



**FEATURES**

- BF Rated 2MOPP Class I & Class II Models
- Approved to IEC/EN/UL 60601-1 3.1 Edition
- Meets IEC/EN 60601-1-2 4th Edition Medical EMC
- Compliant with CEC & Energy Star Level VI
- Low Leakage Current
- 100% Hi-Pot & Burn-in Tested



**INPUT SPECIFICATIONS**

Input Voltage Range .....	85-265 VAC
Input Frequency .....	47-63 Hz
Input Current .....	1.8A rms @ 115 VAC 0.9A rms @ 230 VAC
Inrush Current .....	40A @ 115 VAC or 80A @ 230 VAC, at 25°C cold start
Touch Current .....	75 $\mu$ A typ., 100 $\mu$ A max. @ 264 VAC
Earth Leakage Current .....	75 $\mu$ A typ., 100 $\mu$ A max. @ 264 VAC

**OUTPUT SPECIFICATIONS**

Output Power Ratings .....	See table
Tolerance .....	$\pm$ 5%
Ripple and Noise* .....	1% peak to peak max. at full load
Standby Power .....	< 0.21W
Overvoltage Protection .....	Set at 112-140% of its nominal output voltage; Latch off
Overcurrent Protection .....	Protected to short-circuit conditions; Auto recovery
Over Temp. Protection .....	Latch off
Temperature Coefficient .....	$\pm$ 0.04%/°C max.
Transient Response .....	Max. excursion of 4% or better on all models, recovering to 1% of final value within 500 $\mu$ s after a 25% step load change

\* Measured with 20 MHz bandwidth at rated line voltage and output load ranges, with a 10  $\mu$ F tantalum capacitor in parallel with a 0.1  $\mu$ F ceramic capacitor in parallel across the output.

**GENERAL SPECIFICATIONS**

Power Factor .....	0.98 typical @ 115 VAC
Efficiency .....	87% minimum @ full load
Hold-up Time .....	10 ms min. @ 110 VAC
Switching Frequency .....	75-100 kHz
Line Regulation .....	$\pm$ 0.5% maximum @ full load
Operating Temperature .....	0°C to +60°C
Derating .....	Derate from 100% at +40°C linearly to 50% at +60°C
Storage Temperature .....	-20°C to +85°C
Relative Humidity .....	5% to 95% non-condensing
Operating Altitude .....	5,000 meters max.
Withstand Voltage .....	4,000 VAC input-output (2 x MOPP) 1,500 VAC input-ground (1 x MOPP)
MTBF .....	150 kHrs minimum at full load, 25°C ambient, calculated per MIL-HDBK-217F

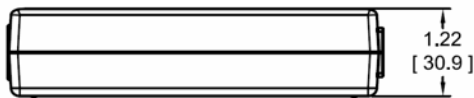
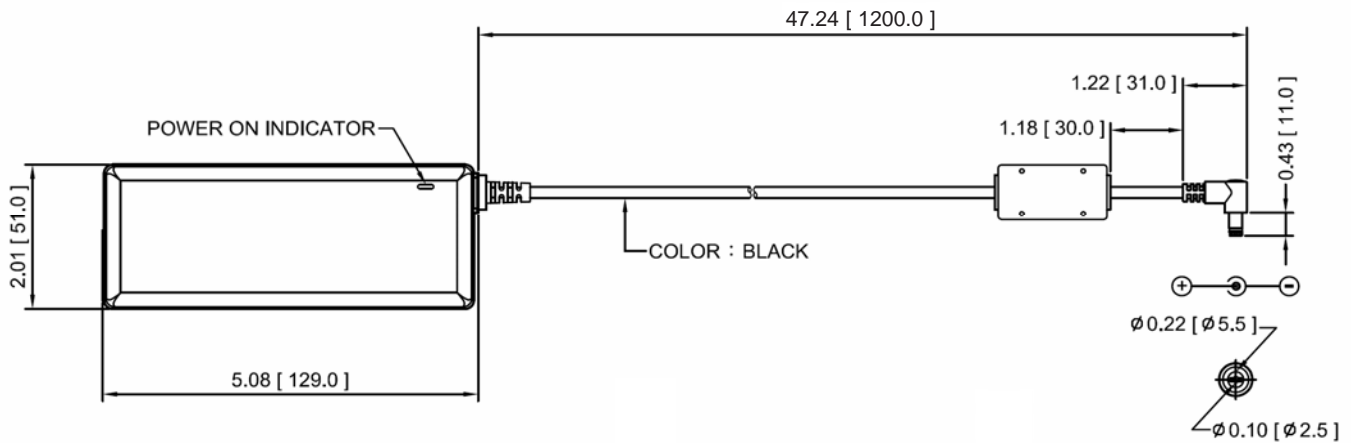
**MODELS LIST**

