



TR100M SERIES

100W MEDICAL SWITCHING ADAPTER



Features

- * Universal Input Range 90~264VAC
- * Meets EN60601-1 and EN55011 Class B
- * Continuous Short Circuit Protection
- * Over Voltage Protection
- * Efficiency & Standby Power Meet Level V
(TR100M120~150: Output Cable Length $\leq$ 1500mm 14AWG /UL1185)
(TR100M180~480: Output Cable Length $\leq$ 1800mm 16AWG /UL1185)
- * Meets 2 MOPP



Ordering information

TR100MXXX- XX	X	XX or XXX
Model No.	DC Plug Type	DC Cable Length and Type
	OVP	
	E: with OVP	11: 720mm with Ferrite Core
		12: 1220mm with Ferrite Core
		36: 1500mm with Ferrite Core
		13: 1800mm with Ferrite Core

MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT	RIPPLE & NOISE NOTE 2	VOLTAGE ACCURACY NOTE 1	LINE REGULATION NOTE 3	LOAD REGULATION NOTE 4	% EFF. (Typ.) NOTE 5
TR100M120	12 V	8.34 A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 4\%$	88%
TR100M150	15 V	6.67 A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 3\%$	88%
TR100M180	18 V	5.56 A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	88%
TR100M190	19 V	5.27 A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	88%
TR100M200	20 V	5.0 A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	88%
TR100M240	24 V	4.17 A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	89%
TR100M480	48 V	2.1 A	1%	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	89%

Specifications

INPUT SPECIFICATIONS:

Voltage 90~264Vac
 Frequency 47 to 63Hz
 Inrush Current Cold Start @25°C 100A max. @240Vac
 Conducted EMI CISPR/FCC Class B
 Isolation Input to output = 4k Vac
 Leakage Current 0.1mA max.

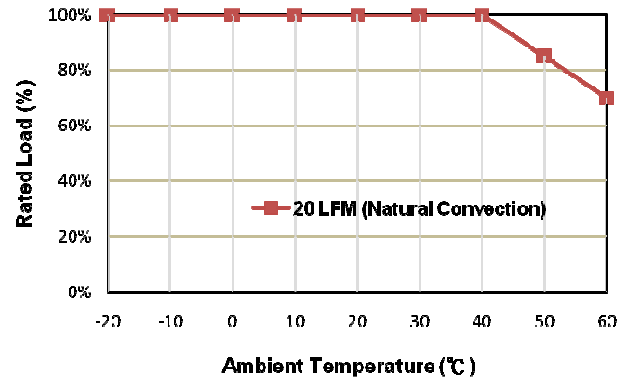
OUTPUT SPECIFICATIONS:

Hold-up Time 16ms typ. @115Vac
 Short Circuit Protection Hiccup Mode (Auto Recover)
 Over Voltage Protection TVS Component to Clamp
 Temperature Coefficient $\pm 0.05\%/^{\circ}\text{C}$

GENERAL SPECIFICATIONS:

Operating Temperature -20 ~ 60°C (see derating curve)
 Storage Temperature -20 ~ 85°C
 Humidity 93% RH max. Non condensing
 Cooling Natural Convection
 Switching Frequency 70KHz Typical
 MTBF MIL-HDBK-217F, GB, at 25°C/115VAC 150Khrs min.
 Altitude 3000m
 Dimensions 5.591x2.283x1.457 inches (142.00x58.00x37.00mm)
 Weight 485g
 AC Inlet IEC320/C8

TR100M Series Derating Curve



SAFETY AND EMC:

Emission and Immunity EN55011, EN60601-1-2, EN61000-3-2
 EN61000-3-3
 Safety (Medical 3rd) IEC60601-1, EN60601-1
 UL ANSI/AAMI ES60601-1

NOTE:

1. Voltage setpoint at 60% full load.
2. Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to output for Ripple & Noise measuring @20MHz BW.
3. Line regulation measured from 100Vac to 240Vac, full load.
4. Load regulation measured from 60% to 100% full load and from 60% to 20% load (60% +/- 40% full load)
5. Typical efficiency with 230 VAC and max. load at 25°C.

Mechanical Specification

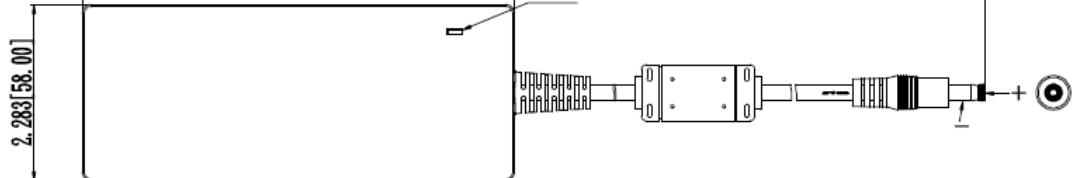
All Dimensions are in inches(mm)
 Tolerance: Inches: X.XXX±0.02
 Millimeters: X.XX±0.5

UNIT: inches(mm)

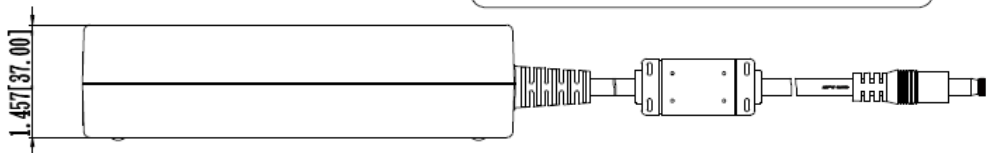
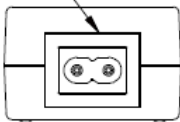
5.591[142.00]

59.055[1500.00]±1.969[50.00]

LED



IEC320/C8



Typical at 25°C, nominal line and 75% load, unless otherwise Specified