

AD2412N3L-VI

24 Watts

Data Sheet

Total Power: 24 Watts
Input Voltage: 90 - 264 Vac
of Outputs: Single, 12 Volt



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

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 μ A 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

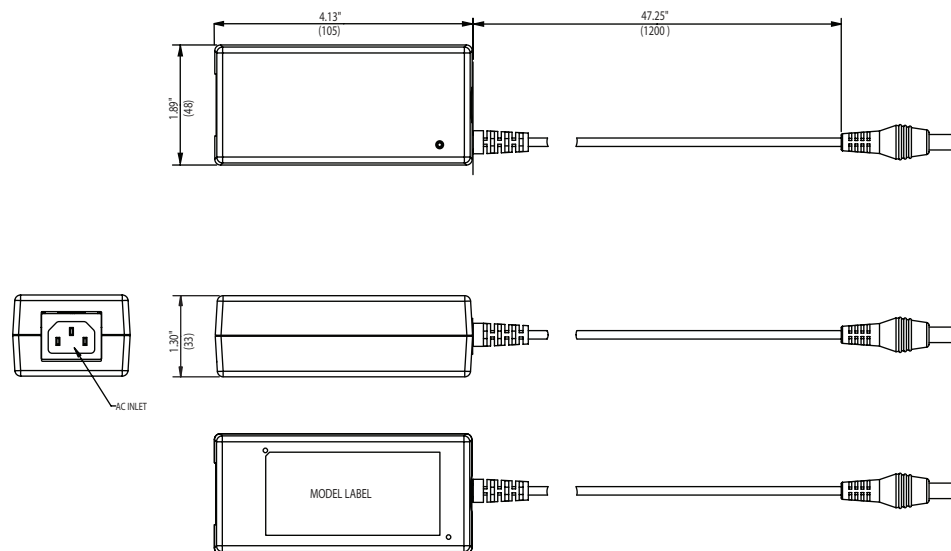
Operating temperature	-20 °C to +50 °C ambient (with warm-up period)
Storage temperature	-45 °C to +85 °C
Electromagnetic susceptibility	Designed to meet EN61000-4-2, -4, -5, level 3; EN61000-4-3, -6, 6v/m; EN61000-3-3 and EN61000-3-2 Class A
Humidity	Operating; non-condensing 5% to 90% RH
MTBF calculated	> 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 ¹	Regulation ²	Ripple P/P (PARD) ^{3,4}
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 10µF (tantalum capacitor) in parallel with a 0.1 µF 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 damaged 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 ± 0.02" (±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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