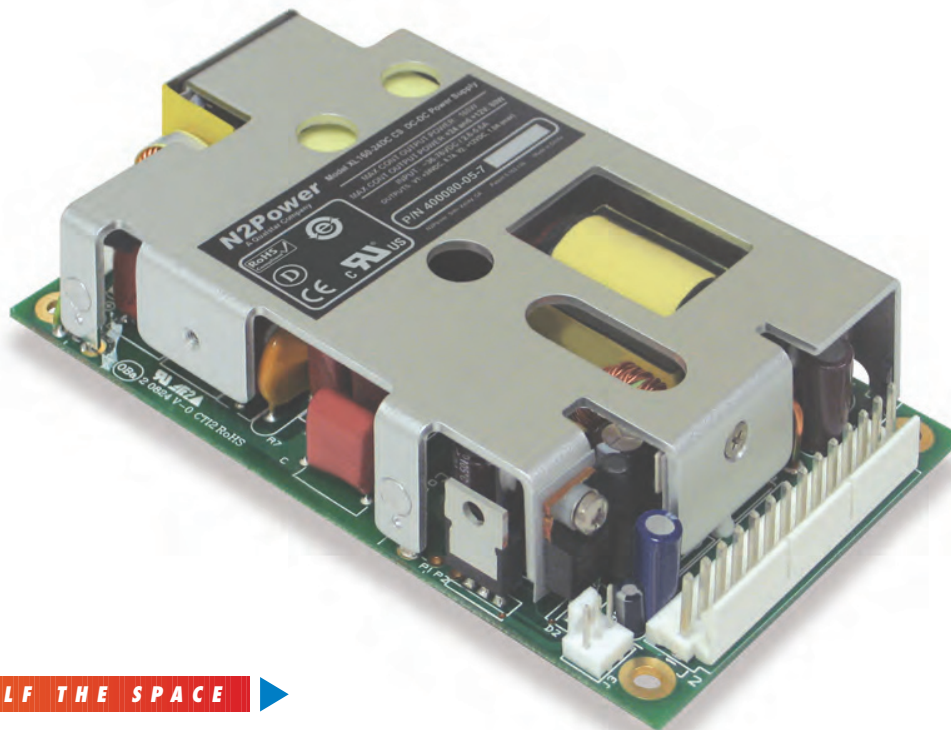


- **160 W DC-DC**
- **UP TO 90% EFFICIENCY**
- **HIGH POWER DENSITY:
8.5 W / in³**
- **36 – 76 VDC**
- **ACTIVE CURRENT SHARING**
- **BUILT IN OR-ING DIODES
FOR N+1 (OPTIONAL)**
- **3" X 5" SMALL FOOTPRINT**
- **<1U HIGH: 1.25"**
- **NO LOAD OPERATION**
- **RoHS COMPLIANT**
- **INPUT TO OUTPUT ISOLATION**



POWER SUPPLY DESIGN LEADER

N2Power™ continues to lead the power density race with its new small, high efficiency open frame XL160 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 160 watt range. The unique design means reduced energy costs, a greater return on your investment, higher reliability and longer product life.

