150 Watts

AMM150 Series



- Energy Star Level V ≥15 V
- CEC 2008 & EISA2007 Compliant
- Worldwide Medical Approvals
- Class I and Class II Versions
- 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 (Class I Versions)	• 90 µA max at 115 VAC/60 Hz, 150 µA max at 230 VAC/50 Hz
Input Protection	• Internal 3 A fuse in live and neutral lines
No Load Input Power	• <0.5 W

Output

Output Voltage	• See table
Initial Set Accuracy	• ±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	• ±0.5%
Load Regulation	• ±5%
Transient Response	• 4% deviation recovering to <1% within 300 µs for 25% step change
Ripple & Noise	• 2% pk-pk max, see note 1
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	• ±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^3
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^2, 20 mins on 3 axes

EMC & Safety

Emissions	• EN55011, Class B conducted EN55011, Class B radiated
Harmonic Currents	• EN61000-3-2, Class A
Voltage Flicker	• EN61000-3-3
ESD Immunity	• EN61000-4-2, ±8 kV air & ±6 kV indirect Discharge, Perf Criteria A
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

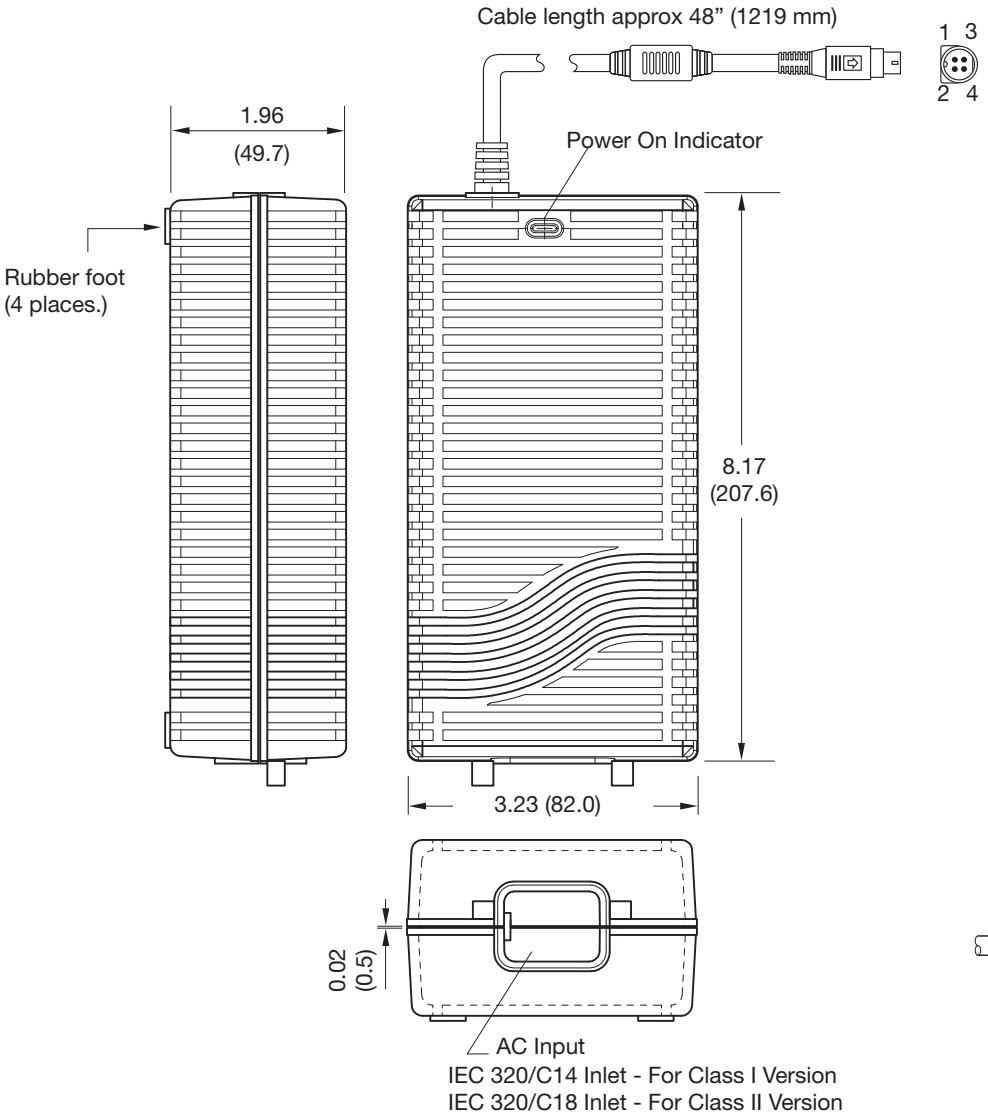
Models and Ratings

Output Power	Output Voltage	Output Current	Total Regulation[2]	Model Number[5,6]
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[3]
150 W	27 V	5.56 A	5%	AMM150PS27[3]
150 W	48 V	3.13 A	5%	AMM150PS48[3]

Notes

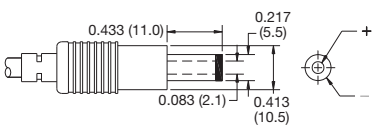
1. Ripple and noise measured at 20 MHz bandwidth with a 10 µF tantalum and 0.1 µF ceramic capacitor connected at the measurement point.
2. Total regulation includes set accuracy, line and load regulation.
3. For optional barrel jack connector, add suffix 'B1' to the model number e.g. AMM150PS24B1.
4. Efficiency given is the average of efficiencies measured with output loads of 25%, 50%, 75% and 100%. Models with output voltage of 15 V and higher have 87% minimum.
5. For optional AC cable restraint on the Class I Version, add suffix 'A' to the model number e.g. AMM150PS24A or AMM150PS24B1A. AC mains lead must be Interpower Corporation, part number: 70006020300. Optional AC cable restraint is not available on the Class II Version.
6. For Class II Versions, and 'C2' to model number, eg. AMM150PS24C2

Mechanical Details



Pin	Function
1	Return
2	Output+
3	Return
4	Output+

Optional Barrel Jack Connector



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. For Class I versions shell is connected to ground. For Class II Versions shell is capacitively coupled to input.