

## AMM150 Series



- Energy Star & CEC 2008 Compliant
- Worldwide Medical Approvals
- Operating Temperature - Up to 60 °C
- High Efficiency
- Optional AC Cable Restraint
- Optional Output Connectors
- Low Leakage Current

## Specification

## Input

Input Voltage	• 90-264 VAC
Input Frequency	• 47-63 Hz
Input Current	• 2 A rms at 115 VAC, 1 A rms at 230 VAC
Earth Leakage Current	• 90 $\mu$ A max at 115 VAC/60 Hz, 150 $\mu$ A max at 230 VAC/50 Hz
Input Protection	• Internal 3 A fuse in live and neutral lines

## Output

Output Voltage	• See table
Initial Set Accuracy	• $\pm$ 2%
Minimum Load	• No minimum load required
Start Up Delay	• 2 s max at 115 VAC
Start Up Rise Time	• <80 ms at 115 VAC
Hold Up Time	• 15 ms at 110 VAC
Line Regulation	• $\pm$ 0.5%
Load Regulation	• $\pm$ 5%
Transient Response	• 4% deviation recovering to <1% within 300 $\mu$ s for 25% step change
Ripple & Noise	• 2% pk-pk max
Overvoltage Protection	• 112-140% of nominal output voltage, auto recovery
Overtemperature Protection	• Unit shuts down, auto recovery
Overload Protection	• 130-180% auto recovery
Short Circuit Protection	• Trip & restart (hiccup mode)
Temperature Coefficient	• $\pm$ 0.04%/°C

## General

Efficiency	• 85% minimum (see note 4)
Isolation	• 4000 VAC Input to Output 1500 VAC Input to Ground 500 VAC Output to Ground
Switching Frequency	• 50-110 kHz
Power Density	• 2.9 W/Inch <sup>3</sup>
MTBF	• 150 kHrs per MIL-HDBK-217F

## Environmental

Operating Temperature	• 0 °C to +60 °C, derate linearly from 100% load at +40 °C to 50% at +60 °C
Cooling	• Natural convection
Operating Humidity	• 5-95% RH, non-condensing
Storage Temperature	• -40 °C to +85 °C
Operating Altitude	• 3000 m
Shock	• 30 g, 10 ms on 3 axes
Vibration	• 5-100 Hz, 2.31 m/s <sup>2</sup> , 20 mins on 3 axes

## EMC &amp; Safety

Emissions	• EN55011, Class B conducted EN55011, Class B radiated
Harmonic Currents	• EN61000-3-2
Voltage Flicker	• EN61000-3-3
ESD Immunity	• EN61000-4-2, $\pm$ 8 kV air & $\pm$ 4 kV contact
Radiated Immunity	• EN61000-4-3, level 2 Perf Criteria A
EFT/Burst	• EN61000-4-4, level 3 Perf Criteria A
Surge	• EN61000-4-5, level 3 Perf Criteria A
Conducted Immunity	• EN61000-4-6, 3 V rms Perf Criteria A
Magnetic Field	• EN61000-4-8, 1 A/m Perf Criteria A
Dips & Interruptions	• EN61000-4-11, >95% $U_T$ for 10 ms, 60% $U_T$ for 100 ms, 30% $U_T$ for 500 ms Perf Criteria A, B, B
Safety Approvals	• EN60601-1, UL60601-1, CSA22.2 No. 601-1 per cUL

