

TOTAL POWER INT'L

UNIVERSAL INPUT HARMONIC CORRECTION AC-DC OPEN FRAME SINGLE & TRIPLE OUTPUT 50 WATTS INTERNAL SWITCHING POWER SUPPLIES TPVP50 SERIES



FEATURES:

- ACCOMMODATE UNIVERSAL AC SOURCES
- MEET IEC1000-3-2 HARMONIC CORRECTION
- MEET UNIVERSAL SAFETY STANDARDS
- EMI MEET CISPR PUB.22 CLASS B
- CE MARKING COMPLIANCE

SPECIFICATION

INPUT SPECIFICATION

Input Voltage: Typ. 90-264Vac with PFC.
Input Connector: Molex V-M connector.
Input Frequency: 47-63Hz.
Inrush Current: Typ. 27A @230Vac.
Input Current: Typ. 0.6A@115Vac, 0.3A@230Vac.
Dielectric Withstand: Meet IEC950.
EMI: Meet CISPR PUB.22 Class B.
Hold-up Time: Typ. 55mS @ 115Vac & 230Vac.
Power Factor Correction: Meet Harmonic Correction per IEC1000-3-2. PF typ. 0.95-0.99.
Earth Leakage: Less than 0.7mA at 230Vac.

OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart.
Output Current: See Ratings Chart.
Output Connector: Molex V-M connector.
Output Wattage: Typ. 50 Watts.
Line Regulation: Typ. 0.1-0.5%.
Load Regulation: Main VO1 typ. $\pm 1-2.0\%$.
Aux. VO2 typ. $\pm 2-3.0\%$ (Common choke).
Aux. VO3 typ. $\pm 2-3.0\%$ (Common choke).
Noise & Ripple: Typ. 1.0% peak to peak.
OVP: Installed in main O/P VO1 only.
Adjustability: Available at VO1.
Overload Protection (OLP): Fully protected against output overload and short circuit. Consult the factory for OLP setting.

GENERAL SPECIFICATION

Efficiency: Typ. 70-76%.
Switching Frequency: Fixed freq. at 83K Hz.
Circuit Topology: PWM Fixed frequency forward circuit.
Transient Response: Output voltage returns in less than 0.7mS following a 25% load change.
Safety Standard: UL1950/EN60950 Class I.

Operating Temperature: 0 to +50°C.
Storage Temperature: -20 to +85°C.
Temperature Coefficient: 0.04%/°C.
Cooling: Convection air.
Construction: PCB open frame format.
Power Density: 2.8Watts / Cubic Inch.



OUTPUT VOLTAGE/CURRENT RATINGS CHART

SINGLE OUTPUT

MODEL NO.	MAIN VO1@ ★	
	Typ.	Volt.
TPVP50-S025120	12.0A	2.5V
TPVP50-S033120	12.0A	3.3V
TPVP50-S050100	10.0A	5.0V
TPVP50-S120045	4.5A	12.0V
TPVP50-S150038	3.8A	15.0V
TPVP50-S240025	2.5A	24.0V
TPVP50-S280022	2.2A	28.0V
TPVP50-S360016	1.6A	36.0V
TPVP50-S480013	1.3A	48.0V

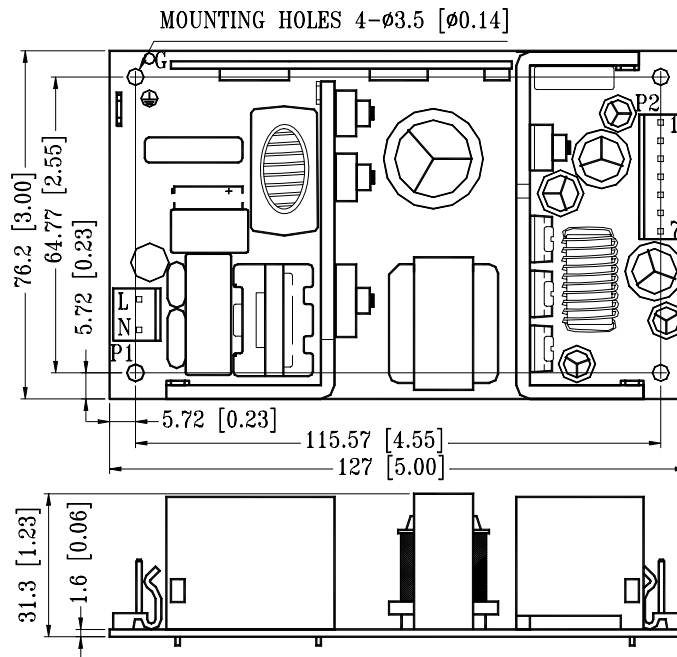
TRIPLE OUTPUT

MODEL NO.	MAIN VO1@ ★		AUX. VO2 ■		AUX. VO3 ■	
	Typ.	Volt.	Typ.	Volt.	Typ.	Volt.
TPVP50-T050II	4.0A	+5.0V	2.0A	+12V	0.5A	-12V
TPVP50-T050IE	4.0A	+5.0V	2.0A	+12V	1.0A	-5V
TPVP50-T050MI	4.0A	+5.0V	1.0A	+24V	0.5A	-12V
TPVP50-T050KK	4.0A	+5.0V	1.6A	+15V	0.5A	-15V
TPVP50-T033II	6.0A	+3.3V	2.0A	+12V	0.5A	-12V
TPVP50-T033KK	6.0A	+3.3V	1.6A	+15V	0.5A	-15V

Symbol: "★" OVP built-in. "@ " Adjustable. "■" Common Choke.

MECHANICAL DIMENSIONS: MM [INCHES]

WEIGHT: 358.0 g (12.6 Oz.)



INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

ASSIGNMENT	AC INPUT			SINGLE OUTPUT		TRIPLE OUTPUT			
	AC-LINE	AC-NEUTRAL	AC-GROUND	VO1	DC COM	VO1	VO2	VO3	DC COM
CONNECTOR & PIN #	P1-L	P1-N	G	P2-1,2,3	P2-4,5,6,7	P2-2,3	P2-1	P2-7	P2-4,5,6

Mating connector: Molex 5195 or 5239 series.