

AMD150 Series



- Energy Star Level V
- CEC2008 & EISA2007 Compliant
- Universal Input
- High Efficiency
- 0 °C to +70 °C Operating Temperature
- Non-standard Connectors Available
- International Safety Approvals

Specification

Input

Input Voltage	• 90-264 VAC
Input Frequency	• 47-63 Hz
Input Current	• 2.0 A rms at 115 VAC, 1.0 A rms at 230 VAC
Inrush Current	• 60 A at 115 VAC, 120 A at 230 VAC, cold start +25 °C
Input Protection	• Internal T4A/250 V fuse
Power Factor	• 0.95 typical
Earth Leakage Current	• 150 μ A max at 115 VAC, 250 μ A max at 230 VAC
No Load Input Power	• <0.5 W

Output

Output Voltage	• See table
Output Voltage Trim	• Not user-adjustable
Initial Set Accuracy	• $\pm 2\%$
Minimum Load	• No minimum load required
Start Up Delay	• 5 s max at 100 VAC
Hold Up Time	• 3 ms minimum at 100 VAC
Line Regulation	• $\pm 0.5\%$ maximum
Load Regulation	• See table
Transient Response	• 4% max. deviation, recovery to within 1% in 500 μ s for a 25% load change
Ripple & Noise	• 2% max pk-pk (see note 1)
Overvoltage Protection	• 110-140% Vnom, recycle input to reset
Overtemperature Protection	• Unit shuts down, recycle input to reset
Overload Protection	• 110-150%, auto recovery
Short Circuit Protection	• Trip and restart (Hiccup mode)
Temperature Coefficient	• 0.04%/°C

General

Efficiency	• 88% min
Isolation	• 3000 VAC Input to Output 1500 VAC Input to Ground Output 0 V is electrically connected to Input Ground
Switching Frequency	• 20-80 kHz variable
Power Density	• 5.1 W/In ³
MTBF	• >100 kHrs per MIL-HDBK-217F (+25 °C ambient at full load)

Environmental

Operating Temperature	• 0 °C to +70 °C, derate from 100% power at +40 °C to 60% power at +70 °C
Operating Humidity	• 10-95% RH, non-condensing
Storage Temperature	• -20 °C to +80 °C
Operating Altitude	• 3000 m
Shock	• 30 g, 10 ms on 3 axes
Vibration	• 5-100 Hz, 2.31 m/s ² , 20 mins, 3 axes

EMC & Safety

Emissions	• EN55022/FCC/VCCL, Class B conducted EN55022/FCC/VCCL, Class B radiated
Harmonic Currents	• EN61000-3-2
Voltage Flicker	• EN61000-3-3
ESD Immunity	• EN61000-4-2, ± 15 kv contact and air discharge
Radiated Immunity	• EN61000-4-3, level 2 Perf Criteria A
EFT/Burst	• EN61000-4-4, level 2 Perf Criteria A
Surge	• EN61000-4-5, level 3 Perf Criteria A
Conducted Immunity	• EN61000-4-6, level 2 Perf Criteria A
Dips & Interruptions	• EN61000-4-11, 30% for 10 ms, 60% 100 ms, 100% 5000 ms, Perf Criteria A, B, B
Safety Approvals	• EN60950, UL60950, CSA22.2 No. 60950 per cUL, CE Mark

