

AD50 Series

50 Watts

Total Power: 50 Watts
Input Voltage: 90 - 264 VAC
of Outputs: single



Special Features

- Universal AC input
- Fully regulated output
- EN61000-3-2 compliant
- Input power <74 watts
- Overcurrent and overvoltage protection
- High efficiency
- High MTBF
- IEC320 AC input receptacle
 - 3 pin (type C6) - AD5012N3L
 - 2 pin (type C8) - AD5012N2L
- Built in EMI filter
- (CISPR 22 Class B)
- AC input fuse
- Complies with One Watt Input Energy Star / Blue Angel Requirement
- CE Mark EMC & LVD

Safety

CSA_{UL} UL 60950-1
CSA CSA-C22.2 no.60950-1
VDE EN/IEC60950-1
CE Mark LVD and EMC

Electrical Specifications

Input

| | |
|-------------------------------|--|
| Input range | 90-264 Vac (wide range) |
| Frequency | 47-63 Hz |
| Inrush current | 60A maximum @ 230VAC, cold start 25°C |
| Input current | 2 A maximum |
| Efficiency | 80% typical |
| EMI/RFI | FCC Part 15, Class B & EN55022 (CISPR 22) Class B |
| Safety ground leakage current | 300µA maximum@ 50/60 Hz, 264 VAC input - AD5012N3L 100µA maximum@ 50/60 Hz, 264 VAC input - AD5012N2L |

Output

| | |
|------------------------|---|
| Maximum Power (Po) | 50 W |
| Hold-up time | 17 ms. minimum at full load @ 100 Vac, 47 Hz |
| Overvoltage protection | 16 - 20 V Latching type, recycle AC to reset. |
| Overcurrent protection | Output short circuit protection auto recover Overload protection @ 110 - 120% above maximum rating |
| Thermal protection | 105° to 120°C Trip point; output will latch off |
| Cable/connector | DC cable length 2.5 mm center plug DC plug center +v DC plug outer -v |

Environmental Specifications

| | |
|---------------------------------|--|
| Operating temperature: | 5° to +40°C ambient |
| Storage temperature: | -40°C to +70°C |
| Electromagnetic susceptibility: | Designed to meet EN61000-4-2, -4, -5, level 4; EN61000-4-3, -6, 10v/m; EN61000-4-8, -11; EN61000-3-3 and EN61000-3-2 Class A |
| Humidity: | Operating; non-condensing 10% to 90% RH |
| MTBF demonstrated: | >300,000 hours at full load and 25°C ambient conditions |

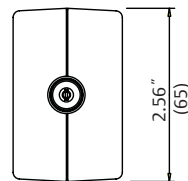
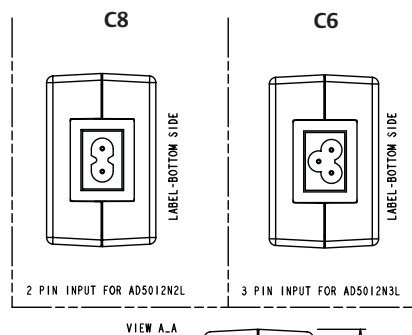
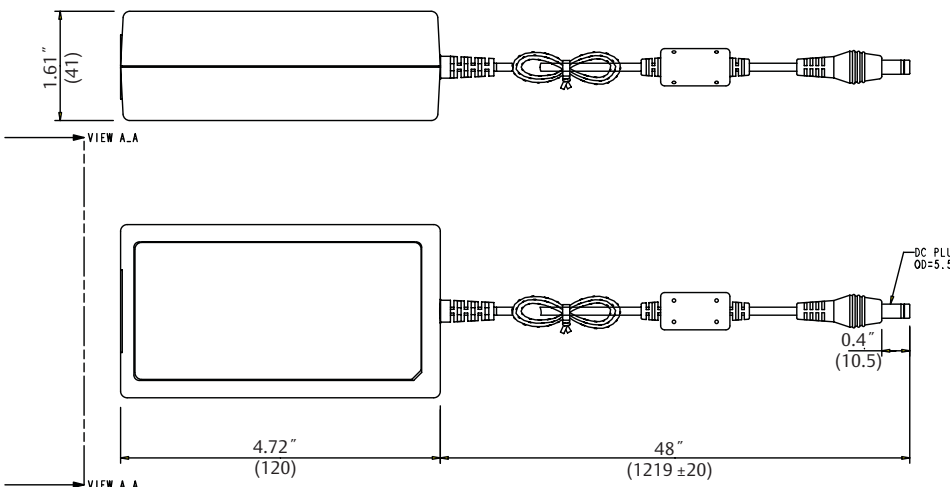


Ordering Information

| Model Number | Maximum Power | Output Voltage | Maximum Load | Peak Load ¹ | Regulation ² | Ripple P/P (PAR) ³ |
|--------------|---------------|----------------|--------------|------------------------|-------------------------|-------------------------------|
| AD5012N3L | 50 W | 12 Vdc | 4.16 A | 6 A | ±5% | <500 mV |
| AD5012N2L | 50 W | 12 Vdc | 4.16 A | 6 A | ±5% | <500 mV |

1. Peak current lasting 200ms every 3 seconds.
2. At 25°C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
3. Peak-to-peak with 20MHz bandwidth and 10µF (tantalum capacitor) in parallel with a 0.1µF capacitor at rated line voltage and load ranges.

Mechanical Drawing



Notes:

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance is ± 0.02" (±0.5mm)
3. Warranty: 2 year
4. Weight: 0.61 lb./ 0.28 kg
5. AC input power cord sold separately.
6. Specifications at factory settings at 115VAC input, 25°C unless otherwise stated
7. AC Input Connector: IEC320, C6 or C8

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