

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 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 Requirement

Safety

CSA_{UL} UL 60950-1
CSA CSA-C22.2 no.60950-1

Electrical Specifications

Input

| | |
|--------------------------------|--|
| Input range: | 90 - 264 Vac (wide range) |
| Frequency: | 47 - 63 Hz |
| Inrush current: | 60 A maximum @ 230 Vac, 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: | 300 µA maximum@ 50/60 Hz, 264 Vac input - AD5012N3L 100 µA 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 |
| Cable/connector : | DC cable with 2.5 mm x 5.5 mm barrel 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 |

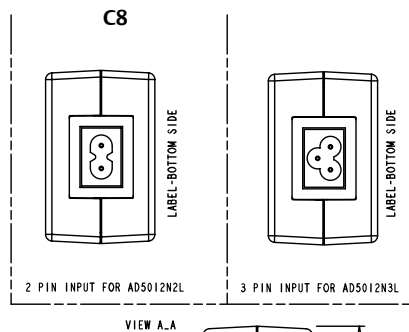
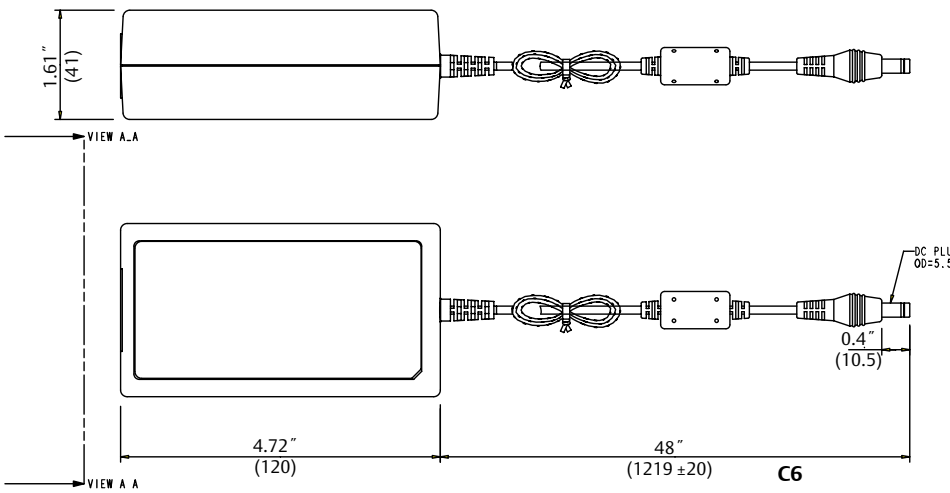


Ordering Information

| Model Number | Maximum Power | Output Voltage | Maximum Load | Peak Load ¹ | Regulation ² | Ripple P/P (PARD) ³ |
|--------------|---------------|----------------|--------------|------------------------|-------------------------|--------------------------------|
| AD5012N3L | 50 W | 12.5 Vdc | 4.16 A | 6 A | ± 5% | < 500 mV |
| AD5012N2L | 50 W | 12.5 Vdc | 4.16 A | 6 A | ± 5% | < 500 mV |

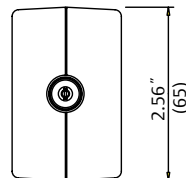
1. Peak current lasting 200 ms every 3 seconds.
2. At 25 °C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
3. Peak-to-peak with 20 MHz bandwidth and 10 μF (tantalum capacitor) in parallel with a 0.1 μF capacitor at rated line voltage and load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

Mechanical Drawing



Notes:

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance is ± 0.02" (± 0.5 mm)
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 115 Vac input, 25 °C unless otherwise stated
7. AC Input Connector: IEC320, C6 or C8, mate with C5 and C7 respectively.



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