

**FEATURES**

- IEC 320/C6, C8, C14, C18 Inlets
- AC Power Cord Retention Clip Option
- IP54 Environmental Rating
- IEC/EN/UL 60601-1 Ed. 3.1 Safety Approvals
- IEC/EN 60601-1-2 Ed. 4 Medical EMC
- Class II Meets IEC 60601-1-11

INPUT SPECIFICATIONS

Input Voltage Range	90-264 VAC
Input Frequency	47-63 Hz
Input Current	1.6A rms @ 115 VAC 0.8A rms @ 230 VAC
Inrush Current	90A @ 115 VAC or 180A @ 230 VAC, at 25°C cold start
No Load Power Cons.	<0.15W
Earth Leakage Current	150 µA max. @ 264 VAC, 63 Hz
Enclosure Leakage Current	100 µA max. @ 264 VAC, 63 Hz

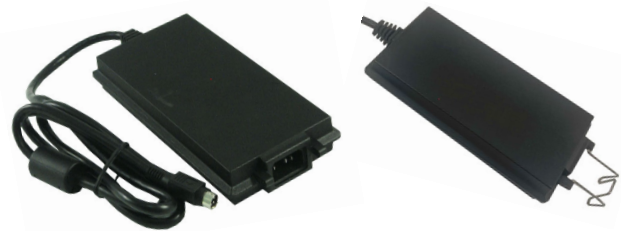
OUTPUT SPECIFICATIONS

Output Power Ratings	See models list
Tolerance	±5%
Ripple and Noise*	1% Vp-p max. at full load
Overvoltage Protection	Set at 112-140% of its nominal output voltage
Overcurrent Protection	Protected to short-circuit conditions, auto-recovery
Over Temp. Protection	Latch off, recycle input to reset
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

* Measured with 20 MHz bandwidth at rated line voltage and output load ranges, with a 47 µF electrolytic capacitor in parallel with a 0.1 µF ceramic capacitor in parallel across the output.

GENERAL SPECIFICATIONS

Power Factor	0.98 typ. @ 115 VAC
Efficiency	88% min. @ full load
Hold-up Time	20 ms @ 100 VAC
Line Regulation	±0.5% max. @ full load
Switching Frequency	50-130 KHz
Operating Temperature	-20°C to +60°C
Derating	Derate from 100% at +40°C linearly to 50% at +60°C
Storage Temperature	-40°C to +85°C
Relative Humidity	5% to 95% non-condensing
Ingress Protection	IP54
Withstand Voltage	4,000 VDC input-output (2MOPP) 1,500 VDC input-ground (1MOPP) 500 VDC output-ground
Operating Altitude	5,000 meters max.
MTBF	100K hours minimum at full load, 25°C ambient, calculated per MIL-HDBK-217F

**MODELS LIST**

*Product No.	Output Voltage	Maximum Current	Maximum Output Power
TPM120-12	12V	8.00A	96W
TPM120-15	15V	7.00A	105W
TPM120-18	18V	6.67A	120W
TPM120-19	19V	6.32A	120W
TPM120-20	20V	6.50A	120W
TPM120-24	24V	5.00A	120W
TPM120-30	30V	4.00A	120W
TPM120-36	36V	2.34A	120W
TPM120-48	48V	2.50A	120W

Note:

Add suffix "-4" to the P/N for model with C14 inlet, "-6" for C6, "-8" for C8, "-F" for C18 inlet, e.g. TPM120-24-4, TPM120-24-6, TPM120-24-8, TPM120-24-F.

