

AEL Series



- Energy Star & CEC 2008 Compliant
- Approved as LPS
- China Compulsory Certification (CCC) Qualified
- High Efficiency
- +70 °C Operating Temperature
- Compact Dimensions
- Optional Input Connector

Specification

Input

| | |
|---------------------------|---|
| Input Voltage | • 90-264 VAC |
| Input Frequency | • 47-63 Hz |
| Input Current | • 0.4 A at 115 VAC |
| Inrush Current | • 15 A/30 A for 115 VAC/230 VAC, cold start |
| Earth Leakage Current | • 0.75 mA at 240 VAC |
| Power Factor | • Meets EN61000-3-2 |
| Input Protection | • Fitted with internal fuse |
| Standby Power Consumption | • Typically 0.3 W, max 0.5 W |

Output

| | |
|--------------------------|--|
| Output Voltage | • See tables |
| Minimum Load | • No minimum load required |
| Hold Up Time | • 5 ms min at full load 110 VAC |
| Start Up Delay | • 2.0 s at full load 100 VAC |
| Transient Response | • 2% deviation, recovery to within 1% of nominal in 4 ms for 50% load change |
| Line Regulation | • See tables |
| Load Regulation | • See tables |
| Ripple & Noise | • 1% pk-pk max, 20 MHz BW. See note 3. |
| Short Circuit Protection | • Trip & restart (Hiccup mode), auto recovery |
| Temperature Coefficient | • $\pm 0.04\%/^{\circ}\text{C}$ |

General

| | |
|---------------------|--|
| Efficiency | • 85% typical |
| Isolation | • 3000 VAC Input to Output 1500 VAC Input to Ground 500 VDC Output to Ground |
| Switching Frequency | • 63 kHz typical |
| MTBF | • 300 kHrs to MIL-STD-217F |

Environmental

| | |
|-----------------------|---|
| Operating Temperature | • 0 °C to +70 °C, derate from 100% power at +40 °C to 50% power at +70 °C |
| Storage Temperature | • -40 °C to +85 °C |
| Cooling | • Convection cooled |
| Operating Humidity | • 5-95% RH, non-condensing |
| Operating Altitude | • 3000 m |
| Shock | • 10 g, 10 ms on 3 axes |
| Vibration | • 5-100 Hz 2.31 m/s ² , 20 mins 3 axes |

EMC & Safety

| | |
|----------------------|--|
| Emissions | • EN55022 FCC Part-15C Level B conducted & radiated |
| Harmonic Current | • EN61000-3-2 Class A |
| Voltage Flicker | • EN61000-3-3 |
| ESD Immunity | • EN61000-4-2 Level 3 Perf criteria A |
| Radiated Immunity | • EN61000-4-3 3 V/m 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 |
| Magnetic Field | • EN61000-4-8 1 A/m Perf criteria A |
| Dips & Interruptions | • EN61000-4-11, 70% U _r for 500 ms, 40% U _r for 100 ms, <5% U _r for 5000 ms Perf criteria A, B, B |
| Safety Approvals | • EN60950-1:2001, UL/cUL60950-1, Approved as Limited Power Source, CE Mark, China Compulsory Certification (CCC) qualified. |