UNMATCHED POWER DENSITY

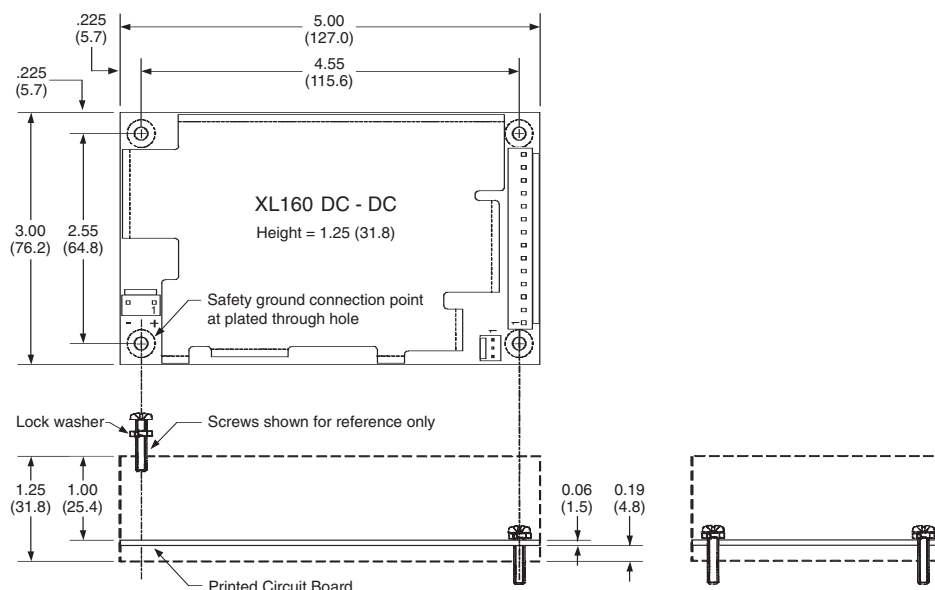
With an overall height of 1.25" and a 3" x 5" footprint, the XL160 Series boasts a power density of 8.5 watts per cubic inch. It is ideally suited for OEMs using industry standard 1U chassis. N2Power's small form factor power supplies allow you to work with additional "real estate" for more functionality 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 XL160 Series provides up to 90% efficiency in a 160 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 XL160 DC-DC Product Specification for complete information.



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)
XL160-05DC	400083-01-8	V1	5	±3	32.0	50 mV
XL160-05DC CS	400080-02-4	V2	12	±5	1.0	120 mV
XL160-12DC	400083-03-6	V1	12	±3	13.3	120 mV
XL160-12DC CS	400080-03-2	V2	12	±5	1.0	120 mV
XL160-15DC	400083-04-4	V1	15	±3	10.7	150 mV
XL160-15DC CS	400080-04-0	V2	12	±5	1.0	120 mV
XL160-24DC	400083-05-1	V1	24	±3	6.7	240 mV
XL160-24DC CS	400080-05-7	V2	12	±5	1.0	120 mV
XL160-48DC	400083-06-9	V1	48	±3	3.3	480 mV
XL160-48DC CS	400080-06-5	V2	12	±5	1.0	120 mV
XL160-54DC	400083-07-7	V1	54	±3	2.9	540 mV
XL160-54DC CS	400080-09-9	V2	12	±5	1.0	120 mV
XL160-56DC	400083-08-5	V1	56	±3	2.8	560 mV
XL160-56DC CS	400080-10-7	V2	12	±5	1.0	120 mV
XL160-1DC	400080-01-6	V1	3.3	±3	15.0	50 mV
		V2	5	±4	20.0	50 mV
		V3	12	±5	6.0	120 mV
		V4	-12	±5	1.0	120 mV
XL160-8DC	400080-08-1	V1	5	±4	20.0	50 mV
		V2	12	±5	6.0	120 mV
		V3	-12	±5	1.0	120 mV

CS = Current Sharing

INPUT SPECIFICATIONS	
Nominal Input Voltage:	36 – 76 VDC
Input Current:	5.5 A @ 36 VDC
Input Protection:	8 A fuse
Safety Isolation:	3000 V input to output 1500 V input to ground

OUTPUT SPECIFICATIONS	
Total Power:	160 W
Efficiency:	Up to 90%†
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:	10 CFM
Convection Cooling:	See Product Specification
MTBF:	>200,000 hours calculated
SIGNALS	
Remote Sense:	On main output ^{1Δ}
Current Sharing:	Active current sharing with OR-ing diode ^{1Δ}
Power Good:	Provided [†]
PS_OK:	Output [†]
LED:	Some models [†]

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

¹See Product Specification for additional information

† See Product Specification

Δ Some Models

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

International:

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

IEC 61204-3 Class B

