## **AD50 Medical Series** 50 Watts

**Total Power:** 50 Watts **Input Voltage:** 90 - 264 VAC **# of Outputs:** Single





Rev. 05.18.11\_108 AD50 Medical Series



### **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) AD5012N3LM
   2 pin (type C8) AD5012N2LM
- Built in EMI filter
- (CISPR 22 Class B)
- AC input fuse
- Complies with One Watt Input Energy Star / Blue Angel Requirement

### Safety

CSA UL 60601-1 CSA 60601-1 VDE 60601-1

# **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 300 µA maximum @ 50/60 Hz, 264 VAC input - AD5012N3L leakage current: 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 Designed to meet EN61000-4-2, -4, -5, level 4; susceptibility: 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 Load¹	Regulation <sup>2</sup>	Ripple P/P (PARD) <sup>3</sup>
AD5012N3LM	50 W	12.5 Vdc	4.16 A	6 A	± 5%	< 500 mV
AD5012N2LM	50 W	12.5 Vdc	4.16 A	6 A	± 5%	< 500 mV
AD5012N2LM-0001	50 W	12.5 Vdc	4.16 A	6 A	± 5%	< 500 mV

1. Peak current lasting 200ms every 3 seconds.

**Mechanical Drawing** 

- 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  $\mu$ F (tantalum capacitor) in parallel with a 0.1  $\mu$ F capacitor at rated line voltage and load ranges.

## Facsimile: +1 760 930 0698

**Americas** 5810 Van Allen Way Carlsbad, CA 92008

**USA** 

**Europe (UK)**Waterfront Business Park
Merry Hill, Dudley
West Midlands, DY5 1LX
United Kingdom

Telephone: +1 760 930 4600

Telephone: +44 (0) 1384 842 211 Facsimile: +44 (0) 1384 843 355

Rev. 05.18.11\_108 AD50 Medical Series

### 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.Emerson.com/EmbeddedPower techsupport.embeddedpower @emerson.com

While every precaution has been taken to ensure accuracy and completeness in this literature, Emerson Network Power assumes no responsibility, and disclaims all liability for damages resulting from use of this information or for any errors or omissions.

### Emerson Network Power.

The global leader in enabling business-critical continuity.

AC Power

ID=2.5

**C6** 

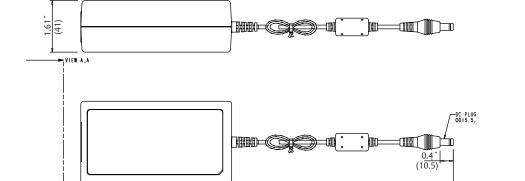
3 Pin Input for AD5012N3I M

2.56 (65)

- Connectivity
- DC Power
- Embedded Computing
- Embedded Power
- Monitoring
- Outside Plant
- Power Switching & Controls
- Precision Cooling
- Racks & Integrated Cabinets
- Services
- Surge Protection

#### EmersonNetworkPower.com

Emerson Network Power and the Emerson Network Power logo are trademarks and service marks of Emerson Electric Co. ©2011 Emerson Electric Co.



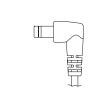
(1219 ±20)

BOTTOM SIDE

**C8** 

2 Pin Input for AD5012N2LM

VIEW A\_A



**Right Angle Connector** 



### Notes:

- 1. Specifications subject to change without notice.
- 2. All dimensions in inches (mm), tolerance is  $\pm$  0.02" ( $\pm$  0.5 mm)

4.72

(120)

- 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
- AC Input Connector: IEC320, C6 or C8, mate with C5 and C7 respectively.