



# 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	OVP
		DC Cable Length and Type
		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 NOTE2	VOLTAGE ACCURACY NOTE1	LINE REGULATION NOTE3	LOAD REGULATION NOTE4	% EFF. (Typ.) NOTE5
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.

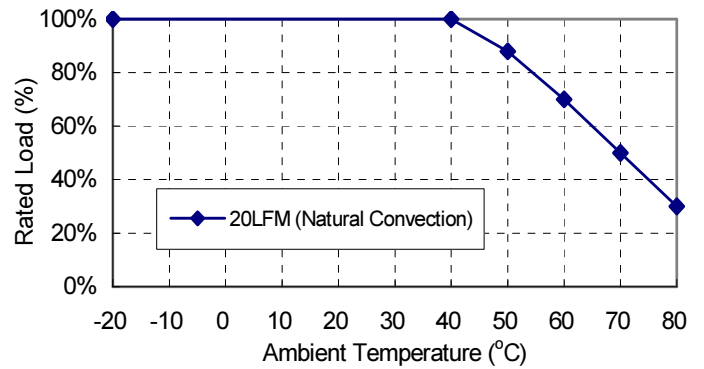
### OUTPUT SPECIFICATIONS:

Hold-up Time ..... 16ms typ. @115Vac  
 Short Circuit Protection ..... Hiccup Mode (Auto Recover)  
 Over Voltage Protection ..... TVS Component to Clamp  
 Temperature Coefficient ..... ±0.05%/°C

### GENERAL SPECIFICATIONS:

Operating Temperature ..... -20 ~ 80°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:

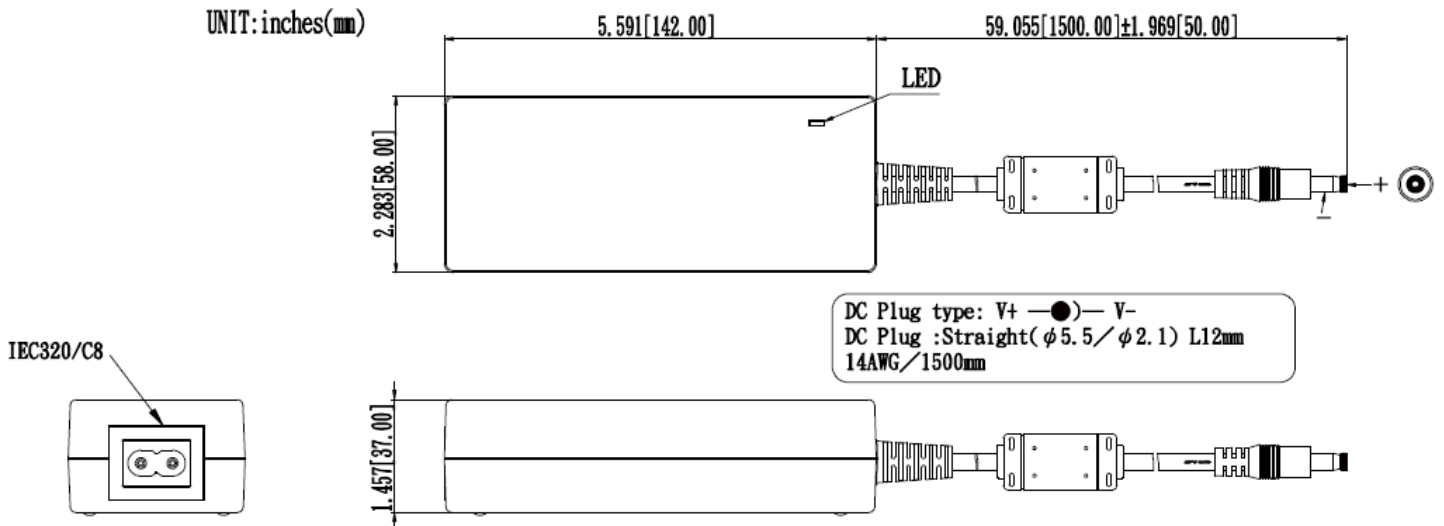
Emission and Immunity ..... EN55011, EN60601-1-2, EN61000-3-2  
 EN61000-3-3  
 Safety (Medical 3<sup>rd</sup>)..... IEC60601-1, EN60601-1  
 UL ANSI/AAMI ES60601-1

### NOTE:

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

## Mechanical Specification

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



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