

## 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<sub>UL</sub> 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

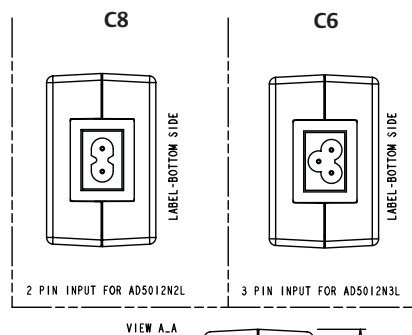
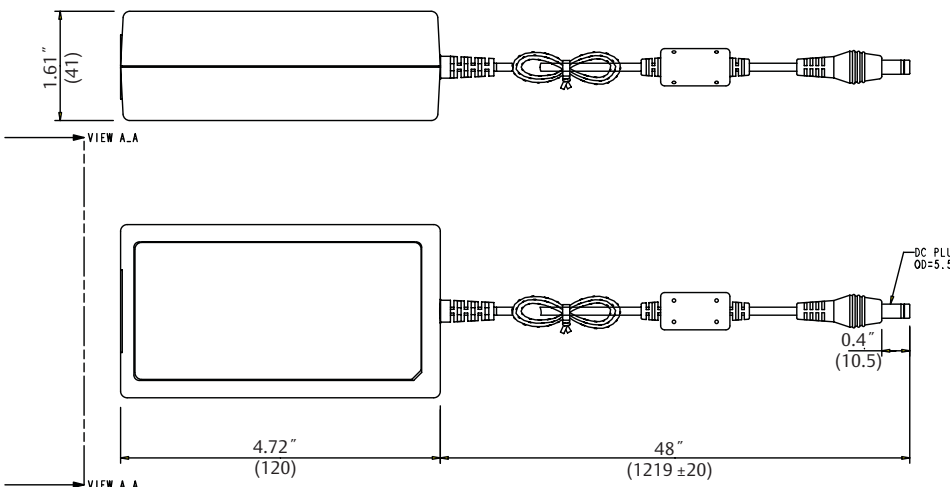


## Ordering Information

Model Number	Maximum Power	Output Voltage	Maximum Load	Peak Load <sup>1</sup>	Regulation <sup>2</sup>	Ripple P/P (PAR) <sup>3</sup>
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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