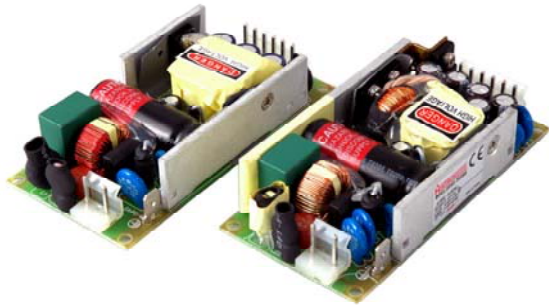




Total Power International, Inc.

UNIVERSAL INPUT AC-DC OPEN FRAME SINGLE & TRIPLE OUTPUT 43 WATTS INTERNAL SWITCHING POWER SUPPLIES TPVI43 SERIES



FEATURES:

- ACCOMMODATE UNIVERSAL AC SOURCES
- COMPACT 4"x2"x1" PCB FORMAT
- MEET UNIVERSAL SAFETY STANDARDS
- EMI MEET CISPR PUB. 22 & FCC CLASS B
- CE MARKING COMPLIANCE

SPECIFICATION

INPUT SPECIFICATION

Input Voltage: Range typ. 90-264Vac.
Rating 100 to 240Vac.

Input Connector: V-M connector.

Input Frequency: 47-63Hz.

Inrush Current: ≤12A rms cold start @230Vac.

Input Current: Typ. 0.7A@115Vac, 0.35A@230Vac.

Dielectric Withstand: Meet IEC 60950-1.

EMI: Meet CISPR PUB. 22 & FCC Class B.

Hold-up Time: Typ. 20mS @115Vac, 100mS @ 230Vac.

Earth Leakage: Less than 0.4mA @230Vac.

OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart.

Output Current: See Ratings Chart.

Output Connector: V-M connector.

Output Wattage: Typ. 42 watts.

Line Regulation: Typ. 0.2%.

Load Regulation: Main VO1 typ. ±2-3%.
Aux.VO2 typ. ± 4-6%(Common choke).
Aux.VO3 typ. ± 3.0%(P.R.).

Noise & Ripple: Typ. 1.0% peak to peak.

OVP: Built-in at main output VO1(Latch).

Adjustability: Not available.

Overload Protection (OLP): Fully protected against outputs overload and short circuit.
Typ. OLP set at 105-120% of rating output power.
Consult the factory for OLP setting

GENERAL SPECIFICATION

Efficiency: Typ. 75-80%(Various with output voltage).

Switching Frequency: 130 KHz or 70KHz.

Circuit Topology: Fixed frequency forward circuit for triple output and 5V/3.3V of single output.
Fixed frequency flyback circuit for high voltage of single output.

Transient Response: Output voltage returns in less than 0.5mS following a 50% load change.

Safety Standard: IEC 60950-1 Class I.

Power Density: 5.5Watts / Cubic Inch.

Operating Temperature: 0 to +50 °C under forced air flow for full load. .Derate by 1.3W/ °C from 40°C to 50 °C.

Storage Temperature: -20 to +85°C.

Temperature Coefficient: Typ. 0.04%/°C.

Cooling: At least 5 cfm(100LFM) direct forward air flow is required to achieve full rating power.

Construction: 4"x2"x1" PCB format.

Note: Due to requests in market and advances in technology, specifications subject to change without notification.



In application



Total Power International, Inc.

