



TR30M SERIES

30W MEDICAL SWITCHING ADAPTER



Features

- * Universal Input: 90~264Vac
- * Meets EN60601-1 and EN55011 Class B
- * Continuous Short Circuit Protection
- * Over Voltage Protection
- * CEC Level IV Compliant except TR30M050
Meets CEC Level III
(Output Cable Length \leq 1800mm)
(TR30M050: Output Cable Length \leq 720mm)
- * Efficiency & Standby Power Meet Level V (Option)
(Output Cable Length \leq 1800mm)
(TR30M050: Output Cable Length \leq 720mm)
(TR30M090: Output Cable Length \leq 1220mm)
- * Meets 2MOPP



Ordering information

TR30MXXX - XX

Model No. DC Plug Type

E XX

DC Cable Length and Type

- 01: 720mm
- 02: 1220mm
- 03: 1800mm
- 11: 720mm with Ferrite Core
- 12: 1220mm with Ferrite Core
- 13: 1800mm with Ferrite Core

* 18AWG / SPT1

MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT	RIPPLE & NOISE NOTE 1	VOLTAGE ACCURACY NOTE 2	LINE REGULATION NOTE 3	LOAD REGULATION NOTE 4	% EFF. (Typ.) NOTE 5
TR30M050	5 V	4 A	50 mVp-p	$\pm 2\%$	$\pm 1\%$	$\pm 6\%$	76%
TR30M090	9 V	3 A	90 mVp-p	$\pm 2\%$	$\pm 1\%$	$\pm 4\%$	82%
TR30M120	12 V	2.5 A	120 mVp-p	$\pm 2\%$	$\pm 1\%$	$\pm 3\%$	82%
TR30M150	15 V	2 A	150 mVp-p	$\pm 2\%$	$\pm 1\%$	$\pm 3\%$	85%
TR30M180	18 V	1.65 A	180 mVp-p	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	85%
TR30M240	24 V	1.25 A	240 mVp-p	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	84%

Specifications

INPUT SPECIFICATIONS:

Voltage 90~264Vac
 Frequency 47 to 63Hz
 Inrush Current 50A max. @240Vac
 Input Current 0.6A max.

OUTPUT SPECIFICATIONS:

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

GENERAL SPECIFICATIONS:

Isolation Input to output = 5,656VDC
 Operating Temperature 0 ~ 60°C (see derating curve)
 Storage Temperature -20~85°C
 Humidity 93% RH max. Non condensing
 Cooling Natural Convection
 Switching Frequency 65KHz Typical
 MTBF MIL-HDBK-217F, GB, 25°C/115VAC 300Khrs min.
 Altitude 3000m
 Dimensions 4.331x1.969x1.181 inches (110.00x50.00x30.00mm)
 Weight 220g(0.49 Pounds)

SAFETY AND EMC:

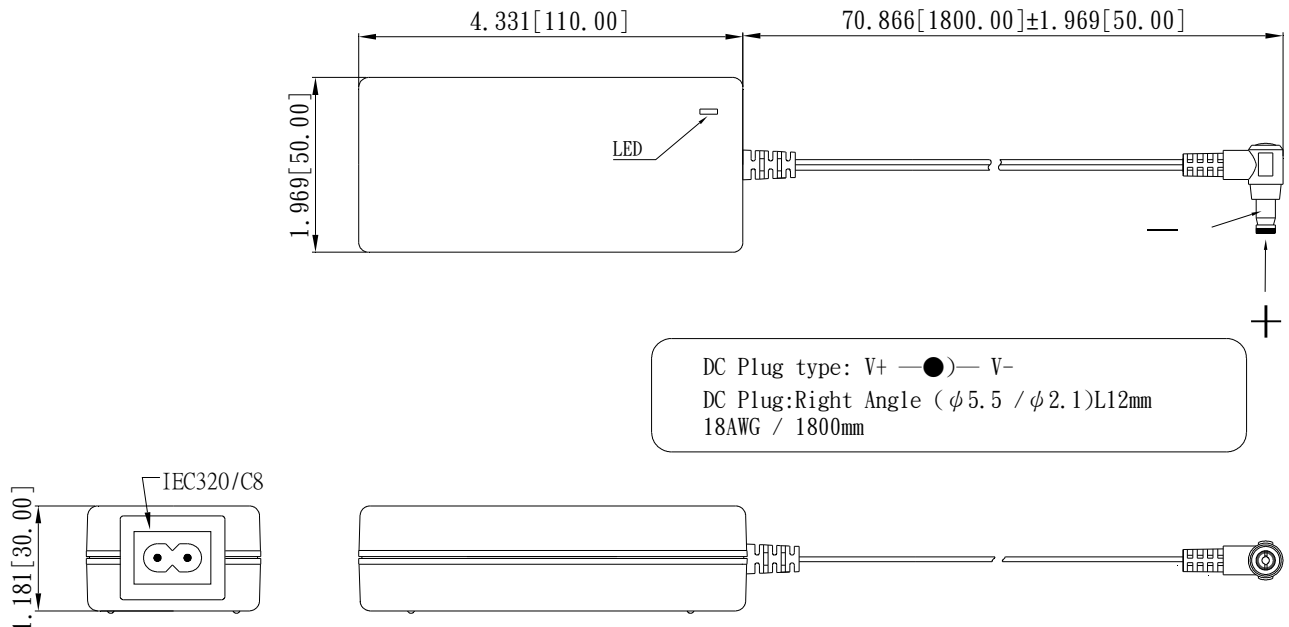
Emission and Immunity EN55011, EN60601-1-2, EN61000-3-2
 EN61000-3-3
 Safety UL ANSI/AAMI ES60601-1:2005

Mechanical Specification

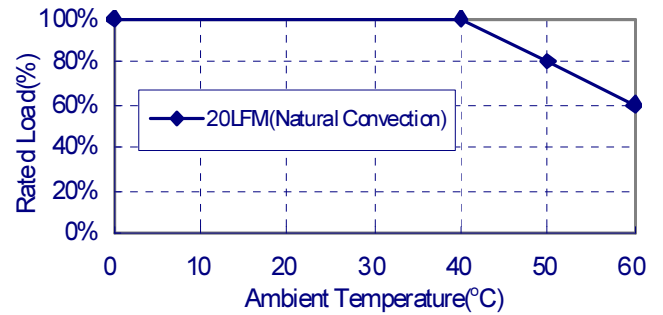
All Dimensions are in inches(mm)

Tolerance: Inches: X.XXX \pm 0.02

Millimeters: X.XX \pm 0.5



TR30M Series Derating Curve



NOTE:

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

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