

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

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|-----------------------|---|
| 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 |
| Power Factor | • 0.95 typical |
| Earth Leakage Current | • 150 µA max at 115 VAC, 250 µA max at 230 VAC |
| No Load Input Power | • <0.5 W |

Output

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|----------------------------|---|
| Output Voltage | • See table |
| Output Voltage Trim | • Not user-adjustable |
| Initial Set Accuracy | • ±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 | • ±0.5% maximum |
| Load Regulation | • See table |
| Transient Response | • 4% max. deviation, recovery to within 1% in 500 µs 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/VCCI, Class B conducted EN55022/FCC/VCCI, 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 |

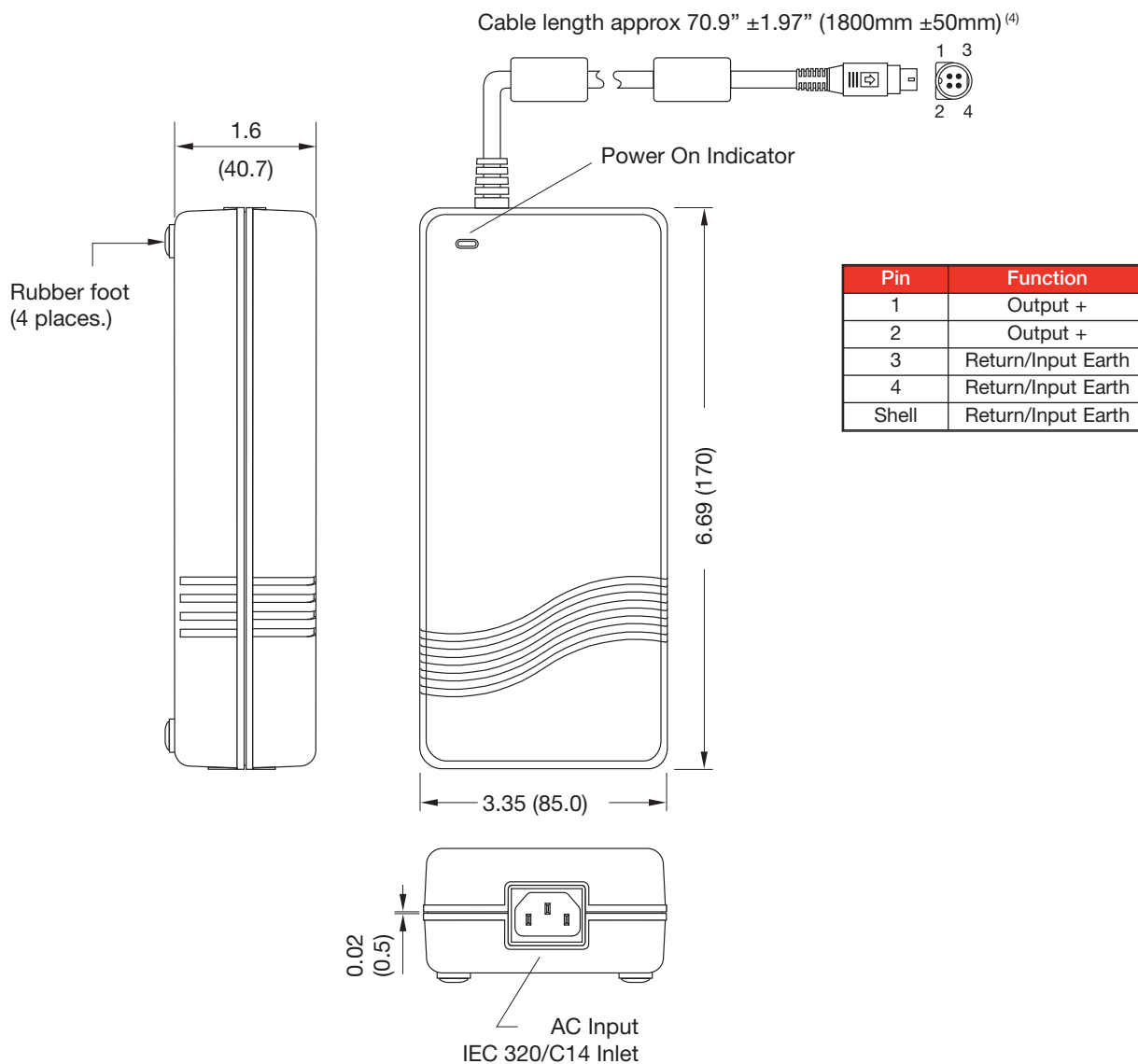
Models and Ratings

| 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 μF tantalum and 0.1 μF 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 (Kycon KPP-4P or equivalent) mates with Kycon KPJ-4S or equivalent.