

# 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
- \* Meets 2 MOPP

(TR100M120~150: Output Cable Length ≤ 1500mm 14AWG /UL1185) (TR100M180~480: Output Cable Length ≤ 1800mm 16AWG /UL1185)



# **Ordering information**

TR100MXXX- XX
Model No. DC Plug Type

X OVP E: with OVP XX or XXX

DC Cable Length and Type

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%	±2%	±1%	±4%	88%
TR100M150	15 V	6.67 A	1%	±2%	±1%	±3%	88%
TR100M180	18 V	5.56 A	1%	±2%	±1%	±2%	88%
TR100M190	19 V	5.27 A	1%	±2%	±1%	±2%	88%
TR100M200	20 V	5.0 A	1%	±2%	±1%	±2%	88%
TR100M240	24 V	4.17 A	1%	±2%	±1%	±2%	89%
TR100M480	48 V	2.1 A	1%	±2%	±1%	±2%	89%

### **Specifications**

#### **INPUT SPECIFICATIONS:**

Voltage	90~264Vac
	120~370Vdc
Frequency	47 to 63Hz
Inrush Current	Cold Start @25℃ 100A max. @240Vac
Conducted EMI	CISPR/FCC Class B
Leakage Current	100uA max.

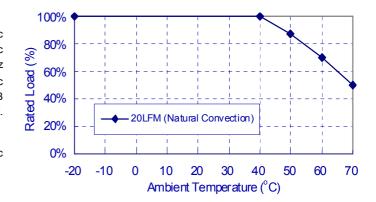
#### **OUTPUT SPECIFICATIONS:**

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:**

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Isolation	Input to output = 4000VAC				
Operating Temperature	20 ~700°C (see derating curve)				
Storage Temperature	20 ~ 85℃				
Humidity	93% RH max. Non condensing				
Cooling	Natural Convection				
Switching Frequency	70KHz Typical				
MTBF MIL-HDBK-217F, GB, at	$25^{\circ}\text{C}/115\text{VAC}$ 150Khrs min.				
Altitude	3000m				
Dimensions 5.591x2.283x1.4	457 inches (142.00x58.00x37.00mm)				
Weight	485g				
AC Inlet	IEC320/C8				

## **TR100M Series Derating Curve**



#### **SAFETY AND EMC:**

Emission and Immunity (Ed 4.0) ............. EN55011, FCC CRF47 Part 18
EN60601-1-2, EN61000-3-2, 3, IEC61000-4-2, 3, 4, 5, 6, 8, 11
Safety (Ed 3.1) ........... IEC60601-1:2005+A1:2012, EN60601-1:2006/A1:2013
UL ANSI/AAMI ES60601-1:2005

#### NOTE:

- 1. Voltage accuracy at 60% full load.
- 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

