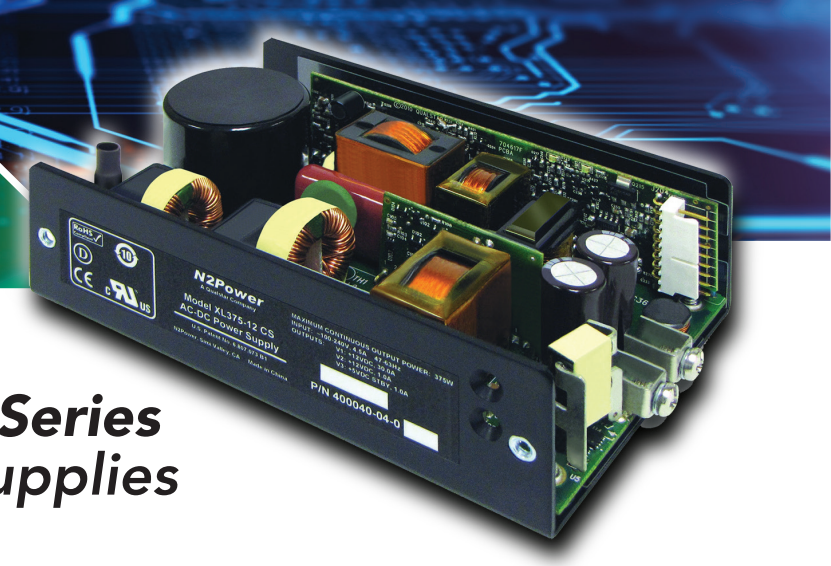
DATASHEET

N2Power™



N2Power XL375 AC-DC Series
High Efficiency Power Supplies

HIGHLIGHTS

- 375 W AC-DC
- Up to 93% efficiency
- High power density: Over 15W/cu in.
- 3.3" x 5" footprint
- All outputs may be paralleled
- Remote on/off
- 5 V Standby output (1 amp)
- 12 V Aux output (1 amp)
- Universal AC input
- Active PFC (90 – 264 VAC)
- Active current sharing for N, N+1 (main output)*
- Active inrush current protection
- 260 W convection cooling
- RoHS compliant
- OR-ing MOSFET board (optional)
- 3 year warranty

COMPLETE PROTECTION

The main output is enabled whenever all of the required startup conditions are met, and is shut down upon command, loss of input power or whenever excessive sensed. It always provides the host system with advanced warning of an impending shutdown to enable it to perform housekeeping before power is lost. The OR-ing board option allows the main outputs of up to four XL375s to be operated in parallel. It also provides hot- swappable N+1 configurations.

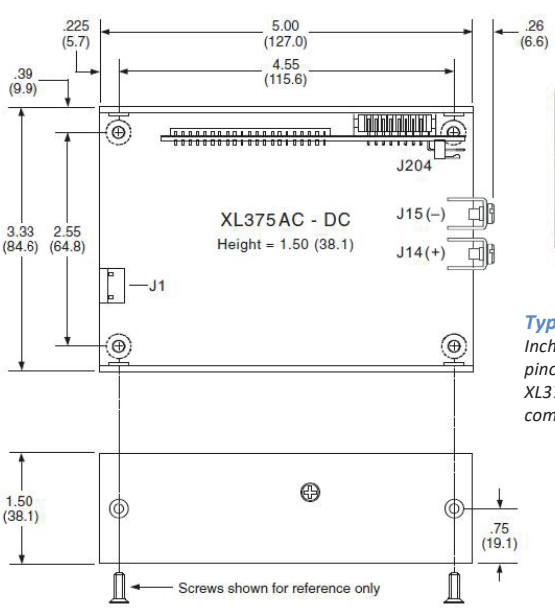
UNMATCHED POWER DENSITY

With an overall height of 1.5" and a 3.3" x 5" footprint, the XL375 Series boasts a power density over 15 watts per cubic inch. It is ideally suited for OEMs using the industry standard 1U chassis.

A POWER SUPPLY DESIGN LEADER

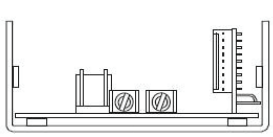
HIGH EFFICIENCY IN A SMALL PACKAGE

N2Power leads the power density race with its high efficiency XL375 Series DC -DC power supplies, which provide up to 93% efficiency. In fact, comparisons of efficiencies show that our supplies can reduce energy losses by up to 50%. Our advanced technology yields a very small footprint and offers the highest power density in its class. This unique design also generates less wasted heat—reducing the need for forced air cooling, decreasing AC power consumption, increasing reliability, and maximizing its economy of operation. By building our power supplies with a focus on maximizing efficiency, we can provide our valued customers with reduced energy costs, longer product lifespans, and a greater return on their investment.



OR-ing Board Option

Typical Mechanical Drawing:
Inches (millimeters), connectors and pinouts may vary with model. Refer to XL375 Product Specification for complete information.



cULus · CE · RoHS Compliant · REACH COMPLIANT

Contact us regarding custom and modified standard supplies for unique applications.

N2Power™

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Rev042820

Continued on back...

