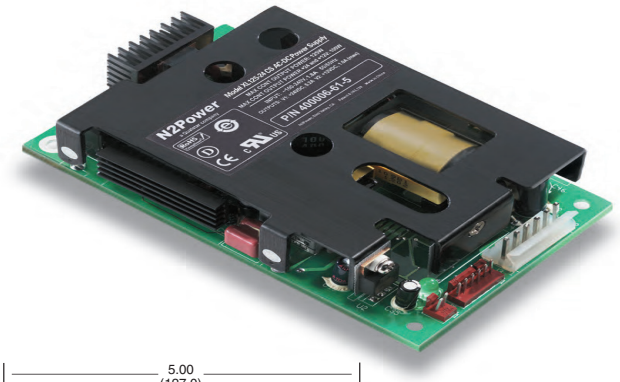
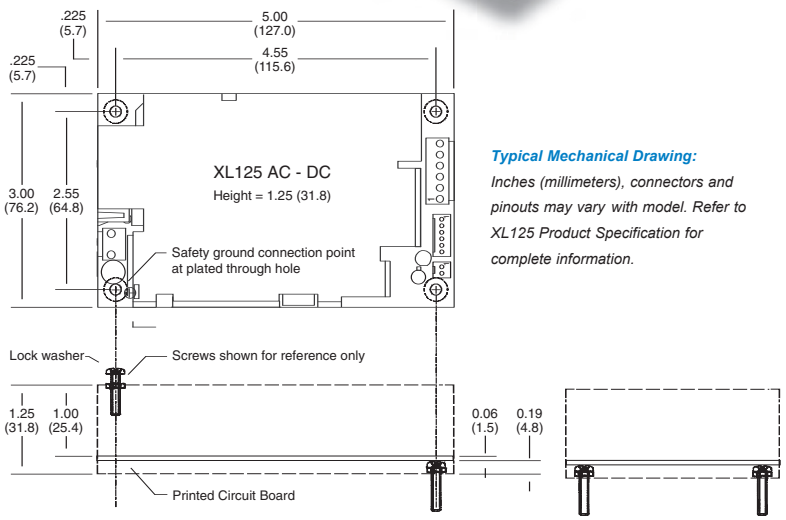
POWER SUPPLY DESIGN LEADER

N2Power continues to lead the power density race with its new small, high efficiency XL125 Series AC-DC power supplies. Our patented technology yields a very small footprint, reduces wasted power, and offers the highest power density in the marketin the 125 watt range. This unique design means reduced energy costs, a greater return on your investment, higher reliability and longer product life.



HIGHLIGHTS

- 125 W AC-DC
- Up to 92% Efficiency
- High Power Density: 6.7 W / in^3
- Universal AC input
- Active PFC (90-264 VAC)
- Built in OR-ing Diodes for N+1 (Optional)
- 3” X 5” Small Footprint
- <1U High: 1.25"
- No Load Operation
- RoHS Compliant



Typical Mechanical Drawing:
Inches (millimeters), connectors and pinouts may vary with model. Refer to XL125 Product Specification for complete information.

HIGH EFFICIENCY IN A SMALL PACKAGE

Reduced heat generation and greater reliability are key design requirements. The XL125 Series provides up to 92% efficiency in a 125 watt power supply. Our unique design reduces energy consumption and generates less waste heat. It requires little forced air cooling, decreases AC loads and increases reliability and economy of operation.

UNMATCHED POWER DENSITY

With an overall height of 1.25" and a 3" x 5" footprint, the XL125 Series boasts a power density of 6.7 watts per cubic inch. It is ideally suited for OEMs using industry standard 1U chassis. N2Power’s small form factor power supplies allow you to work with additional “real estate” for more functionality inside your product. Decreased space, reduced thermal loads and lower costs will increase your competitive edge in the market.

REPEATABLE QUALITY

We use advanced PCB technology to deliver the highest density and best performance in the industry. Our packaging design incorporates SMT technology to automate processes, ensure reliability, and reduce cost. Each power supply undergoes a complete functional test and a multi-hour burn-in to insure that every unit meets our stringent quality requirements. Detailed statistical production records are maintained and rigid quality and AVL control insures the highest quality product available. Each power supply design is also rigorously tested by UL, with scheduled factory audits to ensure ongoing compliance.

