

# ARTESYN AD2412N3L-VI

24 Watts



The new AD2412N3L-VI is a freestanding external 24 watt AC-DC power adapter that use high efficiency (87% typical) switch-mode technology to comply with European CoC v.5 Tier 2 and Department of Energy Level VI efficiency standards. It provides a flexible power solution with a compact form-factor for a wide variety of portable and desktop applications including instrumentation, telecommunications, test and measurement systems and computer peripherals.

## SPECIAL FEATURES

- Universal AC input
- Fully regulated output
- EN61000-3-2 compliant
- Overcurrent and overvoltage protection
- High efficiency
- High MTBF
- IEC320 AC input receptacle
- 3 pin (type C14)
- Built-in EMI filter (CISPR 22 Class B)
- LED power good indicator
- AC input fuse
- -20 °C to +50 °C operating temperature (with warm-up period)
- Efficiency complies with European CoC v.5 Tier 2 & US DoE Level VI (Standby power <75 mW)

- RoHS compliant
- Meets surge requirements:
  - 6 KV; EN61000-4-5 Surge 6 kV, Criteria A
  - 2.5 KV; K.21, Basic Levels, | Criteria A
  - 6 KV; K.21, Enhanced Levels, Criteria B

## SAFETY

- UL 60950-1 (UL listed, LPS product)
- CSA-C22.2 No.60950
- TUV EN/IEC60950-1
- CE Mark: LVD & EMC
- CCC Certificate
- CB Certificate
- Other Approvals: RCM, PSE, GS, NOM, NRCAN, DoE, CEC

## DATA SHEET

### Total Power:

24 Watts

### Input Voltage:

90 - 264 Vac

### # of Outputs:

Single, 12 Volt



## ELECTRICAL SPECIFICATIONS

Input	
Input range	90 - 264 Vac (wide range)
Frequency	47 - 63 Hz
Inrush current	50 A maximum @ 230 Vac, cold start 25 °C
Input current	1 A maximum
Efficiency	87% typical
EMI/RFI	FCC Part 15, Class B & EN55022 (CISPR 22) Class B
Safety ground leakage current	250 µA maximum @ 50/60 Hz, 264 Vac input
Output	
Output voltage	12 V
Maximum power (Po)	24 W
Hold-up time	20 ms minimum at full load @ 115 Vac, 60 Hz 13 ms at -20 °C; 20 ms after 30 minutes warm-up time
Overvoltage protection	28 V Latching type, recycle AC to reset
Overcurrent protection	Output short circuit protection auto recover Overload protection @ 2.5 - 5 A
Thermal protection	Latching type, recycle AC to reset
Cable/connector	DC cable with 2.5 mm I.D. / 5.5 mm O.D. center plug DC plug center +v DC plug outer -v

## ENVIRONMENTAL SPECIFICATIONS

Operating temperature	-20 °C to +50 °C ambient (with warm-up period)
Storage temperature	-45 °C to +85 °C
Electromagnetic susceptibility	Designed to meet EN61000-4-2, -4, -5, level 3; EN61000-4-3, -6, 6v/m; EN61000-3-3 and EN61000-3-2 Class A
Humidity	Operating; non-condensing 5% to 90% RH
MTBF calculated	> 850,000 hours at full load and 25 °C ambient conditions Telcordia SR332 issue 1 (Method 1, Case 3)

## ORDERING INFORMATION

Model Number	Maximum Power	Output Voltage	Minimum Load	Maximum Load	Peak Load <sup>1</sup>	Regulation <sup>2</sup>	Ripple P/P (PARD) <sup>3,4</sup>
AD2412N3L-VI	24 W	12 Vdc	0.1 A	2 A	2.4 A	± 5%	< 120 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 $\mu$ F (tantalum capacitor) in parallel with a 0.1  $\mu$ F capacitor at rated line voltage and load ranges.
4. Ripple 240 mV at -20 °C; 120 mV after 30 minutes warm-up time
5. Surge Criteria A: Equipment shall withstand the test without damage and shall operate within the specified performance limits after the test without manual intervention. Surge Criteria B: Equipment may be damage but will not cause any fire or safety hazard

## MECHANICAL DRAWING



## Notes:

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance is  $\pm 0.02$ " ( $\pm 0.5$  mm)
3. Warranty: 2 years
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, C13



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## ABOUT ADVANCED ENERGY

Advanced Energy (AE) has devoted more than three decades to perfecting power for its global customers. AE designs and manufactures highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

Our products enable customer innovation in complex applications for a wide range of industries including semiconductor equipment, industrial, manufacturing, telecommunications, data center computing, and medical. With deep applications know-how and responsive service and support across the globe, we build collaborative partnerships to meet rapid technological developments, propel growth for our customers, and innovate the future of power.

PRECISION | POWER | PERFORMANCE

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