Models and Ratings

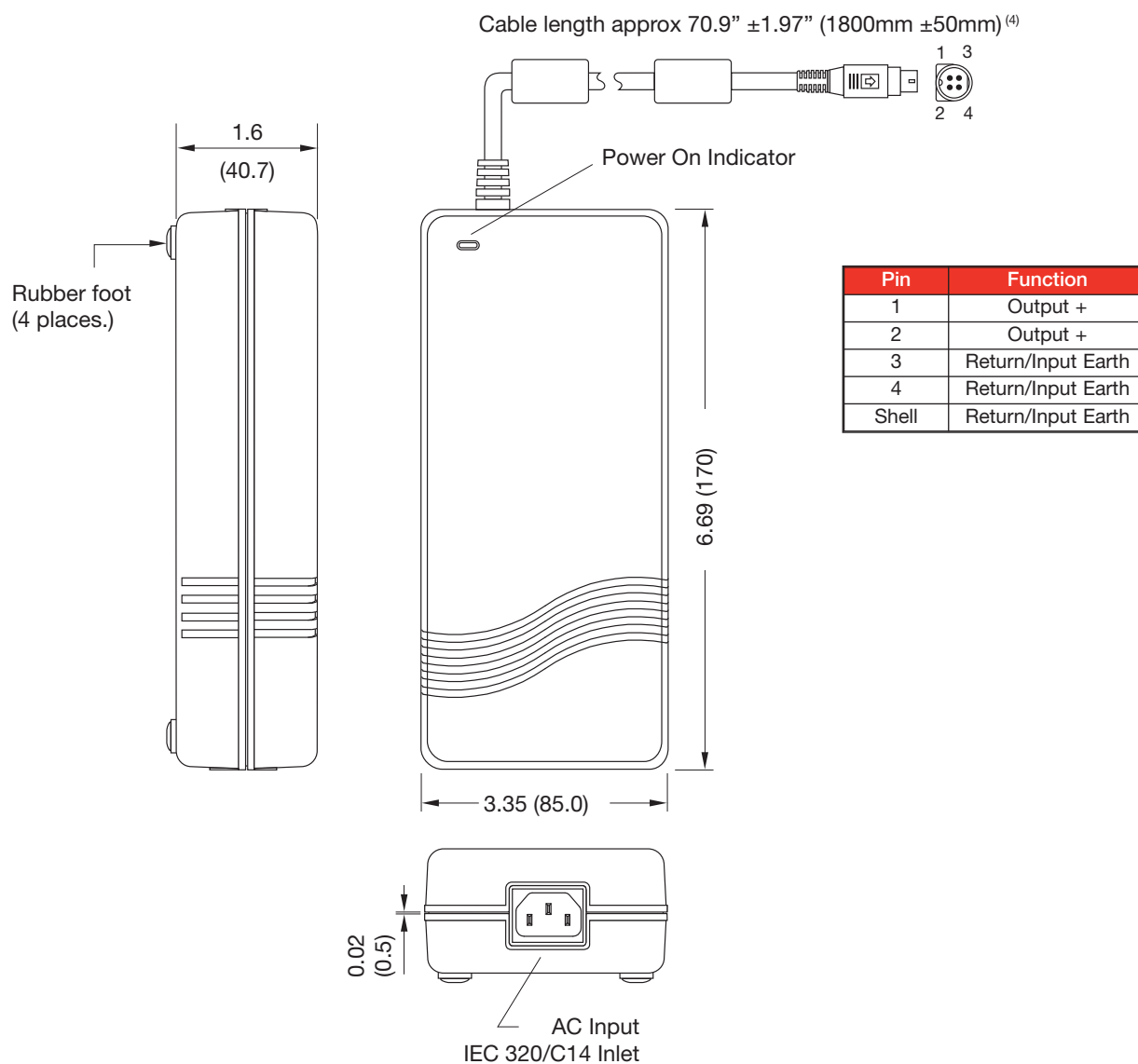
AMD150 XP

Output Power	Output Voltage	Output Current	Total Regulation ⁽²⁾	Model Number
150 W	12 V	12.50 A	5%	AMD150PS12
150 W	19 V	7.89 A	5%	AMD150PS19
150 W	24 V	6.25 A	5%	AMD150PS24

Notes

1. Ripple and noise measured at 20 MHz bandwidth with a 47 μ F tantalum and 0.1 μ F ceramic cap connected at the measurement point.
2. Total regulation includes initial set accuracy, line and load regulation.

Mechanical Details



Notes

1. Dimensions shown in inches (mm). Tolerance is 0.02 (0.5) maximum, except output cable length.
2. Weight: 1.76 lb (800 g).
3. Optional output connectors available. Consult sales.
4. AMD150PS12 cable length is 37.4" (950 mm).
5. Output connector is non locking 4 pin DC power plug and mates with Kycon KPJ-4S or equivalent.