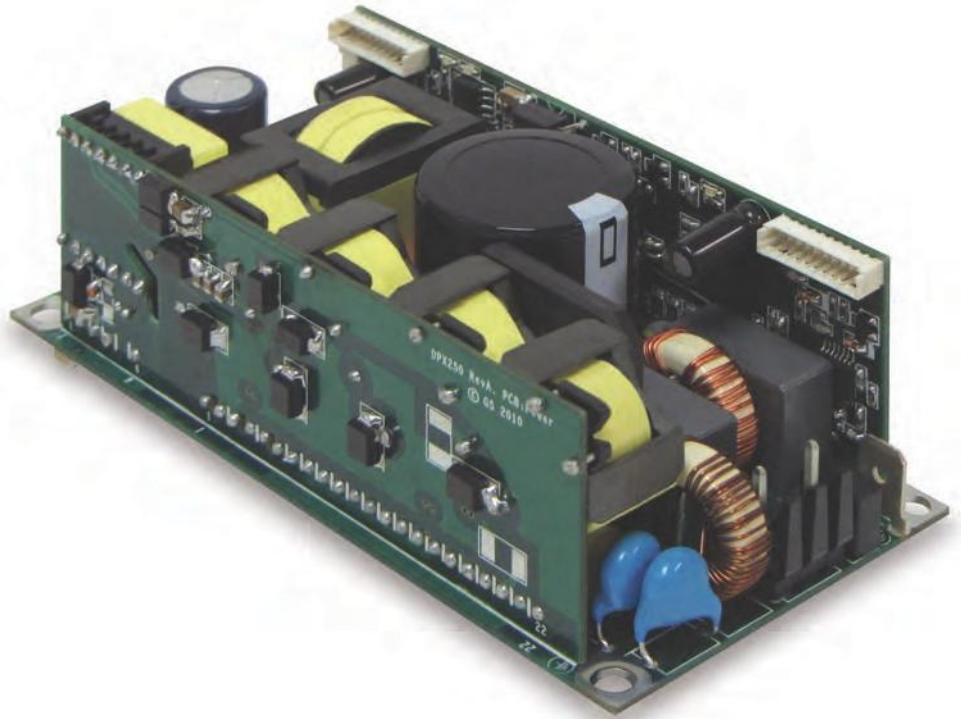


- 270W AC-DC
- 2" x 4" footprint
- Up to 92% efficiency
- High power density: Over 24W/cu in.
- Remote enable
- 5W 5V standby supply
- 6W 12V auxiliary supply
- 140W convection cooled rating
- Active PFC (90 – 264 VAC)
- Active inrush current protection
- RoHS compliant
- PMBus™ interface for digital power management (optional)
- Power good / Power fail
- No load operation



Power Supply Design Leader

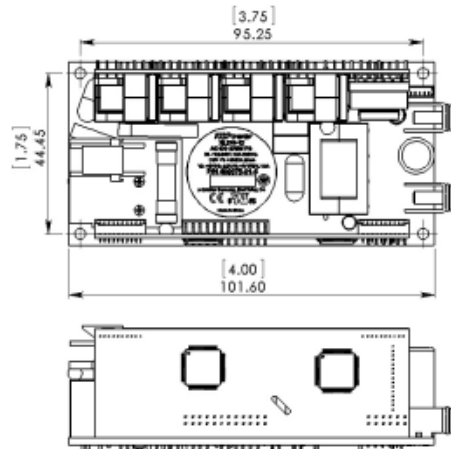
N2Power™ leads the power density race with its small, high efficiency XL270 Series AC-DC power supplies. Our advanced technology yields a very small footprint, reduces wasted power and offers the highest power density in its class. This efficient design means reduced energy costs, a greater return on your investment, greater reliability and longer product life.

State-of-the-Art Digital Controller

The XL270 is the first power supply in this class to use two digital signal processors to control the unit's operation. The DSPs monitor the following values:

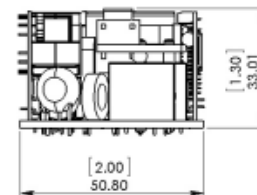
- Output voltage
- Output current
- Auxiliary 12V output voltage
- Self-diagnostic feature
- Transformer temperature
- Auto-optimize feature

The microcontroller enables the main output whenever all the required startup conditions are met, and shuts it down upon command, loss of input power or whenever excessive temperatures or loads are sensed. It always provides advanced warning of an impending shutdown before output power is lost.



