



FEATURES

- 90~264 VAC Universal Input
- Class II Insulation
- Standby Power Consumption < 0.3W
- Interchangeable and Fixed Plugs Available
- Meet CEC and Energy Star Efficiency Level V

INPUT SPECIFICATIONS

Input Voltage Range 90~264 VAC
 Input Frequency 47~63Hz
 Input Current 0.5A rms @ 115 VAC
 0.3A rms @ 230 VAC
 Inrush Current 30A @115 VAC or 60A @ 230 VAC
 (except 80A for 5V output) at 25°C cold start
 Enclosure Leakage Current 100 µA max. @ 264 VAC, 63Hz

OUTPUT SPECIFICATIONS

Output Power 15W max.
 Output Voltage See table
 Output Current See table
 Ripple and Noise* 1% p-p max., except 70 mVp-p on 5V with interchangeable plug
 Overvoltage Protection Set at 116-230% of its nominal output voltage
 Overcurrent Protection Protected to short-circuit conditions
 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 20MHz bandwidth at rated line voltage and output load ranges, with a 47 µF tantalum capacitor in parallel with a 0.1 µF ceramic capacitor in parallel across the output.

GENERAL SPECIFICATIONS

Efficiency See rating chart
 Hold-up Time 8 ms min. @ 115 VAC
 Turn-on Delay Time 3 seconds max. @ 115 VAC
 Line Regulation ±0.5% max. at full load
 Operating Temperature 0°C to +40°C
 Derating Derate from 100% at +40°C linearly to 50% at +60°C
 Storage Temperature -40°C to +85°C
 Temperature Coefficient ±0.04%/°C max.
 Relative Humidity 10% to 90% non-condensing
 Withstand Voltage 4,000 VAC from input to output
 MTBF 300K hours minimum at full load, 25°C ambient, calculated per MIL-HDBK-217F



MODELS LIST

*Product No.	Output Voltage	Max. Output Current	ToI.	Ripple & Noise	Active Efficiency	
					@ 115 VAC	@ 230 VAC
TWM15-05-X	5V	3A	±5%	70mV	78%	77%
TWM15-06-X	6V	2.5A	±5%	60mV	80%	78%
TWM15-09-X	9V	1.67A	±5%	90mV	82%	80%
TWM15-12-X	12V	1.25A	±5%	120mV	82%	80%
TWM15-15-X	15V	1A	±5%	150mV	83%	80%
TWM15-24-X	24V	0.625A	±5%	240mV	85%	81%

*X = AC plug code. See below tables and drawings for details.

X	Fixed Type of AC Plug
E	EU Plug
U	USA Plug, Polarized
UN	USA Plug, Non-Polarized
*I	*Interchangeable "main body" without AC plug

P/N	*Interchangeable AC Plug
IPB	British/UK Plug
IPE	EU Plug
IPU	USA Plug (for 115V socket)
IPUH	USA Plug (for 230V socket)

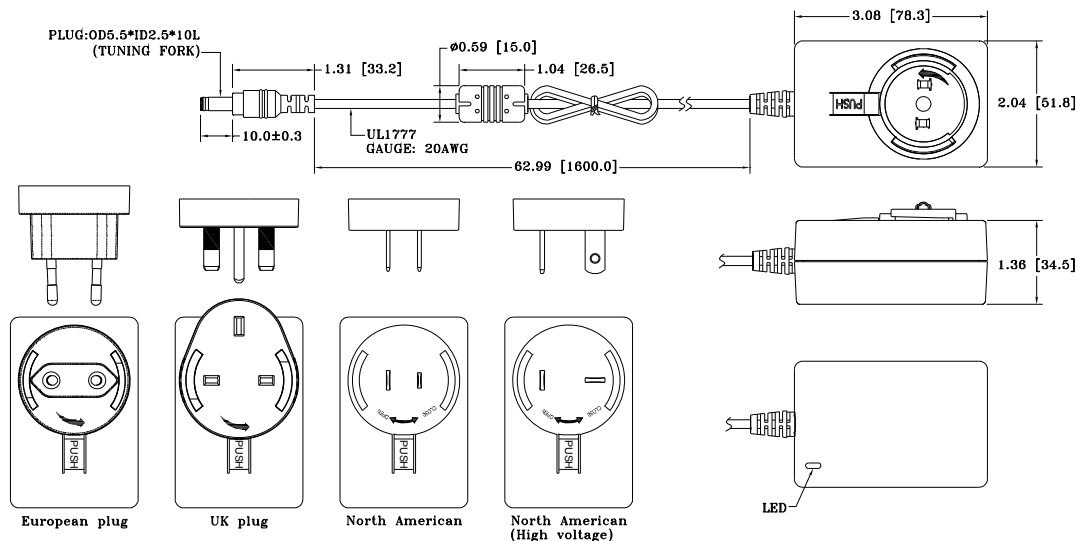
*Must order with the interchangeable "main body" such as TWM15-05-I, etc.

