

- **280 W AC-DC / 3" X 5.3" FOOTPRINT**
- **AVAILABLE MODELS: 12V – 56V**
- **UP TO 90% EFFICIENCY**
- **HIGH POWER DENSITY: OVER 13 W / in³**
- **ALL OUTPUTS MAY BE PARALLELED**
- **REMOTE ON / OFF**
- **5V STANDBY OUTPUT (1A)**
- **12V AUX OUTPUT (1A)**
- **UNIVERSAL AC INPUT**
- **ACTIVE PFC (90 – 264 VAC)**
- **ACTIVE CURRENT SHARING FOR N, N+1**
- **ACTIVE INRUSH CURRENT PROTECTION**
- **RoHS COMPLIANT**



POWER SUPPLY DESIGN LEADER

N2Power leads the power density race with its high efficiency XL280 Series AC-DC power supplies. Our advanced technology yields a very small footprint, reduces wasted power, and

TWICE THE POWER IN HALF THE SPACE

offers the highest power density in its class. This efficient design means reduced energy costs, a greater return on your investment, greater reliability and longer product life.

UNMATCHED POWER DENSITY

With an overall height of 1.43" and a 3" x 5.3" footprint, the XL280 Series boasts a power density over 13 watts per cubic inch. It is ideally suited for OEMs using the industry standard 1U chassis.

HIGH EFFICIENCY IN A SMALL PACKAGE

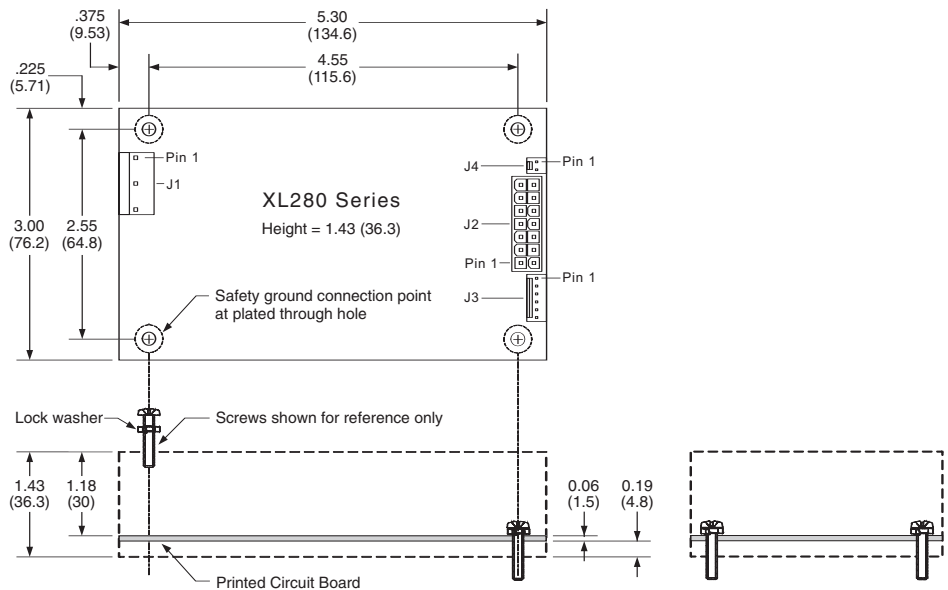
The XL280 Series provides up to 90% efficiency. Our unique design reduces energy consumption and generates less wasted heat. It requires little forced air cooling, decreases AC power consumption, increases reliability and economy of operation. Comparisons of efficiencies show that our supplies can reduce losses up to 50%.

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 loads or temperatures are sensed. When AC input power is lost it provides the host system with advanced warning of an impending shutdown.

Typical Mechanical Drawing:

Inches (millimeters), refer to XL280 Product Specification for complete information.



