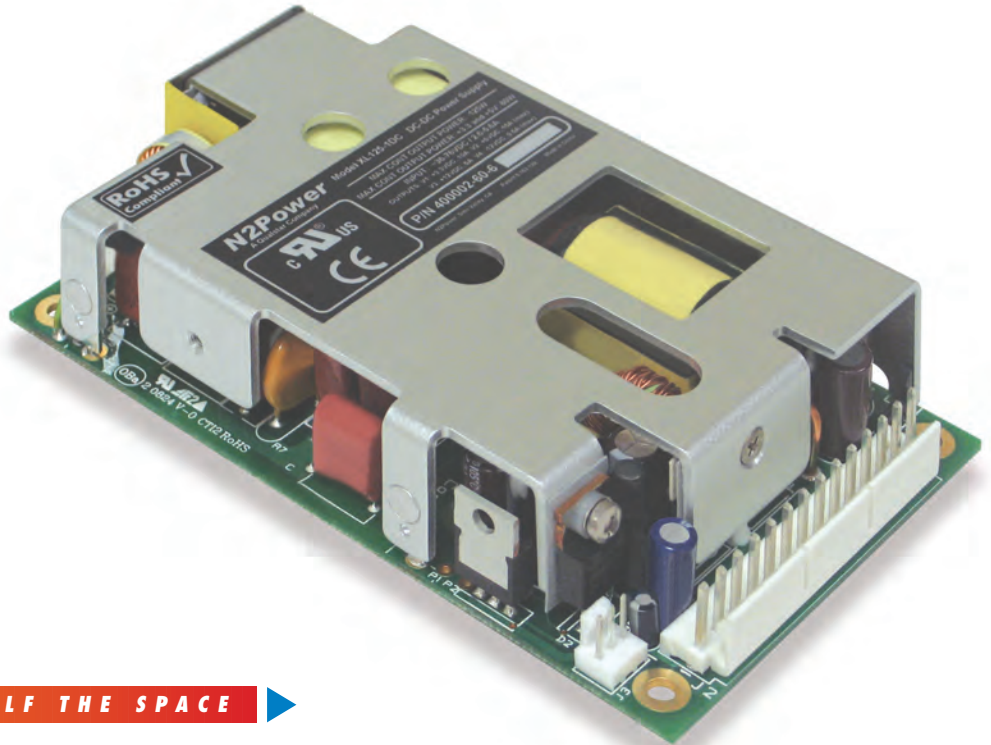


# XL125 DC-DC Series

- 125 W DC-DC
- UP TO 90% EFFICIENCY
- HIGH POWER DENSITY:  
6.7 W / in<sup>3</sup>
- 36 – 76 VDC
- ACTIVE CURRENT SHARING
- 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 DC-DC Series power supplies.

**TWICE THE POWER IN HALF THE SPACE**

Our 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.

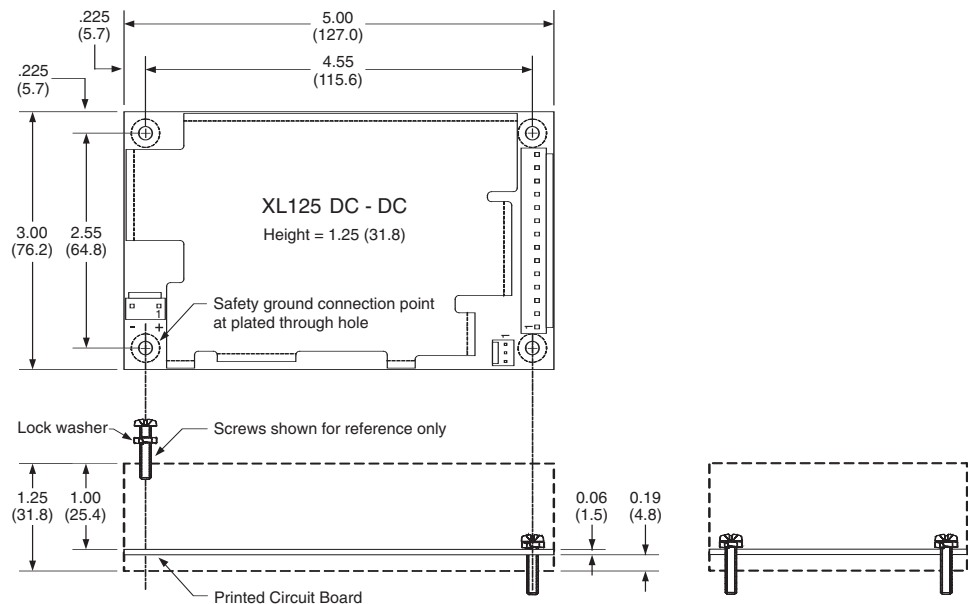
### HIGH EFFICIENCY IN A SMALL PACKAGE

Reduced heat generation and greater reliability are key design requirements. The XL125 Series provides up to 90% efficiency in a 125 watt DC-DC power supply. Our unique design reduces energy consumption and generates less waste heat. It requires little forced air cooling, decreases DC loads and increases reliability and economy of operation.

### Typical Mechanical Drawing:

Inches (millimeters), connectors and pinouts may vary with model.

Refer to XL125 DC-DC Product Specification for complete information.



# XL125 DC-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)
XL125-12DC	400071-63-5	V1	12	±3	10.4	120 mV
XL125-12DC CS	400070-63-7	V2	12	±5	1.0	120 mV
XL125-15DC	400071-64-3	V1	15	±3	8.3	150 mV
XL125-15DC CS	400070-64-1	V2	12	±5	1.0	120 mV
XL125-24DC	400071-65-0	V1	24	±3	5.2	240 mV
XL125-24DC CS	400070-65-2	V2	12	±5	1.0	120 mV
XL125-48DC	400071-66-8	V1	48	±3	2.6	480 mV
XL125-48DC CS	400070-66-0	V2	12	±5	1.0	120 mV
XL125-54DC	400071-67-6	V1	54	±3	2.3	540 mV
XL125-54DC CS	400070-69-4	V2	12	±5	1.0	120 mV
XL125-56DC	400071-68-4	V1	56	±3	2.2	560 mV
XL125-56DC CS	400070-70-2	V2	12	±5	1.0	120 mV
XL125-1DC	400070-61-1	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
XL125-8DC	400070-68-6	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:	36 – 76 VDC
Input Current:	4 A @ 36 VDC
Input Protection:	5 A fuse
Safety Isolation:	3000 V input to output 1500 V input to ground

OUTPUT SPECIFICATIONS	
Total Power:	125 W
Efficiency:	Up to 90% <sup>†</sup>
Minimum Load:	No load <sup>†</sup>
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

<sup>†</sup> See Product Specification

<sup>Δ</sup> Some Models

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 <sup>†Δ</sup>
Current Sharing:	Active current sharing with OR'ing diode <sup>†Δ</sup>
Power Good:	Provided <sup>†</sup>
PS_OK:	Output <sup>†</sup>
LED:	Some models <sup>†</sup>

## 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)"

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:

CISPR 22: High frequency line conducted phenomena

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

Safety Approvals:

UL, cUL, CB Certificate, CB Report, CE Mark

