



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## 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<sub>UL</sub>** 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

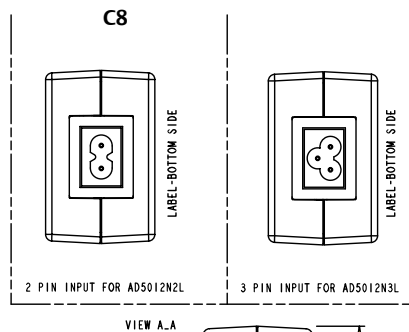
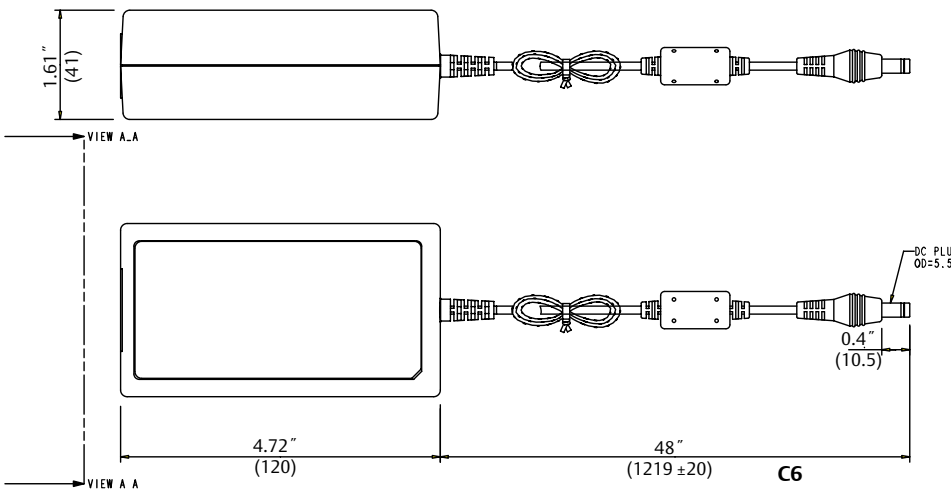


## Ordering Information

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