| MODEL | PART NUMBER | OUTPUT | VOLTAGE | REGULATION (%) | MAXIMUM CURRENT (A) | RIPPLE & NOISE (P-P) |
|-------------------------|----------------------------|--------|---------|----------------|---------------------|----------------------|
| XL280-12 XL280-12 CS | 400082-01-2 400081-01-4 | V1 | 12 | ±3 | 23.3 | 120 mV |
| | | V2 | 12 | ±5 | 5.0 | 120 mV |
| | | V3 | 12 | ±5 | 1.0 | 120 mV |
| | | V4 | 5sb | ±5 | 1.0 | 50 mV |
| XL280-24 XL280-24 CS | 400082-02-0 400081-02-2 | V1 | 24 | ±3 | 11.7 | 240 mV |
| | | V2 | 12 | ±5 | 5.0 | 120 mV |
| | | V3 | 12 | ±5 | 1.0 | 120 mV |
| | | V4 | 5sb | ±5 | 1.0 | 50 mV |
| XL280-48 XL280-48 CS | 400082-03-4 400081-03-0 | V1 | 48 | ±3 | 5.8 | 480 mV |
| | | V2 | 12 | ±5 | 5.0 | 120 mV |
| | | V3 | 12 | ±5 | 1.0 | 120 mV |
| | | V4 | 5sb | ±5 | 1.0 | 50 mV |
| XL280-54 XL280-54 CS | 400082-04-6 400081-04-8 | V1 | 54 | ±3 | 5.2 | 540 mV |
| | | V2 | 12 | ±5 | 5.0 | 120 mV |
| | | V3 | 12 | ±5 | 1.0 | 120 mV |
| | | V4 | 5sb | ±5 | 1.0 | 50 mV |
| XL280-56 XL280-56 CS | 400082-05-3 400081-05-5 | V1 | 56 | ±3 | 5.0 | 560 mV |
| | | V2 | 12 | ±5 | 5.0 | 120 mV |
| | | V3 | 12 | ±5 | 1.0 | 120 mV |
| | | V4 | 5sb | ±5 | 1.0 | 50 mV |

CS = Current Sharing

| INPUT SPECIFICATIONS | |
|--------------------------|--|
| Nominal Input Voltage: | 100 – 240 VAC |
| Tested Input Limits: | 90 – 264 VAC |
| Input Frequency Range: | 47 – 63 Hz |
| Input Current: | 3.5 A @ 100 VAC |
| Input Protection: | 5 A fuse |
| Safety Isolation: | 3000 VAC input to output 1500 VAC input to ground |
| Inrush Current: | 14 A @ 240 VAC† |
| Power Factor Correction: | Active PFC circuitry, meets or exceeds EN61000-3-2 |
| Leakage Current: | 0.75mA @ 240 VAC / 60 Hz† |

| OUTPUT SPECIFICATIONS | |
|---------------------------|--|
| Total Output: | 280 W |
| Hold-up Time: | Minimum 22 mS |
| Efficiency: | Up to 90%† |
| Minimum Load: | No load† |
| Over / Under Shoot: | Maximum 10% at turn-on |
| Output Isolation: | For POE† |
| PROTECTION | |
| Overvoltage Protection: | V1 (latches off) |
| Overpower Protection: | Protected / Auto Recovery |
| Short Circuit Protection: | Auto recovery of all outputs |
| Thermal Shutdown: | Auto recovery protection against over temperature conditions |

† See Product Specification Δ Some Models

| OPERATING SPECIFICATIONS | |
|--------------------------|--|
| Operating Temperature: | -25°C to +50°C |
| Temperature Derating: | 2.5% / degree 50°C to 70°C |
| Storage Temperature: | -40°C to +85°C |
| Forced Air Cooling: | 10 CFM minimum† |
| Convection Cooling: | See Specification ^Δ |
| MTBF: | 546,464 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 |
| Remote Enable Input: | Low-true input enables V1, V2, V3 output |

* See MTBF Report for additional temperature values

Compliance:†

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

† See Product Specification for additional information

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



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Switching Power Supplies](#) category:

Click to view products by [N2power](#) manufacturer:

Other Similar products are found below :

[70841011](#) [73-551-0005](#) [AAD600S-4-OP](#) [R22095](#) [HWS50A-5/RA](#) [KD0204](#) [9021](#) [S-15F-12](#) [LDIN100150](#) [LPM000-BBAR-01](#) [LPX17S-C](#)
[EVS57-10R6/R](#) [FDC40-24S12](#) [FRV7000G](#) [22929](#) [CQM1IA121](#) [40370121900](#) [VI-PU22-EXX](#) [40370121910](#) [LDIN5075](#) [432703037161](#)
[WRB01X-U](#) [LPX140-C](#) [08-30466-1040G](#) [09-160CFG](#) [70841004](#) [70841025](#) [VPX3000-CBL-DC](#) [LPM000-BBAR-05](#) [LPM000-BBAR-08](#)
[LPM124-OUTA1-48](#) [LPM000-BBAR-07](#) [LPM109-OUTA1-10](#) [LPM616-CHAS](#) [08-30466-1055G](#) [08-30466-2175G](#) [DMB-EWG](#) [TVQF-](#)
[1219-18S](#) [6504-226-2101](#) [CQM1IPS01](#) [XPFM201A+](#) [MAP80-4000G](#) [LFP300F-24-TY](#) [SMP21-L20-DC24V-5A](#) [VI-MUL-ES](#) [08-30466-](#)
[0065G](#) [CME240P-24](#) [VI-RU031-EWWX](#) [08-30466-0028G](#) [S82Y-TS01](#)