Product No.	Output Voltage	Maximum Current	Maximum Power
<b>Class I (IEC 320/C6 Inlet)</b>			
<b>TMP65-12</b>	12 V	5.42 A	65 W
<b>TMP65-15</b>	15 V	4.33 A	65 W
<b>TMP65-18</b>	18 V	3.62 A	65 W
<b>TMP65-19</b>	19 V	3.43 A	65 W
<b>TMP65-20</b>	20 V	3.25 A	65 W
<b>TMP65-24</b>	24 V	2.71 A	65 W
<b>Class II (IEC 320/C8 Inlet)</b>			
<b>TMP65-12-2R</b>	12 V	5.42 A	65 W
<b>TMP65-15-2R</b>	15 V	4.33 A	65 W
<b>TMP65-18-2R</b>	18 V	3.62 A	65 W
<b>TMP65-19-2R</b>	19 V	3.43 A	65 W
<b>TMP65-20-2R</b>	20 V	3.25 A	65 W
<b>TMP65-24-2R</b>	24 V	2.71 A	65 W

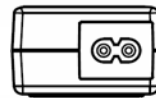
**STANDARDS & COMPLIANCES**

IEC/EN 60601-1-2: 2014 .. EMC & Immunity Performance	
EN 55011 & 55022 .....	Class B, conducted & radiated
FCC, VCCI .....	Class B, conducted & radiated
EN 61000-3-2 .....	Harmonic distortion, Class A
EN 61000-3-3 .....	Line fluctuations & flicker
EN 61000-4-2 .....	ESD, $\pm$ 15kV air and $\pm$ 8kV contact
EN 61000-4-3 .....	Radiated immunity, 10V/m
EN 61000-4-4 .....	Fast transient/burst, $\pm$ 2kV
EN 61000-4-5 .....	Surge, $\pm$ 1kV diff., $\pm$ 2kV com.
EN 61000-4-6 .....	Conducted immunity, 6Vrms
EN 61000-4-8 .....	Magnetic field immunity, 30A/m
EN 61000-4-11 .....	Voltage dip immunity, 30% reduction for 500ms, 60% reduction for 100ms, >95% reduction for 10ms
Safety Standards .....	IEC/EN/UL 60601-1 (Edition 3.1), ANSI/AAMI ES 60601-1 (2012), CAN/CSA C22.2 No. 60601-1 (2014); IEC 60950-1 (2nd Edition)
Agency Approvals .....	UL, cUL, TUV, CE, CB, CCC
Other Compliances .....	RoHS, CEC & Energy Star Level VI

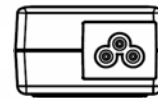
### MECHANICAL SPECIFICATIONS



AC INPUT  
IEC 320/C8 INLET ( Class II )



AC INPUT  
IEC 320/C6 INLET ( Class I )



Unit: inch [mm]  
Weight: 410 grams (0.906 lbs.) approx.

#### NOTES:

1. UL11352 14AWG 1200mm output cable is used to meet CEC Level VI.
2. Standard Class I model comes with AC and DC Grounds connected together. Separate grounds available upon request.
3. The output connector shown is for reference only. Please contact TRUMPower to order the connector that meets your requirements.