OUTPUT VOLTAGE / CURRENT RATINGS CHART

SINGLE OUTPUT

MODEL NO.	MAIN VO1 ★				
	Min.	Typ.	Volt.	Max.	Peak
TPVI43-S033800	0.2A	8.00A	3.3V	8.00A	10A
TPVI43-S050800	0.2A	8.00A	5.0V	8.00A	10A
TPVI43-S120340	0.0A	3.40A	12.0V	3.40A	4A
TPVI43-S150270	0.0A	2.70A	15.0V	2.70A	3A
TPVI43-S240170	0.0A	1.70A	24.0V	1.70A	2A
TPVI43-S480085	0.0A	0.85A	48.0V	0.85A	1A

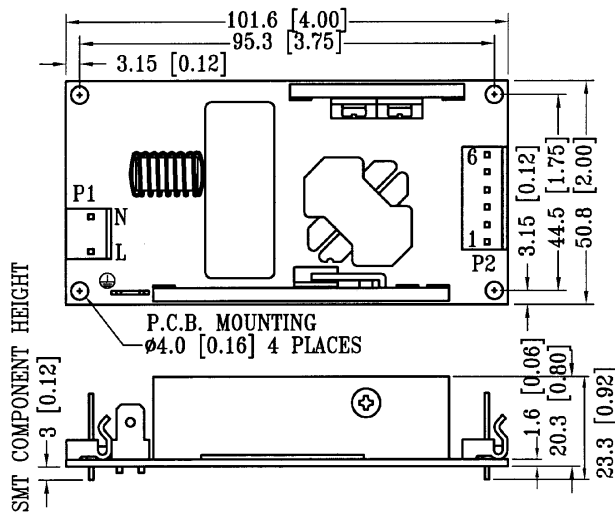
TRIPLE OUTPUT

MODEL NO.	MAIN +VO1 ★					AUX. +VO2■					AUX. -VO3●				
	Min.	Typ.	Volt.	Max.	Peak	Min.	Typ.	Volt.	Max.	Peak	Min.	Typ.	Volt.	Max.	Peak
TPVI43-T050II	0.5A	4.0A	+5.0V	6A	8A	0.1A	1.5A	+12V	2.0A	3.0A	0A	0.5A	-12V	0.5A	1A
TPVI43-T050MI	0.5A	4.0A	+5.0V	6A	8A	0.1A	0.7A	+24V	1.0A	1.5A	0A	0.5A	-12V	0.5A	1A
TPVI43-T050KK	0.5A	4.0A	+5.0V	6A	8A	0.1A	1.0A	+15V	1.5A	2.0A	0A	0.5A	-15V	0.5A	1A
TPVI43-T033EI	0.5A	6.0A	+3.3V	6A	8A	0.2A	3.0A	+5V	3.0A	4.0A	0A	0.5A	-12V	0.5A	1A

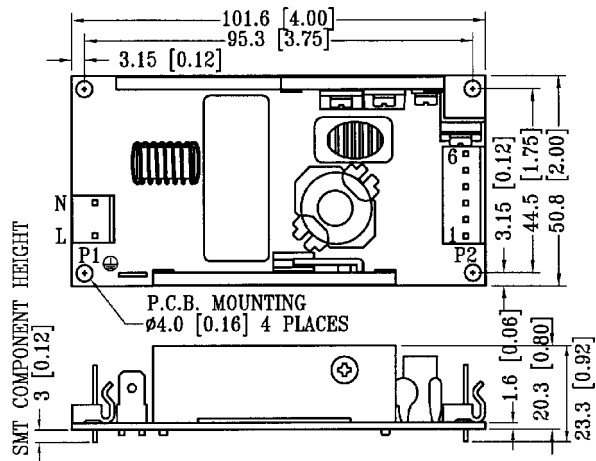
Symbol: "★" OVP built-in. "■" Couple common choke. "●" Post-Regulated.

MECHANICAL DIMENSIONS: MM [INCHES]

WEIGHT: 145g (5.12 Oz.)



SINGLE OUTPUT



TRIPLE OUTPUT

INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

ASSIGNMENT	AC INPUT			SINGLE OUTPUT		TRIPLE OUTPUT			
	AC-L	AC-N	AC-G	VO1	DC COM	VO1	VO2	VO3	DC COM
CNTR/PIN#	P1-L	P1-N	G	P2-1,2	P2-3,4	P2-1,2	P2-6	P2-5	P2-3,4

Mating connector: P1,2 Molex # 5195 or 5239 series.