STANDARDS & COMPLIANCES

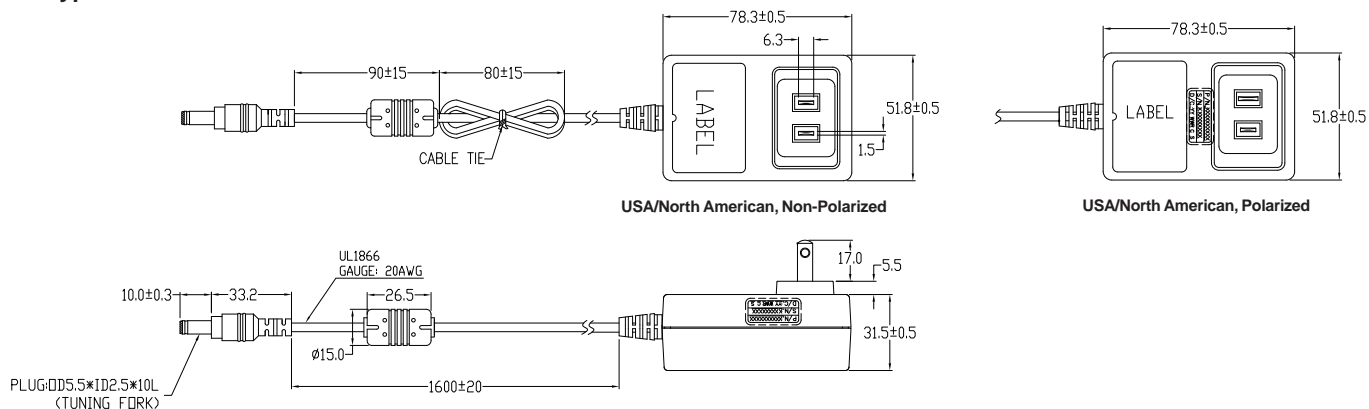
IEC 60601-1-2 EMC & Immunity performance
 EN 55011, FCC, VCCI Class B, conducted & radiated
 EN 61000-3-2 Harmonic distortion, Class A & D
 EN 61000-3-3 Line flicker
 EN 61000-4-2 ESD, ±8KV air and ±6KV contact
 EN 61000-4-3 Radiated immunity, 3V/m
 EN 61000-4-4 Fast transient/burst, ±2KV
 EN 61000-4-5 Surge, ±1KV diff., ±2KV com.
 EN 61000-4-6 Conducted immunity, 3 Vrms
 EN 61000-4-8 Magnetic field immunity, 3A/m
 EN 61000-4-11 Voltage dip immunity, 30% reduction for 500 ms, 60% reduction for 100 ms, >95% reduction for 10 ms
 Safety Standards UL 60601-1, EN 60601-1, CSA C22.2 No. 601.1
 Agency Approvals UL, cUL, TUV, CE (LVD)
 Other Compliances RoHS, CEC & Energy Star Level V

MECHANICAL SPECIFICATIONS

Interchangeable Types



Fixed Types



NOTES:

1. Dimensions: inches [mm]
2. Tolerance: 0.02 [0.5] maximum
3. Weight: approx. 200 grams (0.44 lbs.)
4. The DC connector shown on the drawings is just an example. Contact TRUMPower for connector options.
5. The output cable is 20 AWG x 1600 mm, except 16 AWG x 1000 mm on 5V & 6V output models, and 18 AWG x 1200 mm on 9V output model, so as to comply with CEC and Energy Star efficiency level V requirements. Longer cables are available with efficiency reduced.