

# TR30M

S E R I E S

## 30W MEDICAL SWITCHING ADAPTER



### Features

- Universal Input Range 90-264VAC
- Meets EN60601-1 and EN55011 Class B
- Continuous Short Circuit Protection
- Over Voltage Protection
- TR30M Series meets CEC Level IV except TR30M050 meets CEC Level III (Output Cable Length  $\leq$  1800mm) (TR30M050: Output Cable Length  $\leq$  720mm)

### Ordering information

| TR30MXXX - XX  | E XX                          |
|--|-------------------------------|
| Model No. DC Plug Type                               | DC Cable Length and Type      |
| * Please see Page 235 for more detailed descriptions |                               |
|  | 01 : 720mm                    |
|  | 02 : 1200mm                   |
|  | 03 : 1800mm                   |
|  | 11 : 720mm with Ferrite Core  |
|  | 12 : 1200mm with Ferrite Core |
|  | 13 : 1800mm with Ferrite Core |
|  | * 18AWG / UL1185              |

| MODEL    | OUTPUT VOLTAGE | MIN. LOAD | OUTPUT CURRENT | RIPPLE & NOISE | VOLTAGE SETPOINT | LINE REGULATION | LOAD REGULATION | %EFF     |
|----------|----------------|-----------|----------------|----------------|------------------|-----------------|-----------------|----------|
| TR30M050 | 5V             | 0         | 4A             | 50mVp-p        | $\pm 2\%$        | $\pm 1\%$       | $\pm 6\%$       | 71% min. |
| TR30M090 | 9V             | 0         | 3A             | 90mVp-p        | $\pm 2\%$        | $\pm 1\%$       | $\pm 4\%$       | 75% min. |
| TR30M120 | 12V            | 0         | 2.5A           | 120mVp-p       | $\pm 2\%$        | $\pm 1\%$       | $\pm 3\%$       | 76% min. |
| TR30M150 | 15V            | 0         | 2A             | 150mVp-p       | $\pm 2\%$        | $\pm 1\%$       | $\pm 3\%$       | 78% min. |
| TR30M180 | 18V            | 0         | 1.65A          | 180mVp-p       | $\pm 2\%$        | $\pm 1\%$       | $\pm 2\%$       | 78% min. |
| TR30M240 | 24V            | 0         | 1.25A          | 240mVp-p       | $\pm 2\%$        | $\pm 1\%$       | $\pm 2\%$       | 80% min. |

### Specifications

#### INPUT SPECIFICATIONS:

Voltage .....90 ~ 264Vac  
 Frequency .....47 to 63Hz  
 Inrush Current.....50A max. @240Vac  
 Isolation .....Input to output =5.656VDC  
 Input Current.....0.6A max

#### OUTPUT SPECIFICATIONS:

Holdup Time .....16mS typ. @115Vac  
 Short Circuit Protection .....Continuous (Auto Recovery)  
 Over Voltage Protection .....Yes

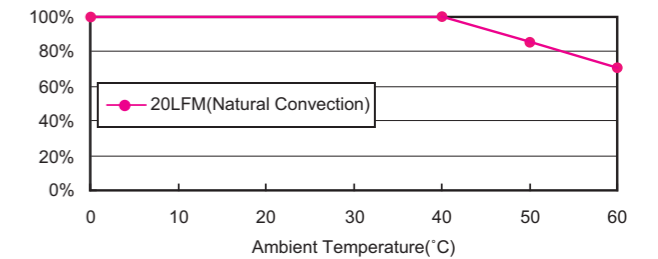
#### ENVIRONMENTAL CHARACTERISTICS:

Operating Temperature .....0 ~ 40°C  
 Storage Temperature .....-20 ~ 85°C  
 Cooling.....Natural Convection

#### MECHANICAL CHARACTERISTICS:

Dimensions .....110.00 x 50.00 x 30.00mm(4.331 x 1.969 x 1.181 Inches)  
 Weight .....220g (0.49 Pounds)

### TR30M Series Derating Curve

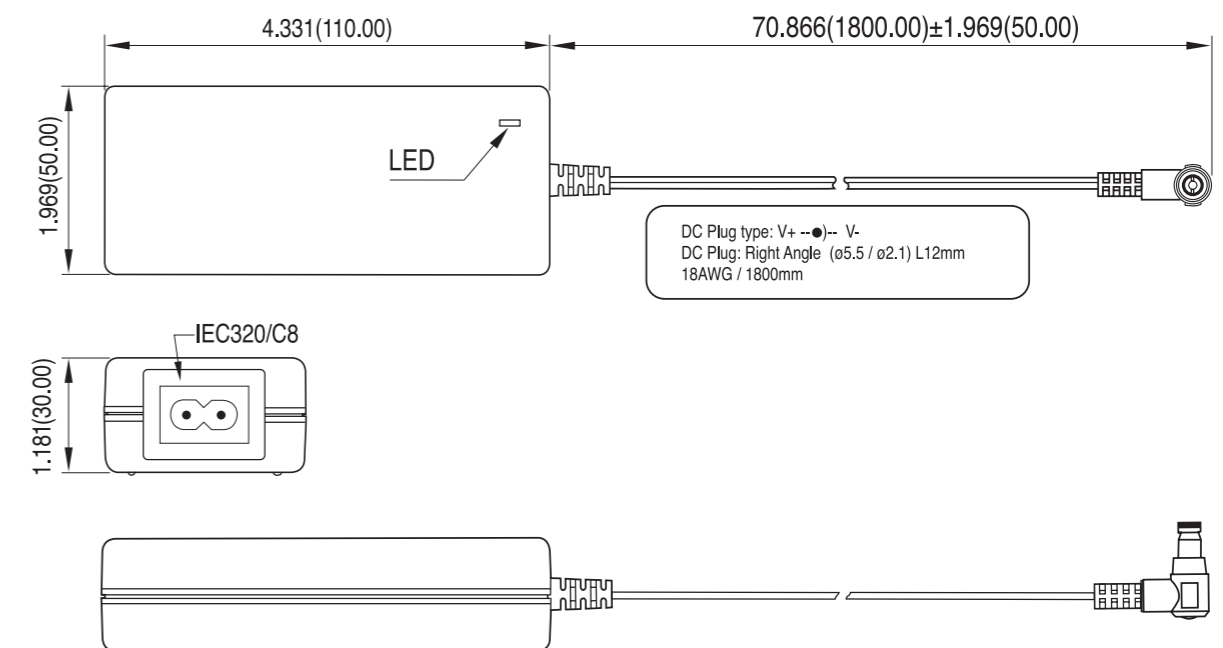


#### NOTE:

1. Voltage setpoint at 60% full load.
2. Add a 0.1 $\mu$ F ceramic capacitor and a 10 $\mu$ F 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)

### Mechanical Specification

All Dimensions In Inches(mm)  
 Tolerance Inches: x.xxx=  $\pm 0.02$   
 Millimeters: x.xx=  $\pm 0.5$



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