PFC READY, SAVE ENERGY

Many countries already require Power Factor Corrected (PFC) power supplies, which lessen loads at generating stations. All XL125 products incorporate active PFC technology with universal input to provide superior efficiency in each supply. Comparisons of power loading show that our supplies can reduce consumption up to 50%.

N2POWER

XL125 SERIES

125 Watt Open Frame Power Supply

Measures: 5.00 x 3.00 x 1.25”

MODEL	PART NUMBER	OUTPUT	VOLTAGE	REGULATION (%)	MAXIMUM CURRENT (A)	RIPPLE & NOISE (P-P)
XL125-03	400010-03-9	V1	3.3	±3	32.0	50 mV
XL125-03 CS	400010-01-3	V2	12	±5	0.5	120 mV
XL125-05	400003-08-3	V1	5	±3	25.0	50 mV
XL125-05 CS	400003-01-8	V2	12	±5	0.5	120 mV
XL125-12	400004-67-7	V1	12	±3	10.4	120 mV
XL125-12 CS	400004-61-0	V2	12	±5	1.0	120 mV
XL125-15	400005-62-5	V1	15	±3	8.3	150 mV
XL125-15 CS	400005-61-7	V2	12	±5	1.0	120 mV
XL125-24	400006-68-0	V1	24	±3	5.2	240 mV
XL125-24 CS	400006-61-5	V2	12	±5	1.0	120 mV
XL125-28	400006-66-4	V1	28	±3	4.5	280 mV
XL125-28 CS	400006-64-9	V2	12	±5	1.0	120 mV
XL125-48	400007-63-9	V1	48	±3	2.6	480 mV
XL125-48 CS	400007-61-3	V2	12	±5	1.0	120 mV
XL125-1	400002-61-4	V1	3.3	±2	10.0	50 mV
		V2	5	±4	15.0	50 mV
		V3	12	±5	5.0	120 mV
		V4	–12	±5	1.0	120 mV
XL125-7	400008-61-1	V1	2.5	±2	13.2	50 mV
		V2	5	±4	15.0	50 mV
		V3	12	±5	5.0	120 mV
		V4	–12	±5	1.0	120 mV
XL125-8	400009-61-9	V1	5	±4	16.5	50 mV
		V2	12	±5	5.0	120 mV
		V3	–12	±5	1.0	120 mV

CS = Current Sharing

INPUT SPECIFICATIONS

Nominal Input Voltage:	100 – 240 VAC
Maximum AC Input:	90 – 264 VAC
Input Frequency Range:	47 – 63 Hz
Input Current:	1.8 A @ 100 VAC
Input Protection:	3.15 A fuse
Safety Isolation:	3000 VAC input to output 1500 VAC input to ground
Inrush Current:	33 A @ 115 VAC
Leakage Current:	<.75 mA
Power Factor Correction:	Active PFC circuitry, meets or exceeds EN61000-3-2

Compliance:[1]

USA / Canada:

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

EMC: FCC part 15, subpart B

[1] See Product Specification for additional information

OUTPUT SPECIFICATIONS

Total Power:	125 W
Hold-up Time:	Minimum 28 mS at all input voltages
Efficiency:	Up to 92%†
Minimum Load:	No load†
Over / Under Shoot:	Maximum 10% at turn-on

PROTECTION

Overvoltage Protection:	On all main outputs
Overpower Protection:	Protected / Auto-recovery
Short Circuit Protection:	All outputs protected against short circuit
Thermal Shutdown:	Protected against overtemperature conditions

† See Product Specification

Europe:

2006/95/EC - “Low Voltage (Safety) Directive”
Demko: EN 60950-1:2006+A11:2009
(2nd Edition)

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

OPERATING SPECIFICATIONS

Operating Temperature:	–25 to +50°C
Temperature Derating:	2.5% / degree C to 70°C
Storage Temperature:	–40 to +85°C
Forced Air Cooling:	5 CFM
Convection Cooling:	See Product Specification
MTBF:	627,221 hours @ 25°C*

SIGNALS

Remote Sense:	On main output†Δ
Current Sharing:	Active current sharing with OR-ing diode or MOSFETs†Δ
Power Good:	Provided†
PS_OK:	Output†
LED:	Some models†

* See MTBF Report for additional temperature values

International:

IEC 60950-1:2005 (2nd Edition) Safety of Information Technology Equipment

IEC 61204-3 Class B