TRUMPower

130 WATT MEDICAL POWER ADAPTERS

TMP130 SERIES

CE (MDD+EMC)

DESCRIPTION

The TMP130 series of AC/DC switching power adapters are for 100 to 130 watts of continuous output power. They are designed for medical applications that require external power. The units are enclosed in a 94V-1 rated polyphenylene-oxide case with an IEC 320 inlet to mate with interchangeable cord for world-wide use. An on/off switch can be added at request. All models meet CISPR 11 and FCC class B emission limits, and comply with UL, CSA, IEC and CE requirements.



FEATURES

- **In compliance with EN61000-3-2, EN61000-3-3 and EN61000-1-1-2**
- **Optional output connectors**
- **Optional on/off switch**
- **Optional Power Fail Detect (PFD) signal**
- **100% burn-in at full load**
- **Auto-ranging input**
- **Input surge current protection**
- **Overvoltage protection**
- **Thermal protection**

Safety Standard Approvals :

UL 2601-1
CSA C22.2 No. 601.1

TÜV EN60601-1

INPUT SPECIFICATIONS

Input voltage :	90 to 132VAC or 180 to 264VAC (auto-ranging)
Input frequency :	47 to 63 Hz
Input current :	3.0A (rms) for 115 VAC 1.7A (rms) for 230VAC
Leakage current :	90µA max. @ 115VAC, 60Hz 150µA max. @ 230VAC, 50Hz

OUTPUT SPECIFICATIONS

Output voltage/current :	See rating chart
Total output power :	130 watts maximum
Ripple and noise :	1% peak to peak maximum
Overvoltage protection :	Provided on output: set at 112 – 132% of its nominal output voltage
Overcurrent protection :	All outputs protected to short circuit conditions
Temperature coefficient :	All outputs ±0.04%/ºC 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:	0ºC to +70ºC
Storage temperature :	-40ºC to +85ºC
Relative humidity :	5% to 95% non-condensing
Derating :	Derate from 100% at +50ºC linearly to 50% at +70ºC

GENERAL SPECIFICATIONS

Switching frequency:	68 Khz ±8Khz
Efficiency:	70% minimum on Vo ≥12V 65% minimum on others
Hold-up time:	10 msec minimum at 115VAC
Line regulation:	±0.5% maximum at full load
Inrush current:	15amps @115VAC, or 30amps @230VAC, at 25ºC and cold start
Withstand voltage:	4000VAC from input to output 1500VAC from input to ground 5000VAC from output to ground
MTBF:	400,000 hours minimum at full load at 25ºC ambient, calculated per MIL-HDBK-217F, excluding DC fan.

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
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

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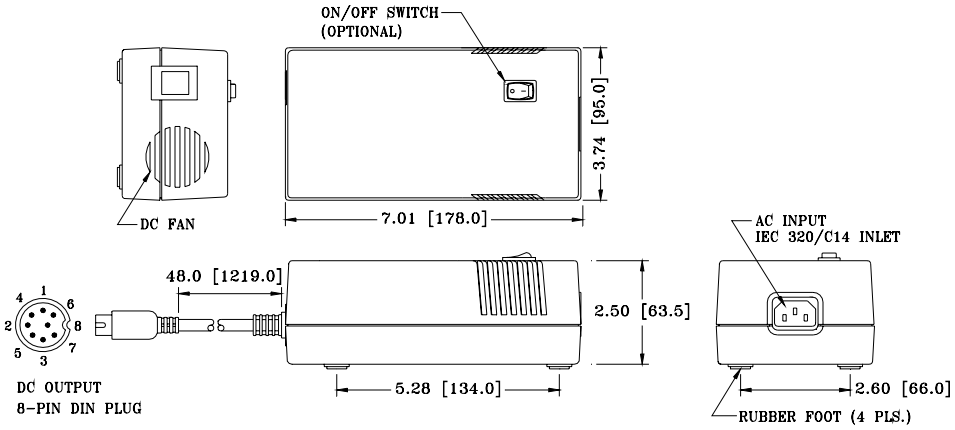
OUTPUT VOLTAGE/CURRENT RATING CHART

Product No.	Vnom.	Output Imin.	Output Imax.	Tol.	Maximum Output Power
TMP130-05	5V	0A	20A	5%	100W
TMP130-07	7V	0A	14A	5%	100W
TMP130-10	10V	0A	10A	5%	100W
TMP130-12	12V	0A	10.8A	5%	130W
TMP130-15	15V	0A	8.6A	4%	130W
TMP130-18	18V	0A	7.2A	4%	130W
TMP130-24	24V	0A	5.4A	3%	130W
TMP130-30	30V	0A	4.3A	3%	130W
TMP130-36	36V	0A	3.6A	2%	130W
TMP130-48	48V	0A	2.7A	2%	130W

Notes: (1) All models are with built-in fan.

(2) Models except TMP130-05, TMP130-07 and TMP130-10 are without remote sense. Consult factory for applications requiring remote sense.

MECHANICAL SPECIFICATIONS



NOTES:
1. Dimensions shown in inch [mm]
2. Tolerance 0.02 [0.5] maximum
3. Weight: 0.80Kgs (1.76Lbs.) approx.
4. Standard output connector is a male 8-pin DIN plug. Please contact TRUMPower for other options.
5. To order a model with on/off switch, add suffix “S” to the model number, e.g. TMP130-24-S.

PIN CHART

Product No. \ PIN		1	2	3	4	5	6	7	8
TMP130-05 TMP130-10	TMP130-07	RETURN	-SENSE	OUTPUT +V	RETURN	OUTPUT +V	RETURN	OUTPUT +V	+SENSE
TMP130-12 TMP130-18 TMP130-30 TMP130-48	TMP130-15 TMP130-24 TMP130-36	RETURN	RETURN	OUTPUT +V	RETURN	OUTPUT +V	RETURN	OUTPUT +V	OUTPUT +V

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