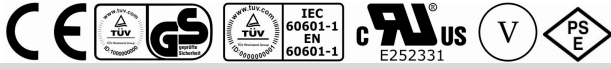




# TRG21 SERIES

## 20W SWITCHING ADAPTER



### Features

- \* Universal Input Range 90-264VAC
- \* Efficiency to 85%
- \* Continuous Short Circuit Protection
- \* Over Voltage Protection
- \* No load input power < 0.3W
- \* Leakage Current < 0.1mA
- \* UL60601-1/IEC60601-1/EN60601-1 Medical safety and IEC60950-1/EN60950-1 ITE approved
- \* AC Inlet IEC320/C8
- \* Meet CEC and Erp Level V  
(Output Cable Length  $\leq$  1800mm 18AWG)  
(TRG21A050: Length  $\leq$  1200mm 18AWG)



MODEL	INPUT VOLTAGE	OUTPUT VOLTAGE	MIN. LOAD	MAX. LOAD	Output Rated Power	RIPPLE & NOISE	VOLTAGE ACCURACY	LOAD REG.	% Eff.
TRG21A050	90-264VAC	5.0V	0	3.0A	15.0W	50mV	$\pm 2\%$	$\pm 5\%$	75%
TRG21A090	90-264VAC	9.0V	0	2.3A	20.7W	50mV	$\pm 2\%$	$\pm 4\%$	80%
TRG21A120	90-264VAC	12V	0	1.8A	21.6W	90mV	$\pm 2\%$	$\pm 3\%$	81%
TRG21A150	90-264VAC	15V	0	1.4A	21.0W	100mV	$\pm 2\%$	$\pm 3\%$	83%
TRG21A180	90-264VAC	18V	0	1.2A	21.6W	100mV	$\pm 2\%$	$\pm 2\%$	84%
TRG21A240	90-264VAC	24V	0	0.9A	21.6W	100mV	$\pm 2\%$	$\pm 2\%$	85%

## Specifications

### INPUT SPECIFICATIONS:

Voltage .....	90~264Vac
Frequency .....	47 to 63Hz
Input Current .....	0.3 to 0.5A
Inrush Current .....	Cold Start@25°C ..... 40A max. @230Vac
Leakage Current .....	0.1mA max.

### OUTPUT SPECIFICATIONS:

Voltage Accuracy .....	±2.0% max.
Line Regulation (note 3) .....	±1.0% max.
Load Regulation (note 4) .....	see table
Holdup Time .....	8ms typ. @115Vac
Short Circuit Protection .....	Continuous
Over Voltage Protection(TVS) .....	115%-140% of nominal output voltage

### GENERAL SPECIFICATIONS:

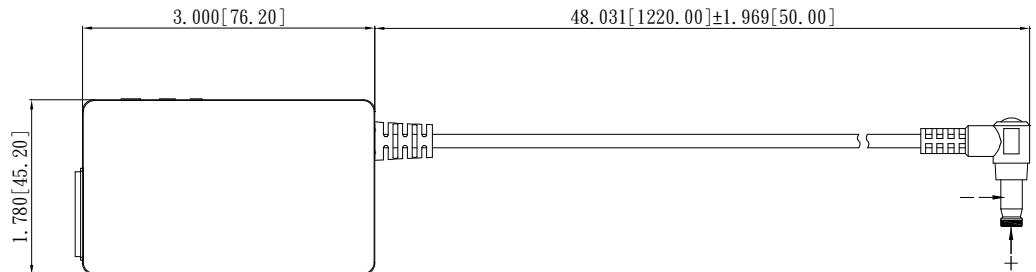
Isolation .....	Input to output = 5,656VDC
Efficiency .....	see table
Switching Frequency .....	100KHz typ.
Operating Temperature .....	-20 ~ 60°C (see derating curve)
Storage Temperature .....	-25~85°C
Cooling .....	Natural Convection
Humidity .....	93% RH max. Non condensing
MTBF .....	MIL-STD-217F, GB, at 25°C/115VAC ..... 400K hrs min.
Dimensions .....	3.000x1.780x0.870Inches (76.20x45.20x22.10mm)
Weight .....	140g(0.31Pounds)

### Mechanical Specification

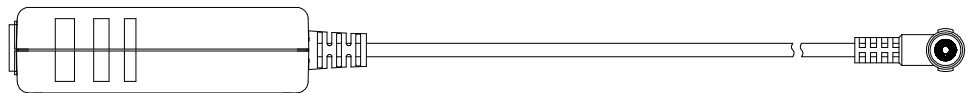
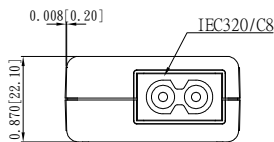
All Dimensions are in inches(mm)

Tolerance: Inches: X.XXX±0.02

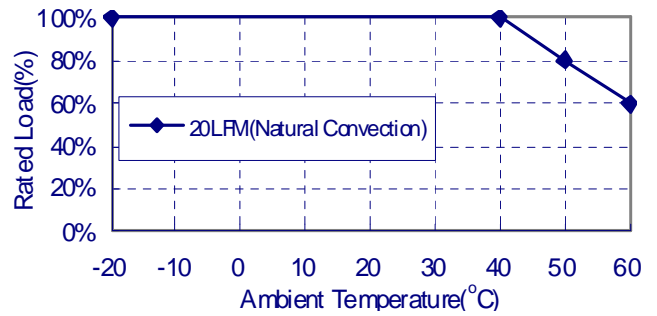
Millimeters: X.XX±0.5



DC Plug type: V+ —●— V-  
 DC Plug :Right Angle(φ 5.5 / φ 2.1) L12mm  
 18AWG / 1220mm



## TRG21 Series De-rating Curve



### SAFETY AND EMISSION:

CE Directive .....	2004/108/EC, 93/42/EEC
Emissions ...	EN60601-1/EN61204-3/EN55022/CISPR Class B, EN55024
Safety Approvals .....	UL60601-1, IEC60601-1, EN60601-1 IEC60950-1, EN60950-1

### NOTE:

1. Voltage accuracy is set of 60% rated load.
2. Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to output for Ripple & Noise measuring @20MHz BW.
3. Line regulation is measured from high line to low line with full load.
4. Load regulation is measured from 60% to full load and from 60% to 20% load (60% +/- 40% load).

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