

AEL80 Series



- Energy Star & CEC 2008 Compliant
- China Compulsory Certification (CCC) Qualified
- Output Voltages from 12 to 48 VDC
- High Efficiency
- +70 °C Operating Temperature
- Compact Dimensions

Specification

Input

Input Voltage	• 90-264 VAC
Input Frequency	• 47-63 Hz
Input Current	• 1.1 A max
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	• 16 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 500 μ s for 50% load change
Line Regulation	• See tables
Load Regulation	• See tables
Ripple & Noise	• 1% pk-pk max, 20 MHz BW
Overvoltage Protection	• 112-132%
Overload Protection	• 110-150%
Short Circuit Protection	• Trip & restart (Hiccup mode), auto recovery
Temperature Coefficient	• $\pm 0.04\%/^{\circ}\text{C}$

General

Efficiency	• 85% minimum
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_T for 500 ms, 40% U_T for 100 ms, <5% U_T for 5000 ms Perf criteria A, B, B
Safety Approvals	• EN60950-1:2001, UL/cUL60950-1, China Compulsory Certification (CCC) qualified, CE Mark.

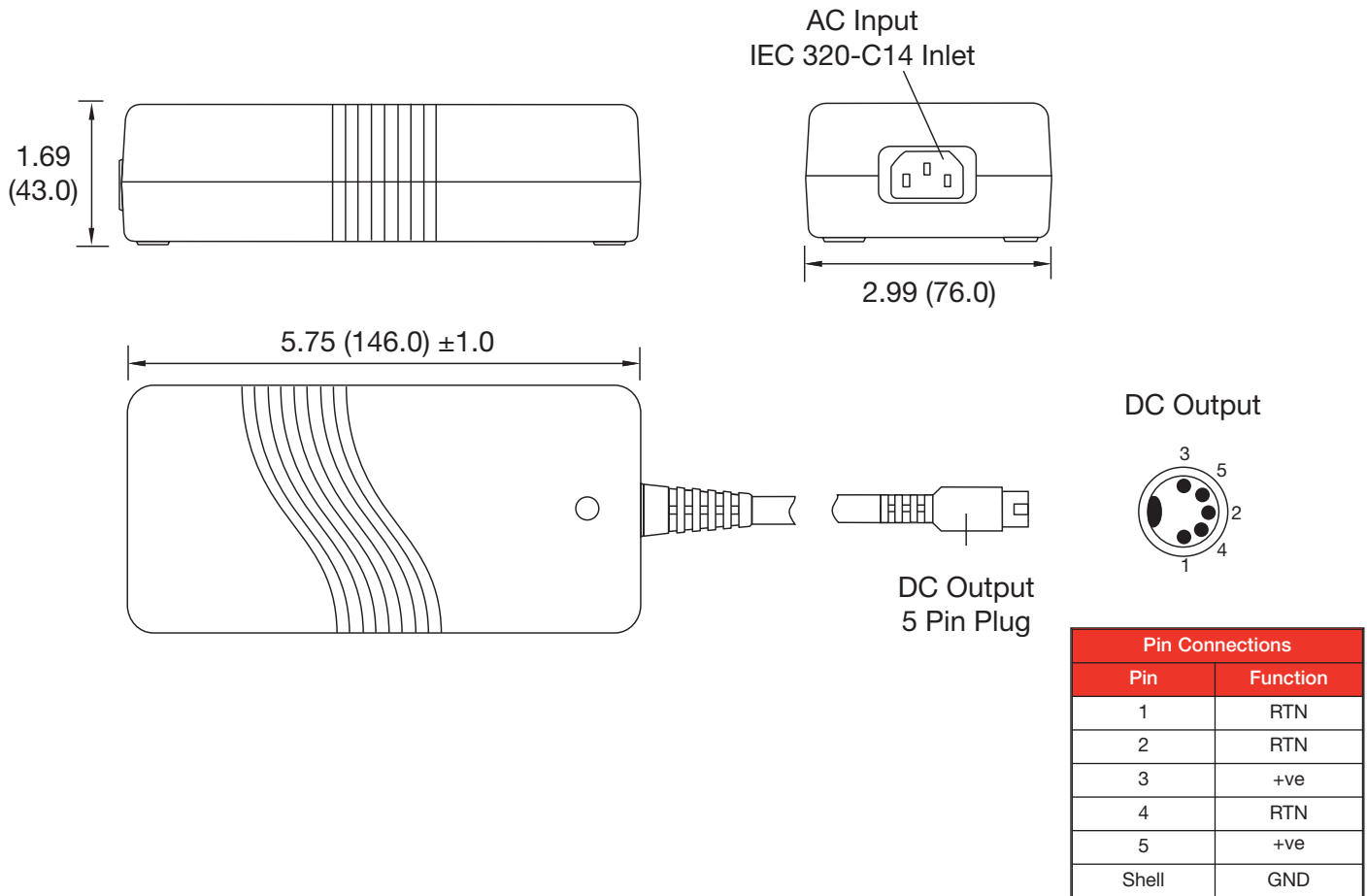
Models and Ratings

Max Output Power	Output Voltage ⁽²⁾	Output Current	Total Regulation ⁽¹⁾	Model Number
80 W	12 VDC	6.66 A	5%	AEL80US12
	15 VDC	5.38 A	5%	AEL80US15
	18 VDC	4.44 A	5%	AEL80US18
	24 VDC	3.33 A	5%	AEL80US24
	30 VDC	2.66 A	5%	AEL80US30
	36 VDC	2.22 A	5%	AEL80US36
	48 VDC	1.66 A	5%	AEL80US48

Notes

1. Total regulation includes initial set accuracy, line regulation, load regulation and temperature coefficient.
2. 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: 5 pin 180° DIN
3. Output cable length is 48" (1220mm) approx.
4. Weight is 1.5 lbs (700 g)
5. For European mains lead order part: EU-MAINS-IEC.
6. For UK mains lead order part: UK-MAINS-IEC.
7. For US mains lead order part: US-MAINS-IEC.