



FEATURES

- 85-264 VAC Universal Input
- Class I with IEC 320/C14 AC Inlet
- Meets IP43 Solid Particle/Liquid Ingress Standards
- Operation Altitude up to 5,000 Meters
- Low Earth Leakage Current
- Meets DoE Level VI & ErP Tier 2 Efficiency Standards



MODELS LIST

Product No.	Output Voltage	Min. Output Current	Max. Output Current	Tolerance	Ripple & Noise (Max. P-P)*	Average Efficiency (Typical)		Max. Output Power
						@ 115 VAC	@ 230 VAC	
TM30D-05	5V	0A	5.0A	±5%	100mV	82%	83%	25W
TM30D-12	12V	0A	2.5A	±5%	120mV	87%	88%	30W
TM30D-15	15V	0A	2.0A	±5%	150mV	87%	88%	30W
TM30D-18	18V	0A	1.66A	±5%	180mV	87%	88%	30W

* Measured at rated line voltage and output load ranges, 20 MHz BW, with a 10µF tantalum capacitor in parallel with a 0.1µF ceramic capacitor across the output.

INPUT SPECIFICATIONS

Input Voltage Range 85-264 VAC
 Input Frequency 47-63Hz
 Input Current 0.8A (rms) @ 115 VAC
 0.35A (rms) @ 230 VAC
 Inrush Current 40A @ 115 VAC or 100A @ 230 VAC
 for 25 W, 35A @ 115 VAC or 85A @ 230 VAC for 30W, at 25°C cold start
 Earth Leakage Current 150 µA max. @ 264 VAC, 63Hz
 Touch Current 100 µA max. @ 264 VAC, 63Hz

GENERAL SPECIFICATIONS

Efficiency See table
 Hold-up Time 12 ms min. @ 115 VAC
 Turn-on Delay Time 0.1 sec. max. @ 115/230 VAC
 No Load Power Cons <0.1W
 Line Regulation ±0.5% max. @ full load
 Operation Altitude 5,000 meters
 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 10% to 90% non-condensing
 Withstand Voltage 4,000 VAC, input to output (2 MOPP)
 1,500 VAC, input to ground
 500 VAC, output to ground
 MTBF 300K hours min. at full load, 25°C ambient, calculated per MIL-HDBK-217F

OUTPUT SPECIFICATIONS

Output Power Ratings See table
 Ripple & Noise See table
 Over Voltage Protection Set at 140% max.; Latch off
 Short Circuit Protection Set at 150% max.; Auto recovery
 Over Current Protection Protected to short-circuit conditions
 Temperature Coefficient ±0.04%/°C max.
 Transient Response Max. excursion of 4% or better on all models, recovering to 1% of final value within 500 µs after a 25% step load change

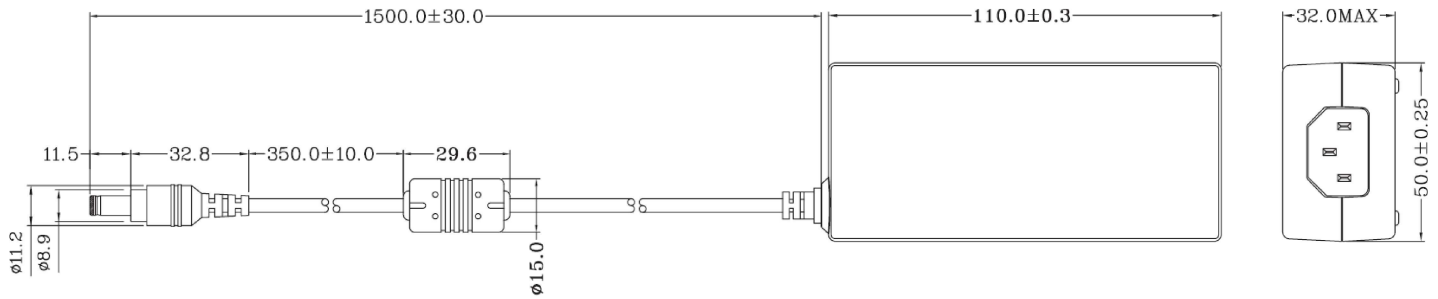
STANDARDS & COMPLIANCE

IEC/EN 60601-1-2, Ed. 4 EMC & Immunity Performance
 EN 55011, EN 55032 Class B, conducted & radiated
 FCC, VCCI Class B, conducted & radiated
 EN 61000-3-2 Harmonic distortion, Class A & D
 EN 61000-3-3 Line flicker
 EN 61000-4-2 ESD, ±15 KV air and ±8 KV contact
 EN 61000-4-3 Radiated immunity, 3 V/m
 EN 61000-4-4 Fast transient/burst, ±2 KV
 EN 61000-4-5 Surge, ±1 KV diff., ±2 KV com.
 EN 61000-4-6 Conducted immunity, 3 Vrms
 EN 61000-4-8 Magnetic field immunity, 3 A/m
 EN 61000-4-11 Voltage dip immunity, 30% reduction for 500ms, >95% reduction for 20ms
 Safety Standards UL/IEC/EN 60601-1 (Edition 3.1), ANSI/AAMI ES 60601-1 (2012), CSA C22.2 No. 60601-1 (2014)
 Agency Approvals UL, cUL, TUV, CB, CE
 Other Compliance RoHS, DoE Level VI, ErP Tier 2

TM30D Series

25-30W Medical Grade Desktop AC/DC Power Adapters

MECHANICAL SPECIFICATIONS



NOTES:

1. Dimensions: mm
2. Tolerance: 0.5 maximum unless otherwise stated
3. Weight: 180 grams (0.40 lbs.) approx.
4. Output cable: 1,000mm, 16 AWG for 5V output model; 1,500mm, 18 AWG for 12-18V output models.
5. Standard output connector: 2.5 x 5.5 x 11.5 mm C+ barrel plug. Contact TRUMPower for other connector options.