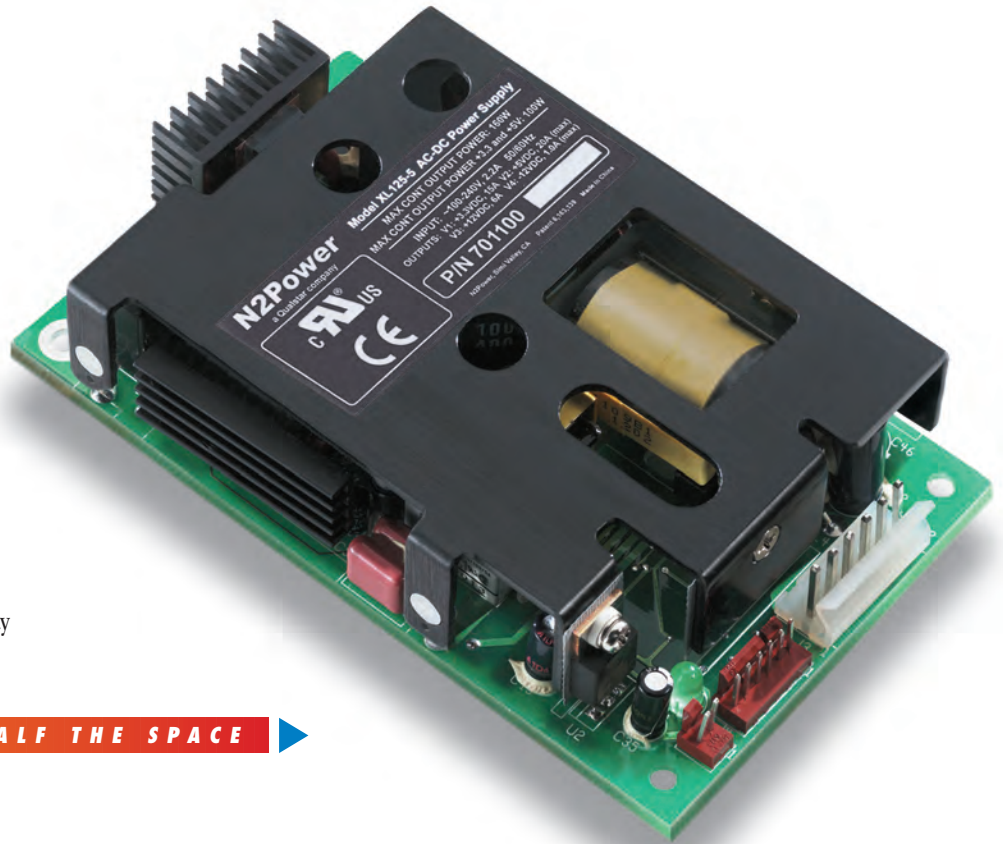


# XL125 AC-DC Series

- **125 W AC-DC**
- **UP TO 92% EFFICIENCY**
- **HIGH POWER DENSITY:  
6.7 W / in<sup>3</sup>**
- **UNIVERSAL AC INPUT**
- **ACTIVE PFC (90 – 264 VAC)**
- **BUILT IN OR'ING DIODES  
FOR N+1**
- **3" X 5" SMALL FOOTPRINT**
- **<1U HIGH: 1.25"**
- **NO LOAD OPERATION**
- **RoHS COMPLIANT**



### POWER SUPPLY DESIGN LEADER

N2Power™ continues to lead the power density race with its new small, high efficiency open frame XL125 Series AC-DC power supplies.

### TWICE THE POWER IN HALF THE SPACE

Our patented technology yields a very small footprint, reduces wasted power, and offers the highest power density in the market in the 125 watt range. The unique design means reduced energy costs, a greater return on your investment, higher reliability and longer product life.

### UNMATCHED POWER DENSITY

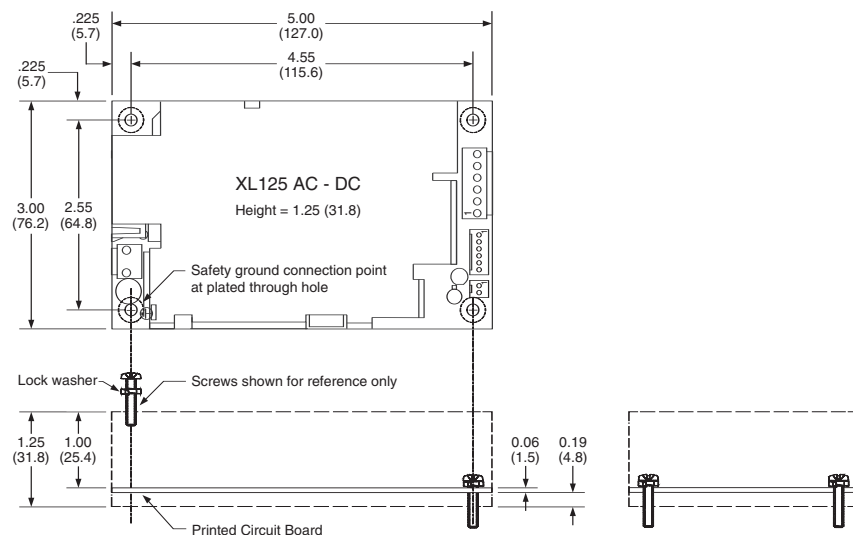
With an overall height of 1.25" and a 3" x 5" footprint, the XL125 Series boasts a power density of 6.7 watts per cubic inch. It is ideally suited for OEMs using industry standard 1U chassis. N2Power's small form factor power supplies allow you to work with additional "real estate" for more functionality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

### 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.

### Typical Mechanical Drawing:

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



### 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%.

# XL125 AC-DC Series

## 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.

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

MODEL	PART NUMBER	OUTPUT	VOLTAGE	REGULATION (%)	MAXIMUM CURRENT (A)	RIPPLE & NOISE (P-P)
XL125-03	400010-03-9	V1	3.3	±3	30.0	50 mV
XL125-03 CS	400010-01-3	V2	12	±5	1.0	120 mV
XL125-05	400003-08-3	V1	5	±3	25.0	50 mV
XL125-05 CS	400003-01-8	V2	12	±5	1.0	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	400006-65-6	V1	24	±3	5.2	240 mV
XL125-24 CS	400006-61-5	V2	12	±5	1.0	120 mV
XL125-28	400006-66-9	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	400008-01-7	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

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

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:	>200,000 hours calculated
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 Product Specification      Δ Some Models

## COMPLIANCE:

### USA/Canada:

UL60950-1:2007 (2nd Edition) / C22.2 No. 60950-1-07 (Bi-National Standard) Safety of Information Technology Equipment

### Europe:

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

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

Directive 2004/108/EC "Electromagnetic Compatibility (EMC) Directive"

EN61204-3:2001 Stabilized Power Supplies, d.c. Outputs EMC Standards Specification

EN61204-3:2001 is a product family EMC standard referencing the following standards:

EN61000-3-3 Limits of Voltage Fluctuations & Flicker

EN61000-3-2 Harmonic Current Emissions

(Power Factor Correction)

EN61000-4-3 Radiated Radio Frequency.

Electromagnetic Field Immunity  
EN61000-4-4 Fast Transient / Burst Immunity  
EN61000-4-5 Surge Immunity  
EN61000-4-6 Immunity to Conducted Disturbances  
EN61000-4-11 Voltage Dips, Short Interruptions & Voltage Variations

Directive 2002/95/EC - "Restriction of Hazardous Substances (RoHS)"

Safety Approvals:  
UL, cUL, CB Certificate, CB Report. CE Mark