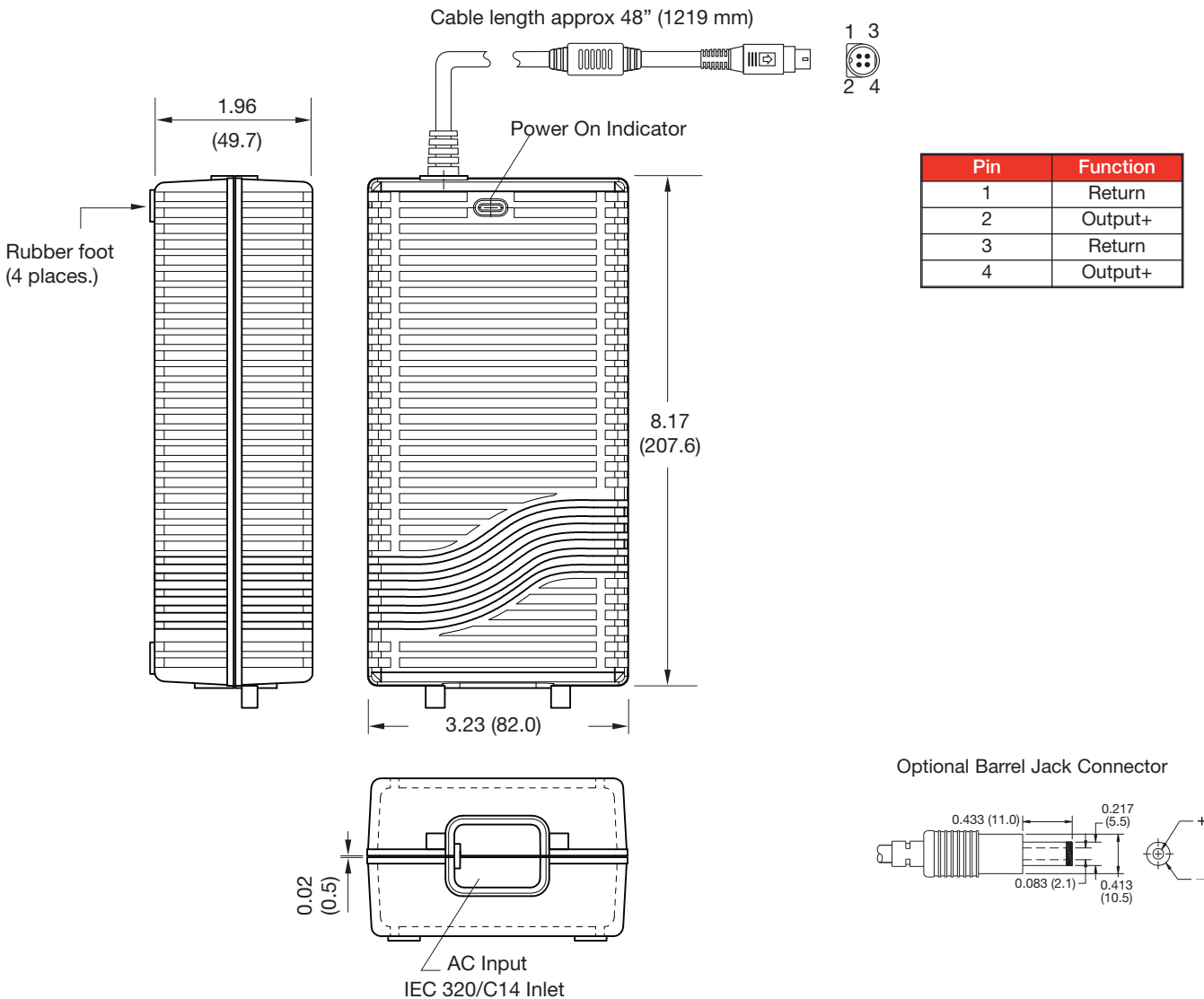
**Models and Ratings**

Output Power	Output Voltage	Output Current	Total Regulation <sup>(2)</sup>	Model Number <sup>(5)</sup>
132 W	12 V	11.00 A	5%	AMM150PS12
144 W	15 V	9.60 A	5%	AMM150PS15
150 W	19 V	7.90 A	5%	AMM150PS19
150 W	24 V	6.25 A	5%	AMM150PS24 <sup>(3)</sup>
150 W	27 V	5.56 A	5%	AMM150PS27 <sup>(3)</sup>
150 W	48 V	3.13 A	5%	AMM150PS48 <sup>(3)</sup>

**Notes**

1. Ripple and noise measured at 20 MHz bandwidth with a 10  $\mu$ F tantalum and 0.1  $\mu$ F ceramic capacitor connected at the measurement point.
2. Total regulation includes set accuracy, line and load regulation.
3. For optional barrel jack connector, add suffix 'B1' to the model number e.g. AMM150PS24B1.
4. Efficiency given is the average of efficiencies measured with output loads of 25%, 50%, 75% and 100%.
5. For optional AC cable restraint, add suffix 'A' to the model number e.g. AMM150PS24A. AC mains lead must be Interpower Corporation, part number: 70006020300.

**Mechanical Details**



**Notes**

1. Dimensions shown in inches (mm). Tolerance is 0.02 (0.5) maximum, except output cable length.
2. Weight: 2.16 lbs (980 g).
3. Output connector is KYCON KPPX-4P. For mating half use KYCON KPJX-4S-S or equivalent.
4. Shell is connected to ground.