

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:	300 μ A maximum@ 50/60 Hz, 264 VAC input - AD5012N3L 100 μ A 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 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

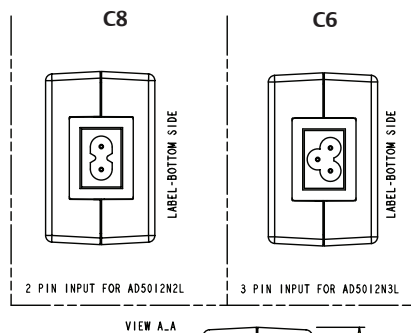
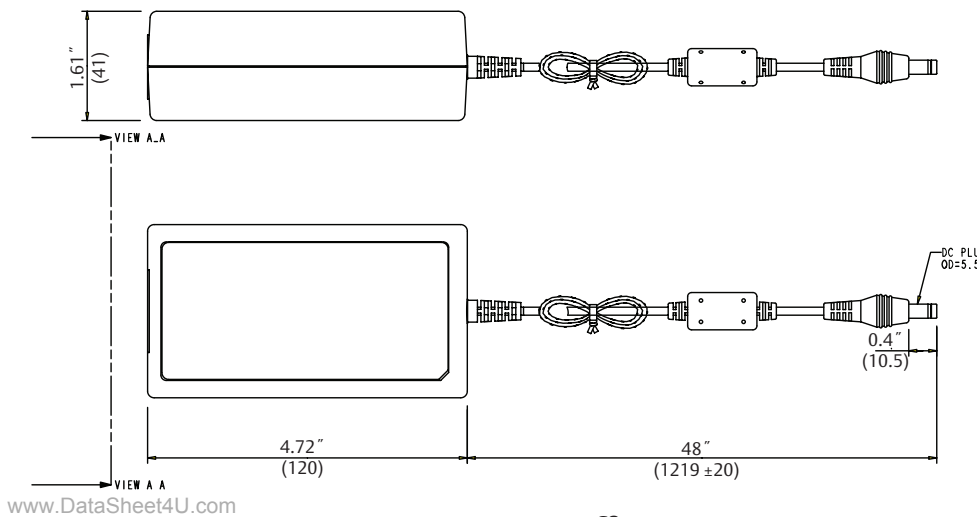


Ordering Information

Model Number	Maximum Power	Output Voltage	Maximum Load	Peak Load ¹	Regulation ²	Ripple P/P (PARD) 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, mate with C5 and C7 respectively.

Americas

5810 Van Allen Way
Carlsbad, CA 92008
USA
Telephone: +1 760 930 4600
Facsimile: +1 760 930 0698

Europe (UK)

Waterfront Business Park
Merry Hill, Dudley
West Midlands, DY5 1LX
United Kingdom
Telephone: +44 (0) 1384 842 211
Facsimile: +44 (0) 1384 843 355

Asia (HK)













14/F, Lu Plaza
2 Wing Yip Street
Kwun Tong, Kowloon
Hong Kong
Telephone: +852 2176 3333
Facsimile: +852 2176 3888

For global contact, visit:

www.powerconversion.com
techsupport.embeddedpower@emerson.com

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