

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

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 $\pm 0.04\%/^{\circ}\text{C}$ 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

TMP130 SERIES



Safety Standard Approvals :



UL 2601-1
CSA C22.2 No. 601.1



TÜV EN60601-1

GENERAL SPECIFICATIONS

Switching frequency: 68 KHz $\pm 8\text{KHz}$
Efficiency: 70% minimum on $V_o \geq 12\text{V}$
65% minimum on others
Hold-up time: 10 msec minimum at 115VAC
Line regulation: $\pm 0.5\%$ maximum at full load
Inrush current: 15amps @ 115VAC, or 30amps @ 230VAC, at 25°C 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 25°C 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, $\pm 8\text{KV}$ air and $\pm 6\text{KV}$ contact
EN61000-4-3: Radiated immunity, 3V/m for 80~2500MHz
EN61000-4-4: Fast transient/burst, $\pm 2\text{KV}$
EN61000-4-5: Surge, $\pm 1\text{KV}$ diff, $\pm 2\text{KV}$ 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

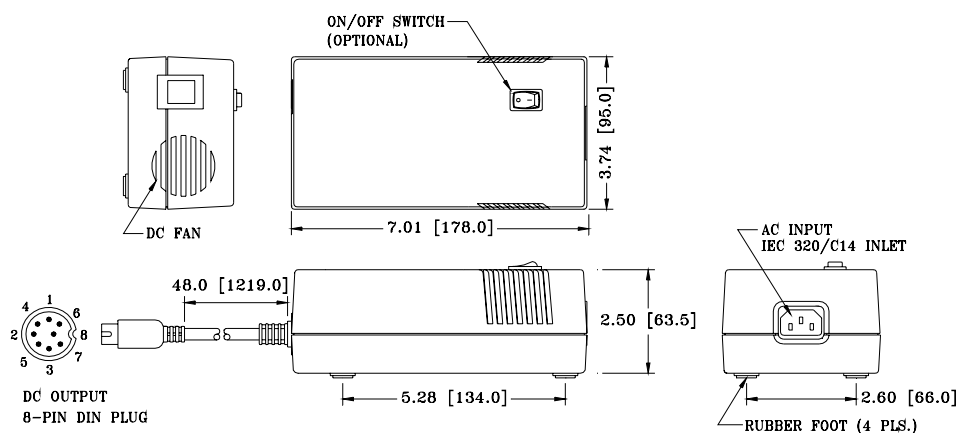
OUTPUT VOLTAGE/CURRENT RATING CHART

Product No.	Vnom.	Output			Tol.	Maximum Output Power
		Imin.	Imax.			
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

PIN		1	2	3	4	5	6	7	8
Product No.									
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