PMBus™ Option

An optional PMBus digital communications interface is available to allow up to six XL270s to communicate over the same bus using the PMBus protocol. This interface allows routine remote control of the main outputs and the 12V fans. The host can also query the DSP for its output voltage and current plus the ambient and transformer temperatures and fan tachometer speed. Because it is programmable, the DSP code can be customized to meet unique OEM requirements.



SMX POWER 3005 Avenida Simi, Simi Valley, CA 93063
TEL: (805) 582-2804 FAX: (805) 582-2308 <http://www.smxpower.com>



MODEL	PART NUMBER	OUTPUT	VOLTAGE	REGULATION (%)	MAXIMUM CURRENT (A)	RIPPLE & NOISE (P-P)
XL270-12	400075-01-5	V _{OUT}	12	±3	22.5	120 mV
		V _{AUX}	12	±5	0.5	120 mV
		V _{SB}	5	±5	1.0	50 mV
XL270-24	400075-02-4	V _{OUT}	24	±3	11.3	240 mV
		V _{AUX}	12	±5	0.5	120 mV
		V _{SB}	5	±5	1.0	50 mV
XL270-30	400075-03-3	V _{OUT}	30	±3	9.0	300 mV
		V _{AUX}	12	±5	0.5	120 mV
		V _{SB}	5	±5	1.0	50 mV
XL270-48	400075-05-7	V _{OUT}	48	±3	5.7	480 mV
		V _{AUX}	12	±5	0.5	120 mV
		V _{SB}	5	±5	1.0	50 mV
XL270-56	400075-07-3	V _{OUT}	56	±3	4.9	560 mV
		V _{AUX}	12	±5	0.5	120 mV
		V _{SB}	5	±5	1.0	50 mV

Compliance *

USA / Canada

Safety:

UL 60950-1 Second Edition
UL 62368-1 Second Edition
CSA 22.2: 60950-1

International

IEC 60950-1 (2005) Second Edition
IEC 62368-1 (2014) Second Edition

EMC:

FCC part 15, subpart B

EN 61204-3
EN61000

* See Product Specification for additional information. The power supply is considered a component of the final product in which it is being used. The final product itself must be tested separately for compliance with all applicable standards.

INPUT SPECIFICATIONS	
Nominal Input Voltage:	100 – 240 VAC
Tested Input Limits:	90 – 264 VAC
Input Frequency Range:	47 – 63 Hz
Input Current:	3.2 A @ 100 VAC
Safety Isolation:	3000 VAC in to out 1500 VAC in to ground
Inrush Current:	35 A @ 240 VAC, 25°C
Leakage Current:	< 0.7 mA
Power Factor Correction:	Active PFC circuitry, meets or exceeds EN61000-3-2
OUTPUT SPECIFICATIONS	
Total Output:	270 W
Output Voltages:	12 to 56 V
Hold-up Time:	Minimum 22 ms at all input voltages
Efficiency:	Up to 92%
Minimum Load:	No load
Over / Under Shoot:	Max 5% at turn-on
PROTECTION	
Input Overcurrent Protection:	6.3 A fuse
Overvoltage Protection:	V _{OUT} only latch off
Overpower Protection:	Auto-recovery
Short Circuit Protection:	Auto recovery
Thermal Shutdown:	Auto recovery
ENVIRONMENTAL SPECIFICATIONS	
Operating Temperature:	-25 to +50°C
Temperature Derating:	2.5% / 50°C to 70°C
Storage Temperature:	-40 to +85°C
Forced Air Cooling:	15 CFM minimum†
Convection Cooling:	140W
MTBF:	504,292 hours @ 25°C
SIGNALS	
Remote Sense	
Active Current Sharing Option	
Passive Redundancy	
Auxiliary Output	
Standby Output	
PMBus Option	
Fan Tachometer Input	
Power Good (PG) / Power Fail Output	
Remote Enable	
Onboard LED Indicators	
Remote Voltage Adjust	

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