Total Power International, Inc.

UNIVERSAL INPUT AC-DC MEDICAL APPLICATION OPEN FRAME SINGLE OUTPUT 63 WATTS INTERNAL SWITCHING POWER SUPPLIES TPMI63 SERIES



FEATURES:

- **ACCOMMODATE UNIVERSAL AC SOURCES**
- **COMPACT 4”x2”x1”PCB FORMAT**
- **MEET MEDICAL STANDARD EN 60601-1/ UL 2601-1**
- **EMI MEET EN 55011 & 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: ≤12.0A rms cold start @230Vac.
Input Current: Typ. 0.9A@115Vac, 0.435 @230Vac.
Dielectric Withstand: Meet IEC 60601-1.
EMI: Meet EN 55011 & FCC Class B.
Hold-up Time: Typ. 11.2mS @115Vac, 72mS @ 230Vac.
Earth Leakage: Less than 0.1mA @230Vac.

OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart.
Output Current: See Ratings Chart.
Output Connector: V-M connector.
Output Wattage: Typ. 62 watts.
Line Regulation: Typ. 0.1%.
Load Regulation: Typ. ±1.0%.
Noise & Ripple: Typ. 1.0% peak to peak.
OVP: Built-in at main output (Latch).
Adjustability: Factory Set.
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. 80-89.5 %. (Various with output voltage).
Switching Frequency: 85KHz.
Circuit Topology: Fixed frequency flyback circuit.
Transient Response: Output voltage returns in less than 0.5mS following a 50% load change.
Safety Standard: Meet Medical standards UL 2601-1/ EN 60601-1 Class I.
Power Density: 7.7Watts / 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 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.

For the details of safety approval, please consult the factory.

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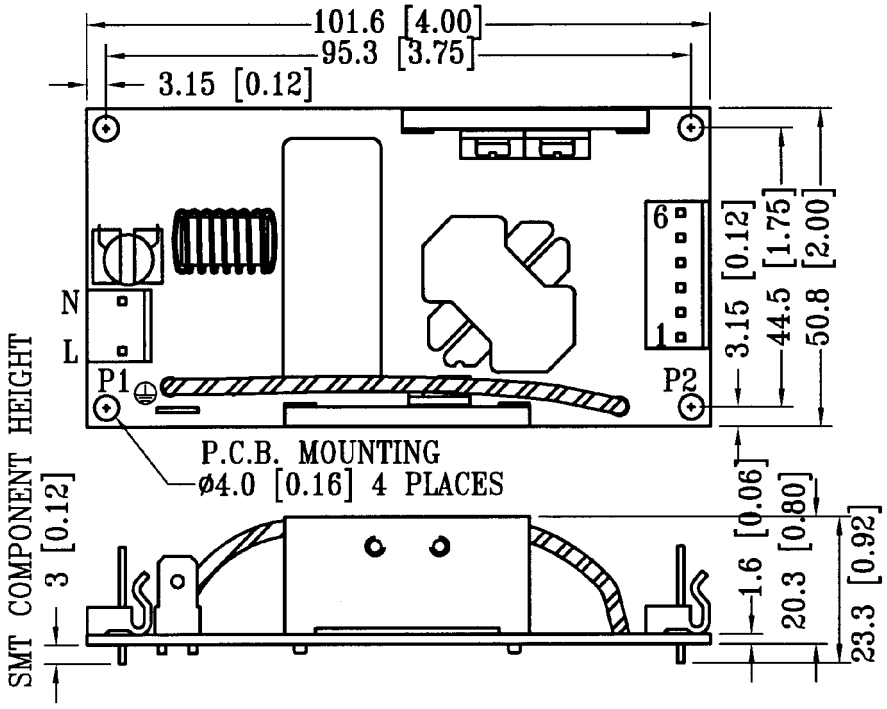
OUTPUT VOLTAGE/CURRENT RATINGS CHART

SINGLE OUTPUT

MODEL NO.	MAIN OUTPUT Typ.	Volt.
TPMI63-S120500	5.00A	**12.0V**
TPMI63-S150400	4.00A	**15.0V**
TPMI63-S240250	2.50A	**24.0V**
TPMI63-S480125	1.25A	**48.0V**

Symbol: "★" OVP built-in.

MECHANICAL DIMENSIONS: MM [INCHES] **WEIGHT:** 121g (4.27 Oz.)



INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

	AC INPUT			SINGLE OUTPUT	
ASSIGNMENT	**AC-L**	**AC-N**	**AC-G**	**VO1**	**DC COM**
CNTR/PIN#	P1-L	P1-N	G	P2-1,2	P2-3,4

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