



N2Power XL280 AC-DC Series Ultrasmall, High Efficiency Power Supplies

HIGHLIGHTS

- 280 W AC-DC
- Up to 90% efficiency
- High power density: over 13 W / cu in.
- 3" x 5.3" footprint
- All outputs may be paralleled
- Remote on/off
- 5 V standby output (1 A)
- 12 V aux output (1 A)
- Universal AC input
- Active PFC (90 - 264 VAC)
- Active current sharing for N, N+1
- Active inrush current protection
- RoHS compliant
- POE compliant (54 V and 56 V models)
- 3 year warranty

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.

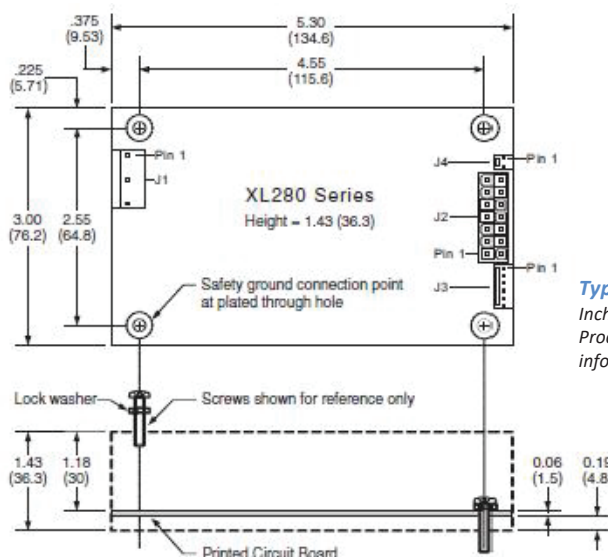
UNMATCHED POWER DENSITY

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.

A POWER SUPPLY DESIGN LEADER

HIGH EFFICIENCY IN A SMALL PACKAGE

N2Power leads the power density race with its high efficiency XL280 Series DC -DC power supplies, which provide up to 90% efficiency. In fact, comparisons of efficiencies show that our supplies can reduce energy losses by up to 50%. Our advanced technology yields a very small footprint and offers the highest power density in its class. This unique design also generates less wasted heat—reducing the need for forced air cooling, decreasing AC power consumption, increasing reliability, and maximizing its economy of operation. By building our power supplies with a focus on maximizing efficiency, we can provide our valued customers with reduced energy costs, longer product lifespans, and a greater return on their investment.



*Typical Mechanical Drawing:
Inches (millimeters), refer to XL280
Product Specification for complete
information.*



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



Call 805.583.7744

N2Power.com
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N2Power XL280 AC-DC Series

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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

Note: If you can't find your preferred output voltage listed on the table above, please contact a sales representative. We can easily modify standard PSUs to meet client-specific voltage requirements.

Compliance:

USA/ Canada:

Safety: UL 60950-1:2007 (2nd Edition) / C22.2 No. 60950-1-07
UL 62368-1 (Second Edition)
Safety of Information Technology Equipment (ITE)

EMC: FCC part 15, subpart B

Europe:

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

Demko: EN 60950-1:2006 + A11:2009 (2nd Edition)
EN 62368-1:2014 / A11:2017

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

International:

IEC 60950-1:2005 (2nd Edition)
EN 62368-1:2014 / A11:2017
Safety of Information Technology Equipment

IEC 61204-3 Class B

Every effort has been made to keep the information contained in this document current and accurate as of the date of publication or revision. However, no guarantee is given or implied that the document is error-free or that it is accurate with regard to any specification. N2Power reserves the right to change specifications without notice.

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
Safety Isolation:	3000 VAC input to output 1500 VAC input to ground
Inrush Current:	14 A @ 240 VAC
Leakage Current:	0.75 mA @240 VAC/60Hz
Power Factor Correction:	Active PFC circuitry, meets or exceeds EN61000-3-2
OUTPUT SPECIFICATIONS	
Total Output:	280 W
Output Voltages:	12 to 56 V
Hold-up Time:	Minimum 22 ms
Efficiency:	Up to 90%
Minimum Load:	No load
Over / Under Shoot:	Max 10% at turn-on
Output Isolation	For POE
PROTECTION	
Input Protection:	5 A fuse
Overvoltage Protection:	V1 (latches off)
Overpower Protection:	Auto-recovery
Short Circuit Protection:	Auto recovery
Thermal Shutdown:	Auto recovery
ENVIRONMENTAL SPECIFICATIONS	
Operating Temperature:	-25 to +70 °C
Temperature Derating:	2.5% / degree 50°C to 70°C
Storage Temperature:	- 40 to +85°C
Forced Air Cooling:	10 CFM minimum
Convection Cooling:	See Specification
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

Contact us regarding custom and modified standard supplies for unique applications. For complete specifications on all models, please visit our website at N2Power.com