N2Power XL375 AC-DC Series

High Efficiency Power Supplies

MODEL	PART NUMBER	OUTPUT	VOLTAGE	REGULATION (%)	MAXIMUM CURRENT (A)	RIPPLE & NOISE (P-P)
XL375-12 CS	400040-01-0	V1	12	±3	30.0	100 mV
		V2	12	±5	1.0	80 mV
		V3	5sb	±5	1.0	50 mV
XL375-24 CS	400041-01-8	V1	24	±3	15.0	200 mV
		V2	12	±5	1.0	80 mV
		V3	5sb	±5	1.0	50 mV
XL375-28 CS	400052-01-5	V1	28	±3	12.8	200 mV
		V2	12	±5	1.0	80 mV
		V3	5sb	±5	1.0	50 mV
XL375-34 CS	400046-05-8	V1	34	±3	10.6	200 mV
		V2	12	±3	1	80 mV
		V3	5sb	±5	1	200 mV
XL375-36 CS	400046-01-7	V1	36	±3	10.0	50 mV
		V2	12	±5	1.0	80 mV
		V3	5sb	±5	1.0	50 mV
XL375-40 CS	400045-01-9	V1	40	±3	9.0	200mV
		V2	12	±5	1.0	80 mV
		V3	5sb	±5	1.0	50 mV
XL375-48 CS	400042-01-6	V1	48	±3	7.5	200 mV
		V2	12	±5	1.0	80 mV
		V3	5sb	±5	1.0	50 mV
XL375-54 CS	400044-01-2	V1	54	±3	6.7	200 mV
		V2	12	±5	1.0	80 mV
		V3	5sb	±5	1.0	50 mV
XL375-56 CS	400043-01-4	V1	56	±3	6.4	200 mV
		V2	12	±5	1.0	80 mV
		V3	5sb	±5	1.0	50 mV

Note: If you can't find your preferred output voltage listed on the table above, please contact a sales representative. We can easily modify standard PSUs to meet client-specific voltage requirements.

1See Product Specification for additional information. The power supply is considered a component of the final product in which it is being used. The final product itself must be tested separately for compliance with all applicable standards.

Compliance (See Product Spec for additional information):

USA / Canada

Safety: UL 60950-1:2007 (2nd Edition) / C22.2 No. 60950-1-07
UL 62368-1 (Second Edition)
Safety of Information Technology Equipment

EMC: FCC part 15, subpart B

Europe

2006/95/EC - "Low Voltage (Safety) Directive"

Demko: EN 60950-1:2006 (2nd Edition) +A1:2010 +A11:2009 +A12:2011 +A2:2013

EN 62368-1:2014 / A11:2017

2004/108/EC "Electromagnetic Compatibility (EMC) Directive" EN 61204-3 Class B

International

IEC 60950-1:2005 (2nd Edition)+ Am1:2009 + Am2:2013

IEC 62368-1:2014

Safety of Information Technology Equipment

IEC 61204-3 Class B

INPUT SPECIFICATIONS	
Nominal Input Voltage:	100 – 240 VAC
Tested Input Limits:	90 – 264 VAC
Input Frequency Range:	47 – 63 Hz
Input Current:	4.3 A @ 100 VAC
Safety Isolation:	3000 VAC input to output 1500 VAC input to ground
Inrush Current:	14 A @ 240 VAC †
Leakage Current:	0.75 mA @ 240 VAC / 60 Hz †
Power Factor Correction:	Active PFC circuitry, meets or exceeds EN61000-3-2 †
OR-ING BOARD OPTION †	
Output Voltage:	OR-ing Board P/N:
12V	400040-02-8
24V	400041-02-6
28 – 48V	400052-02-3
54 – 56V	400044-02-0
OUTPUT SPECIFICATIONS	
Total Output:	375 W (260 W with convection cooling option)
Hold-up Time:	Minimum 22 ms at all input voltages
Efficiency:	Up to 93%
Minimum Load:	No load
Over / Under Shoot:	Max 10% at turn-on
PROTECTION	
Input Overcurrent Protection:	6.3 A fuse
Overvoltage Protection:	V1 (latches off)
Overpower Protection:	Protected / Auto-recovery
Short Circuit Protection:	Auto recovery of all outputs protected against short circuit
Thermal Shutdown:	Auto recovery protection against over temperature conditions
ENVIRONMENTAL SPECIFICATIONS	
Operating Temperature:	–25 to +70˚C
Temperature Derating:	2.5% / degree, 50˚C to 70˚C
Storage Temperature:	– 40 to +85˚C
Forced Air Cooling:	10 CFM minimum †
Convection Cooling:	260W
MTBF:	376,644 hours @ 25˚C *
SIGNALS	
Remote Sense	V1 and Return
Current Sharing	V1 using active circuitry
Passive Redundancy	V2 and V3 outputs may be wire OR-ed
Power Good (PG) Output	High-true CMOS logic and LED drive outputs
Remote Enable Input	Low-true input enables V1 output †
Onboard LED Indicators	AC On, Power Good
Trim Input	±5%

† See Product Specification

* See MTBF Report for additional temperature values

Contact us regarding custom and modified standard supplies for unique applications. For complete specifications on all models, please visit our website at N2Power.com

All information and specifications are based on our knowledge of the products at the time of printing.
N2Power reserves the right to change specifications without notice.

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