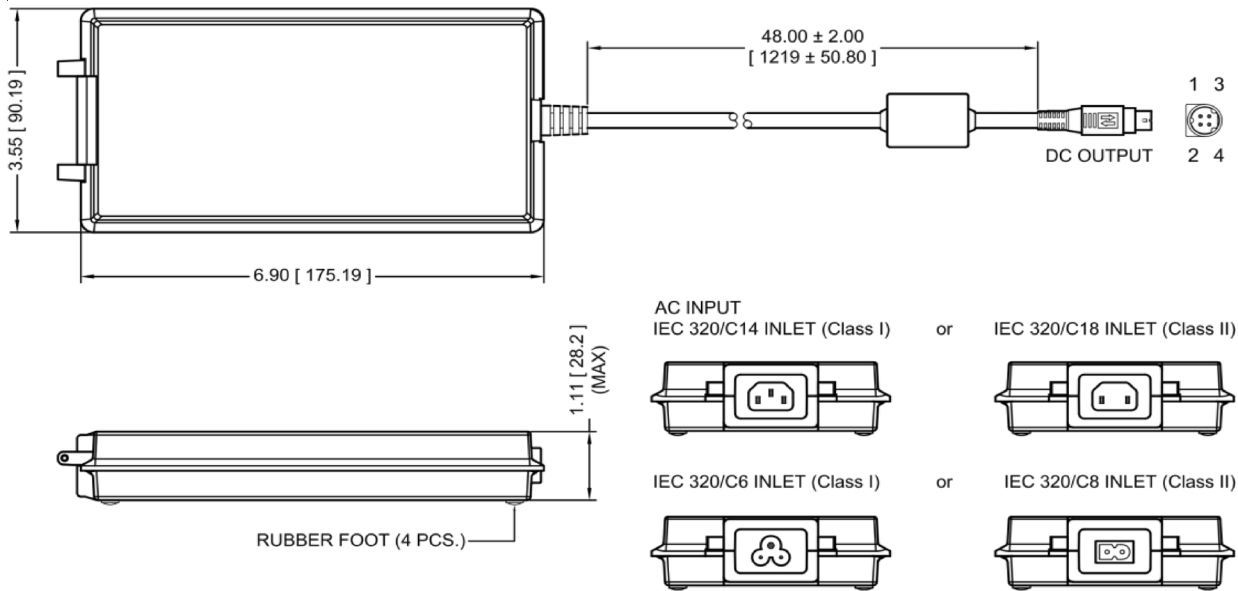
STANDARDS & COMPLIANCE

IEC/EN 60601-1-2 Ed. 4	EMC & Immunity Performance
EN 55011, FCC, VCCI	Class B, conducted & radiated
EN 61000-3-2	Harmonic distortion, Class A & D
EN 61000-3-3	Line fluctuations & flicker
EN 61000-4-2	ESD, ±15 KV air and ±8 KV contact
EN 61000-4-3	Radiated immunity, 10 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, 10 Vrms
EN 61000-4-8	Magnetic field immunity, 30A/m
EN 61000-4-11	Voltage dip immunity, 30% reduction for 500 ms, 60% reduction for 100 ms, >95% reduction for 20 ms
Safety Standards	IEC/EN 60601-1 Edition 3.1, ANSI/AAMI ES 60601-1:2012, CSA C22.2 No. 60601-1:14
Agency Approvals	UL, cUL, TUV, CE, CB
Other Compliance	RoHS, CEC & Energy Star Level VI, EU CoC EPS V5 Tier 2, IP54, IEC 60601-1-11 (Class II version)

TPM120 Series

Medical Grade 96-120W AC/DC Power Adapters

MECHANICAL SPECIFICATIONS



DC OUTPUT CONNECTOR	
PIN	FUNCTION
1	DC RETURN
2	+V
3	DC RETURN
4	+V
SHELL/SHIELD	AC GND (Class I) / DC RETURN (Class II)

Notes:

1. Unit: inch [mm]
2. Tolerance: 0.02 [0.5] maximum, unless otherwise stated
3. Weight: 1.326 lbs. (600 grams) approx.
4. Standard output connector: Kycon P/N KPPX-4P 4-pin circular DIN plug without lock or equivalent
5. Mating connector: Kycon P/N KPJX-4S-S or equivalent
6. Standard Class I model comes with AC and DC Grounds separated. Connected grounds available upon request.
7. Contact TRUMPower for AC power cord retention clip and output connector options.