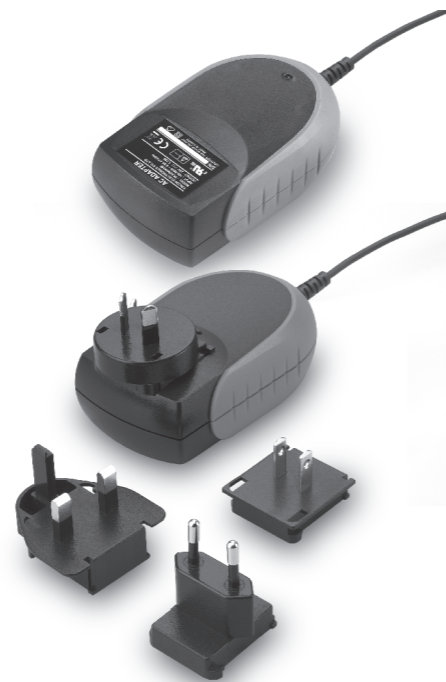


# TR30RAM

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
- Interchangeable AC Plugs
- CEC Level IV Compliant (Output Cable Length ≤ 1800mm) (TR30RAM050: Output Cable Length ≤ 1500mm)

### Ordering information

TR30RAMXX -	XX	E	XX	XX	BK
Model No.	DC Plug Type	DC Cable Length and Type	Color of Overmold Case		
	* 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	BE : Blue GY : Gray RD : Red PE : Purple OR : Orange		

MODEL	OUTPUT VOLTAGE	MAX. LOAD	MIN. LOAD	RIPPLE & NOISE	VOLTAGE ACCURACY	LINE REGULATION	LOAD REGULATION	SWITCHING FREQUENCY	%EFF
TR30RAM050	5V	4.0A	0 A	1%	± 2%	± 1%	± 6%	65kHz Typ.	73% min.
TR30RAM090	9V	3.0A	0 A	1%	± 2%	± 1%	± 3%	65kHz Typ.	76% min.
TR30RAM120	12V	2.5A	0 A	1%	± 2%	± 1%	± 2%	65kHz Typ.	79% min.
TR30RAM150	15V	2.0A	0 A	1%	± 2%	± 1%	± 2%	65kHz Typ.	81% min.
TR30RAM180	18V	1.67A	0 A	1%	± 2%	± 1%	± 2%	65kHz Typ.	81% min.
TR30RAM240	24V	1.25A	0 A	1%	± 2%	± 1%	± 2%	65kHz Typ.	83% min.

### Specifications

#### INPUT SPECIFICATIONS:

Voltage .....90 ~ 264Vac  
 Frequency .....47 to 63Hz  
 Input Current.....0.4 ~ 0.8A max.  
 Inrush Current.....50A max. @240Vac  
 Conducted EMI..... CISPR/FCC Class B  
 Isolation ..... Input to output =5.656VDC  
 Leakage Current..... 100µA max

#### OUTPUT SPECIFICATIONS:

Holdup Time .....10ms typ. @115Vac  
 Short Circuit Protection .....Continuous (Auto Recovery)  
 Over Voltage Protection .....Yes

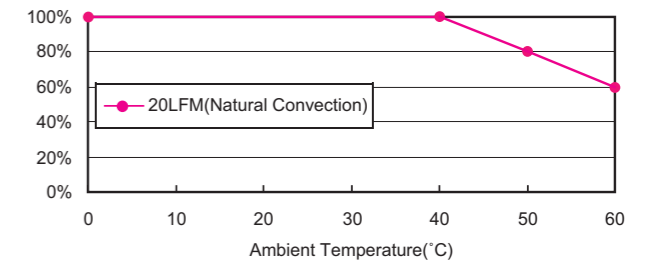
#### ENVIRONMENTAL CHARACTERISTICS:

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

#### MECHANICAL CHARACTERISTICS:

Dimensions .....108.67 x 61.98 x 36.70mm(4.270 x 2.440 x 1.445 Inches)  
 Weight .....300g(0.67 Pounds)

### TR30RAM Series Derating Curve



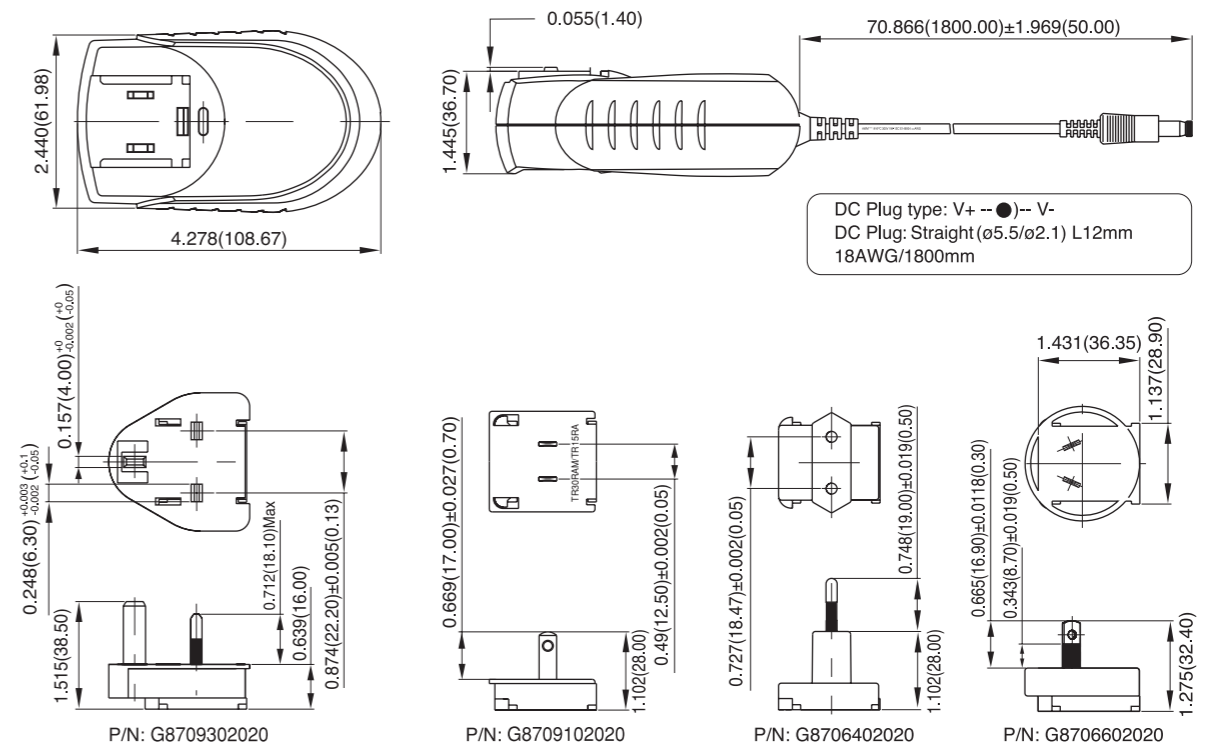
#### NOTE:

1. Voltage setpoint at 60% load.
2. Add a 0.1µF ceramic capacitor and a 10µF 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 full load and from 60% to 20% load (60% +/- 40% load)
5. \*Various TR Series adapters are PSE certified. PSE certification alone is not sufficient for importation into Japan. A valid PSE mark must contain the name of the importer as shown in the example below. If PSE mark is required, the name of the registered importer must be supplied to Cincon on order placement. Product labels will not contain PSE mark if importer name is not supplied. Consult factory or local representative for details\*



### Mechanical Specification

All Dimensions 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