

DESCRIPTION

The TMP30 series of AC/DC switching power adapters are capable of delivering 25 to 30 watt output power. They are enclosed in a 94V-1 rated polyphenylene-oxide case with an IEC320 inlet to mate with interchangeable cord for world-wide use. All models meet CISPR 11 and FCC class B emission limits, and are designed for medical applications.

FEATURES

- 10 standard desktop models.
- Optional output connectors
- Optional on/off switch
- 100% burn-in at full rated load
- 90VAC to 264 VAC universal input
- Input surge current protection
- Overvoltage protection
- Overcurrent protection
- Short-circuit protection with auto-recovery

INPUT SPECIFICATIONS

Input voltage : 85 to 264VAC
 Input frequency: 47 to 63Hz
 Input current : 0.80A (rms) for 115VAC
 0.50A (rms) for 230VAC
 Leakage current: 90µA max. @ 115VAC, 60Hz
 150µA max. @ 230VAC, 50Hz

OUTPUT SPECIFICATIONS

Output voltage/current : See rating chart
 Output power range : 30 watts maximum
 Ripple and noise : 1% peak to peak maximum
 Overvoltage protection : Set at 112-132% of the higher extreme of its nominal output voltage
 Overcurrent protection : The output is protected to short circuit conditions
 Temperature coefficient : All outputs ±0.04%/°C maximum
 Transient response : Maximum excursion of 4% or better on all models, recovering to 1% of final value within 500µs after a 25% step load change

ENVIRONMENTAL SPECIFICATIONS

Operating temperature : 0°C to +70°C
 Storage temperature : -40°C to +85°C
 Relative humidity : 5% to 95% non-condensing
 Derating : Derate from 100% at +50°C linearly to 50% at +70°C

TMP30 SERIES



Safety Standard Approvals :



UL 2601-1,
 CSA C22.2 No. 601.1



TÜV EN60601-1

GENERAL SPECIFICATIONS

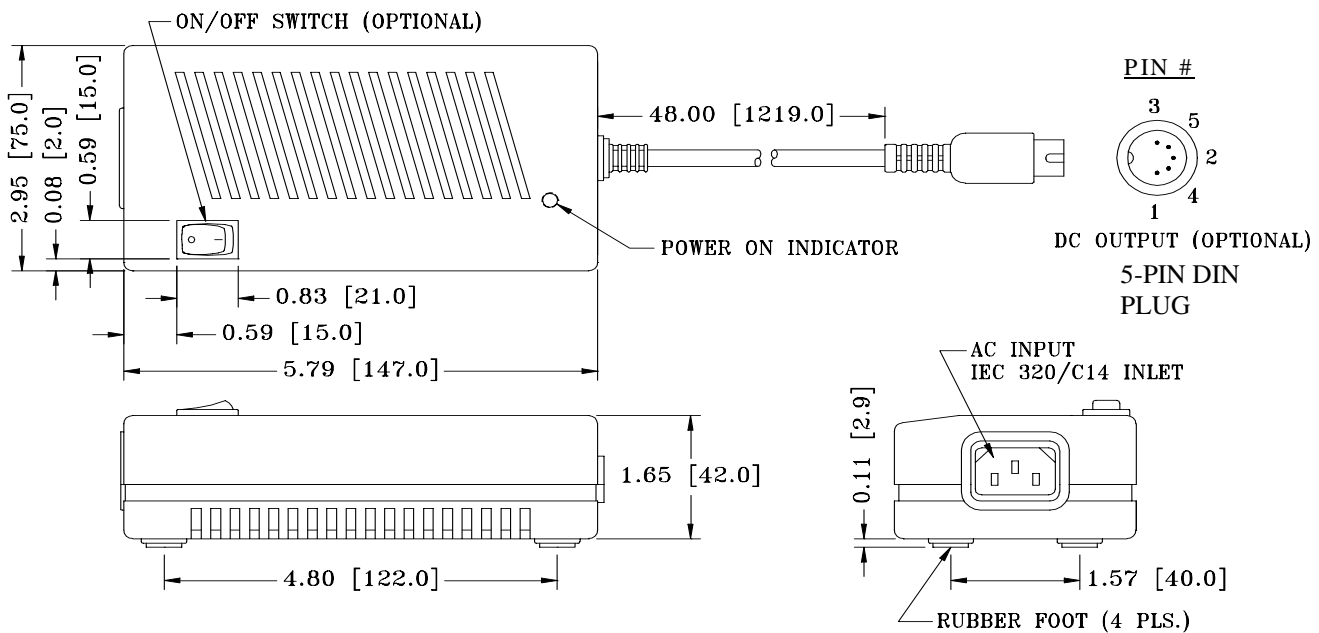
Switching frequency: 70KHz ±5KHz
 Efficiency : 70% minimum on all models with output voltage ≥7V or 65% minimum on the others
 Hold-up time: 20ms minimum at 115VAC
 Line regulation: ±0.5% maximum at full load
 Inrush current: 15A @ 115VAC, or 30A @ 230VAC, at 25°C and cold start
 Withstand voltage: 4000VAC from input to output
 1500VAC from input to ground
 500VAC from output to ground
 MTBF: 400,000 hours minimum at full load at 25°C ambient, calculated per MIL-HDBK-217F
EMC Performance (EN60601-1-2: 2001)
 EN55011: Class B conducted, class B radiated
 FCC: Class B conducted, class B radiated
 VCCI: Class B conducted, class B radiated
 EN61000-3-2: Harmonic distortion, class A and D
 EN61000-3-3: Line flicker
 EN61000-4-2: ESD, ±8KV air and ±6KV contact
 EN61000-4-3: Radiated immunity, 3V/m for 80-2500MHz
 EN61000-4-4: Fast transient/burst, ±2KV
 EN61000-4-5: Surge, ±1KV diff, ±2KV com.
 EN61000-4-6: Conducted immunity, 3Vrms
 EN61000-4-8: Magnetic field immunity, 3A/m
 EN61000-4-11: Voltage dips, 30% reduction for 500ms, 60% reduction for 100ms and >95% reduction for 10ms

OUTPUT VOLTAGE/CURRENT RATING CHART

Product No.	Vnom.	Imin.	Output I _{max.}	Tol.	Maximum Output Power
TMP30-05	5-6V	0A	5.0A	5%	25W
TMP30-06	6-8V	0A	4.5A	5%	30W
TMP30-09	9-11V	0A	3.4A	2%	30W
TMP30-12	11-13V	0A	2.8A	2%	30W
TMP30-15	13-17V	0A	2.4A	2%	30W
TMP30-19	17-21V	0A	1.8A	2%	30W
TMP30-24	21-27V	0A	1.5A	2%	30W
TMP30-30	27-33V	0A	1.2A	2%	30W
TMP30-36	33-39V	0A	1.0A	2%	30W
TMP30-48	48V	0A	0.7A	2%	30W

NOTE: The output voltage can be adjusted by user in the stated range, or set by factory to a wanted value in the range upon the request of a user when ordering.

MECHANICAL SPECIFICATIONS



NOTES:

1. Dimensions shown in inch [mm]
2. Tolerance 0.02[0.5] maximum
3. Weight: 0.55Kgs (1.21Lbs.) approx.
4. Standard output connector is a 5-pin at 180° male DIN. Please contact TRUMPower for other connector options.

PIN CHART

PIN				1	2	3	4	5
Product No.								
TMP30-05	TMP30-06	TMP30-09	TMP30-12	RETURN	RETURN	OUTPUT	RETURN	OUTPUT
TMP30-15	TMP30-19	TMP30-24	TMP30-30					
TMP30-36	TMP30-48							