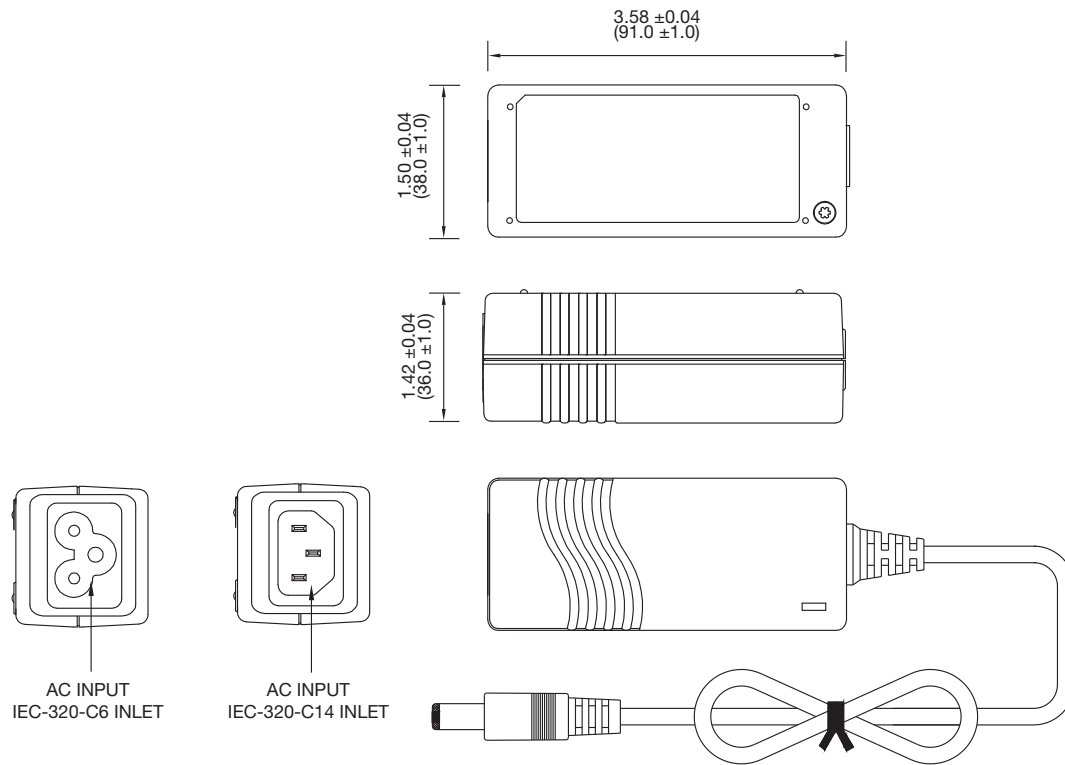
Models and Ratings

| Max Output Power | Output Voltage ⁽⁹⁾ | Output Current | Total Regulation ⁽²⁾ | Model Number ⁽¹⁾ |
|------------------|-------------------------------|----------------|---------------------------------|-----------------------------|
| 8 W | 3.3 VDC | 2.50 A | 7% | AEL15US03 |
| 12 W | 5 VDC | 2.40 A | 7% | AEL15US05 |
| 15 W | 8 VDC | 1.87 A | 5% | AEL15US08 |
| | 9 VDC | 1.66 A | 5% | AEL15US09 |
| | 12 VDC | 1.25 A | 5% | AEL15US12 |
| | 15 VDC | 1.00 A | 5% | AEL15US15 |
| | 18 VDC | 0.83 A | 5% | AEL15US18 |
| | 24 VDC | 0.62 A | 5% | AEL15US24 |
| | 30 VDC | 0.50 A | 5% | AEL15US30 |
| | 36 VDC | 0.42 A | 3% | AEL15US36 |
| | 48 VDC | 0.31 A | 3% | AEL15US48 |

Notes

1. Standard input connector is IEC320-C14 Inlet. For optional IEC320-C6 Inlet, add suffix "C6" to model number e.g. AEL15US12C6.
2. Total regulation includes initial set accuracy, line regulation, load regulation and temperature coefficient.
3. Measured at 25 °C
4. Other output voltages available, contact sales for details.

Mechanical Details



Notes

1. All dimensions are shown in inches (mm). Tolerance ± 0.04 (± 1.0) max.
2. Output connector: is 0.22 (5.5) outer diameter barrel, 0.10 (2.5) inner diameter barrel with centre positive (+) and outer shell negative (-). Length is 0.433 (11.0).
3. Output cable length is 48" (1220mm) approx.
4. Weight is 0.36 lbs (165 g)
5. For European mains lead order part: EU-MAINS-IEC or EU-MAINS-5 for C6 version.
6. For UK mains lead order part: UK-MAINS-IEC or UK-MAINS-5 for C6 version.
7. For US mains lead order part: US-MAINS-IEC or US-MAINS-5 for C6 version.