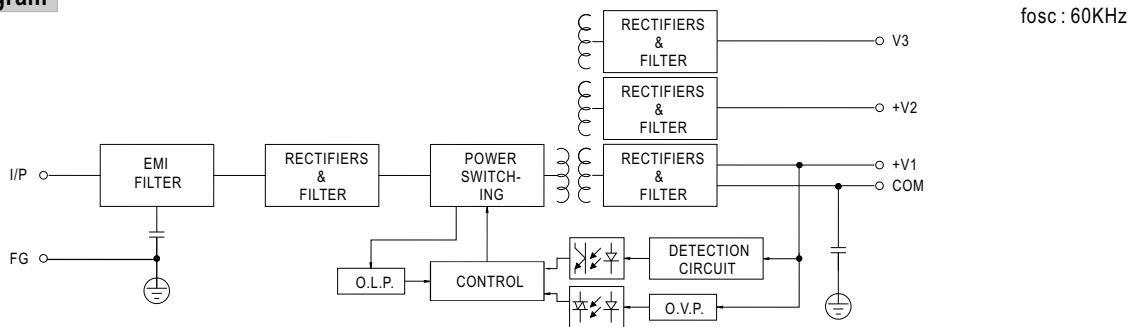
Case No. 903 Unit:mm



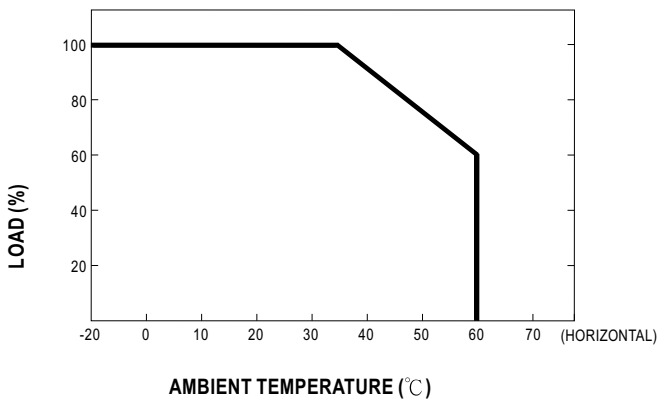
Terminal Pin. No Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	5	DC OUTPUT +V2
2	AC/N	6	DC OUTPUT COM
3	FG $\perp$	7	DC OUTPUT +V1
4	DC OUTPUT V3		

**Block Diagram**



**Derating Curve**



**Output Derating VS Input Voltage**

