



FEATURES

- 80 to 264 VAC Wide Input Range
- Single 12 to 54 VDC Output Voltages
- Class I & Class II, 2 MOPP
- 0.98 Active Power Factor
- 89% Minimum Efficiency
- 0.15W Max. No Load Power Consumption
- Compliant with DoE Level VI & CoC EPS V5 Tier 2



INPUT SPECIFICATIONS

Input Voltage Range 80-264 VAC
 Power Derating Derate linearly from 100% at 90V to 90% at 85V and 85% at 80V AC
 Input Frequency 47-63 Hz
 Input Current 2.5A rms @ 115 VAC
 1.25A rms @ 230 VAC
 Touch Current 100 µA max. @ 264 VAC, 63Hz
 Earth Leakage Current 220 µA max. @ 264 VAC, 63Hz

OUTPUT SPECIFICATIONS

Output Power Ratings See table
 Tolerance ±5%
 Ripple and Noise* 1% peak to peak max.
 Overvoltage Protection Set at 110-140% of its nominal output voltage
 Overcurrent Protection Protected to short circuit condition
 Transient Response 4% max. excursion on all models, recovering to 1% of final value within 500 µs after a 25% step load change

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

OTHER SPECIFICATIONS

Power Factor 0.98 typical at 115 VAC
 Efficiency 89% min. at 115 VAC or 230 VAC
 Hold-up Time 20 ms minimum @ 110 VAC
 Turn-on Delay Time 3 sec. max. at 110 VAC
 Line Regulation ±0.5% max. at full load
 Operating Temperature -20°C to +60°C
 Storage Temperature -40°C to +85°C
 Relative Humidity 5% to 95% non-condensing
 Temperature Derating Derate from 100% at +40°C linearly to 50% at +60°C
 Withstand Voltage 4000 VAC, input-output (2 MOPP)
 1500 VAC, input-ground (1 MOPP)
 500 VAC, output-ground
 MTBF 100K hours minimum at full load, 25°C ambient, calculated per MIL-HDBK-217F

MODELS LIST

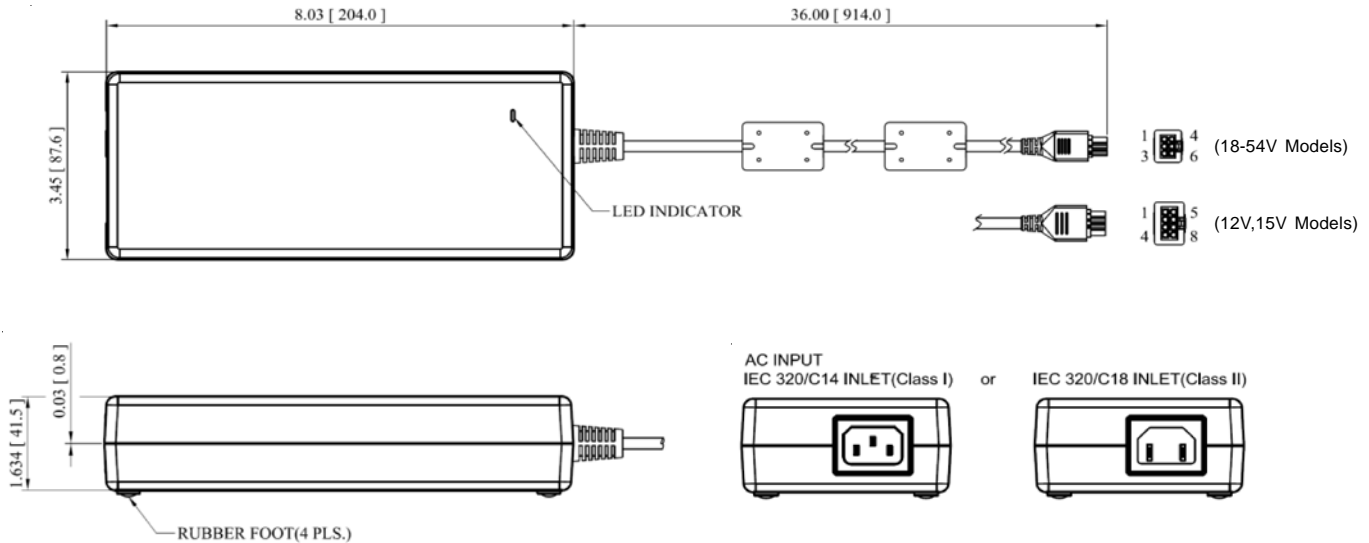
Product No.		Output Voltage	Maximum Current	Maximum Output Power
Class I	Class II			
TMP250-12	TMP250-12-C2	12V	18.34A	220W
TMP250-15	TMP250-15-C2	15V	14.67A	250W
TMP250-18	TMP250-18-C2	18V	13.89A	250W
TMP250-19	TMP250-19-C2	19V	13.16A	250W
TMP250-20	TMP250-20-C2	20V	12.50A	250W
TMP250-24	TMP250-24-C2	24V	10.42A	250W
TMP250-27	TMP250-27-C2	27V	9.26A	250W
TMP250-24	TMP250-30-C2	30V	8.34A	250W
TMP250-32	TMP250-32-C2	32V	7.82A	250W
TMP250-36	TMP250-36-C2	36V	6.95A	250W
TMP250-48	TMP250-48-C2	48V	5.21A	250W
TMP250-54	TMP250-54-C2	54V	4.63A	250W

Note:
 Class I models are equipped with IEC320/C14 inlet, and class II models with IEC320/C18 inlet.

STANDARDS & COMPLIANCE

IEC 61000-1-2:2014 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 flicker
 EN 61000-4-2 ESD, ±15 KV air and ±8 KV contact
 EN 61000-4-3 Radiated immunity, 10V/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, 30 A/m
 EN 61000-4-11 Voltage dips,
 30% reduction for 500ms,
 60% reduction for 100ms,
 >95% reduction for 20ms
 Safety Standards IEC/EN/UL 60601-1 Ed. 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, DoE/CEC Level VI,
 CoC EPS V5 Tier 2

MECHANICAL SPECIFICATIONS



DC OUTPUT CONNECTOR (12V & 15V MODELS)	
PIN	FUNCTION
1	+V
2	RETURN
3	RETURN
4	RETURN
5	+V
6	+V
7	+V
8	RETURN

DC OUTPUT CONNECTOR (18-54V MODELS)	
PIN	FUNCTION
1	+V
2	RETURN
3	RETURN
4	+V
5	+V
6	RETURN

Notes:

1. Unit: inch [mm]
2. Weight: 1.1 kg (2.425lbs.) approx.
3. Output connector for 12V and 15V models: Molex Mini-Fit receptacle, P/N 39-01-2080 with female terminal #5556 or equivalent.
Mating connector: Molex plug 39-01-2086 and male terminal #5566, #5569 or equivalent.
4. Output connector for 18-54V models: Molex Mini-Fit receptacle, P/N 39-01-2060 with female terminal #5556 or equivalent.
Mating connector: Molex plug 39-01-2066 and male terminal #5566, #5569 or equivalent.
5. Contact TRUMPower for output connector options.