



# TR30RDM SERIES

## 30W MEDICAL SWITCHING ADAPTER



### Features

- \* Universal Input Range 80~264VAC
- \* Interchangeable AC Plugs
- \* Approved EN55011, FCC CFR47 Part 18 Class B
- \* Meets EN60335-1
- \* Approved EN60601-1-11 for Home Healthcare Applications
- \* Low Leakage Current <math>< 50\mu\text{A}</math>
- \* Meets IP22
- \* Continuous Short Circuit Protection
- \* Over Voltage Protection
- \* Meet CoC Tier 2 & DoE Level VI  
(Output Cable Length  $\leq 1800\text{mm}$ )  
(TR30RDM050: Output Cable Length  $\leq 1220\text{mm}$ )
- \* No Load Power Consumption <math>< 75\text{mW}</math>
- \* 2MOPP Class II



### Ordering information

TR30RDMXXX	-XX	G	XX	-XX-BK
Model No.	DC Plug Type	UL1571 WITH OVP	DC Cable Length and Type	Color of Top Case
			01: 720mm	BK-BK : Black-Black
			02: 1220mm	BE-BK : Blue-Black
			03: 1800mm	RD-BK : Red-Black
			11: 720mm with Ferrite Core	
			12: 1220mm with Ferrite Core	
			13: 1800mm with Ferrite Core	
			* 16AWG / UL1571 or Equivalent for Vo: 5V, 9V	
			* 18AWG / UL1571 or Equivalent for Vo: 12V, 15V	
			* 22AWG / UL1571 or Equivalent for Vo: 18V, 24V	

MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT	RIPPLE & NOISE NOTE 1	VOLTAGE ACCURACY NOTE 2	LINE REGULATION NOTE 3	LOAD REGULATION NOET 4	% EFF. (Typ.) NOTE 5
TR30RDM050	5V	5.0A	100mVp-p	$\pm 2\%$	$\pm 1\%$	$\pm 6\%$	84%
TR30RDM090	9V	3.3A	100mVp-p	$\pm 2\%$	$\pm 1\%$	$\pm 3\%$	88%
TR30RDM120	12V	2.5A	120mVp-p	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	88%
TR30RDM150	15V	2.0A	120mVp-p	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	88%
TR30RDM180	18V	1.67A	120mVp-p	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	88%
TR30RDM240	24V	1.25A	120mVp-p	$\pm 2\%$	$\pm 1\%$	$\pm 2\%$	88%

Specifications are subject to change without notice.

## Specifications

### INPUT SPECIFICATIONS:

Voltage ..... 80~264Vac (see derating curve)  
 Frequency ..... 47 to 63Hz  
 Input Current ..... 0.8A max.  
 Inrush Current ..... Cold start@25°C ..... 85A max. @240Vac  
 Leakage Current ..... 50uA max.

### OUTPUT SPECIFICATIONS:

Hold-up Time ..... 10ms typ. @115Vac  
 Short Circuit Protection ..... Hiccup Mode Continuous(Auto Recovery)  
 Over Voltage Protection ..... Latch

### GENERAL SPECIFICATIONS:

Isolation ..... Input to output 4000VAC  
 Operating Temperature ..... -25 ~ 70°C (see derating curve)  
 Storage Temperature ..... -25~85°C  
 Humidity ..... 93% RH max. Non condensing  
 Cooling ..... Natural Convection  
 Switching Frequency ..... 65KHz Typical  
 MTBF ..... MIL-HDBK-217F, GB, 25°C/115VAC ..... 380Khrs min.  
 Life time ..... .26280 hours min.@ 75% load, 40°C  
 Altitude ..... 5000m  
 Dimensions ..... 3.807x2.283x1.703 inches (96.70x58.00x43.25mm)  
 Weight ..... 200g(0.44 Pounds)

### SAFETY AND EMC:

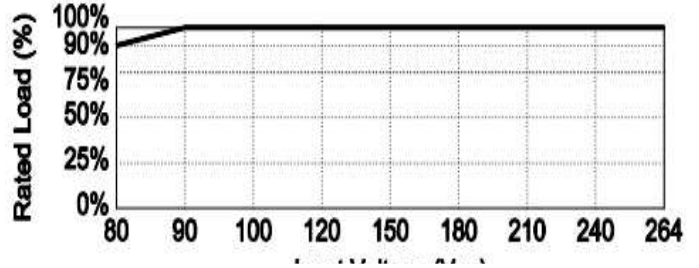
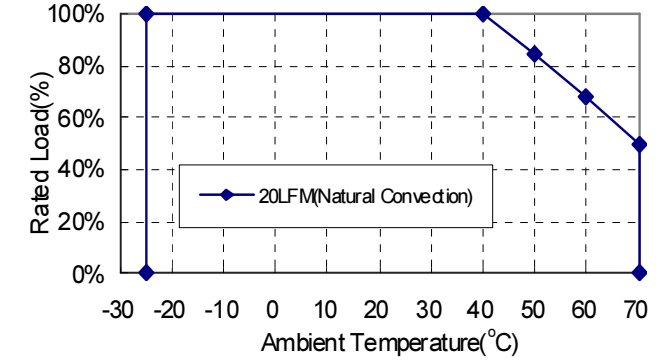
Emission and Immunity(Ed4.0) ..... EN55011, EN60601-1-2  
 EN61000-3-2, EN61000-3-3, IEC61000-4-2, 3, 4, 5, 6, 8, 11  
 FCC CFR47 Part 18 Class B  
 Safety (Ed3.1) ..... IEC60601-1:2005+A1, EN60601-1-11  
 EN60601-1:2006+A11:2011+A1+A12,  
 ANSI/AAMI ES60601-1:2005/A1:2012

### Mechanical Specification

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



## TR30RDM 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 full load.
4. Load regulation is measured from 60% to full load and from 60% to 20% load (60% +/- 40% load).
5. Efficiency measured at 75% load and input voltage is 230Vac.