

# N2POWER ATX AC-DC SERIES ULTRA SMALL, HIGH-EFFICIENCY POWER SUPPLIES

- Up to 87% efficiency
- High power density
- Remote on/off
- 5V Standby output (1amp)
- Universal AC input
- Active PFC (90 264 VAC)
- Inrush current protection
- RoHS compliant



## Power Supply Design Leader

N2Power<sup>™</sup> leads the power density race with its small, high efficiency ATX 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.

## **Unmatched Power Density**

Our ATX Series models are designed expressly for OEM packaging in 1U and 2U chassis to deliver very high power density. The XS285-ATX model features multiple outputs and cooling in an industry standard enclosure for PC chassis applications.

## High Efficiency in a Small Package

The ATX Series provides up to 87% efficiency. Our unique design reduces energy consumption and generates less wasted heat.

It requires little forced air cooling, decreases AC loading, and increases reliability and economy of operation. Comparisons of efficiencies show that our supplies can reduce losses up to 50%.

## **Repeatable Quality**

Each power supply design is tested by UL, and every one we manufacture undergoes a complete functional test and a multi-hour burn-in to insure that every unit meets our stringent quality requirements.

RoHS

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## Models and Dimensions (W x D x H)

XL125-1ATX	XL160-1ATX	XL160-7ATX	XL160-8ATX	XL220-1ATX	XL260-2ATX	XL260-4ATX	XS285-ATX	XR Series
3 x 5 x 1.25"	3 x 5 x 1.3"	3 x 5.3 x 1.35"	3 x 5.3 x 1.35"	5.5 x 5.9 x 3.4"	3 x 5 x 1.32"			
76.2 x 127 x 31.7mm	76.2 x 127 x 33mm	76.2 x 134.6 x 34mm	76.2 x 134.6 x 34mm	139.7 x 149.9 x 86.4mm	76.2 x 127 x 34mm			

Contact us regarding custom supplies for unique applications



QUALSTAR CORPORATION www.n2power.com Tel: 805-583-7744

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MODEL	PART NUMBER	OUTPUT	VOLTAGE	REGULATION (%)	MAXIMUM Current (A)	RIPPLE & NOISE (P-P)
XL125-1ATX		V1	3.3	±2	10.0	50 mV
		V2	5	±4	15.0	50 mV
	400002-71-3	V3	12	±5	5.0	120 mV
		V4	-12	±5	1.0	120 mV
		V5	5sb	±5	1.0	50 mV
	400011-04-5	V1	3.3	±2	15.0	50 mV
		V2	5	±4	20.0	50 mV
XL160-1ATX		V3	12	±5	6.0	120 mV
		V4	-12	±5	1.0	120 mV
		V5	5sb	±5	1.0	50 mV
	400017-02-6	V1	2.5	±2	15.0	50 mV
		V2	5	±4	20.0	50 mV
XL160-7ATX		V3	12	±5	6.0	120 mV
		V4	-12	±5	1.0	120 mV
		V5	5sb	±5	1.0	50 mV
	400018-07-3	V1	5	±4	20.0	50 mV
VI 4CO DATV		V2	12	±5	6.0	120 mV
XL100-0A1X		V3	-12	±5	1.0	120 mV
		V4	5sb	±5	1.0	50 mV
	400019-01-4	V1	24	±4	6.0	240 mV
		V2	5	±4	10.0	50 mV
XL220-1ATX		V3	12	±5	1.0	120 mV
		V4	12	±5	1.0	120 mV
		V5	5sb	±5	1.0	50 mV
	400050-02-7	V1	24	±4	6.0	240 mV
		V2	5	±4	10.0	50 mV
XL260-2ATX		V3	12	±5	4.0	120 mV
		V4	12	±5	0.7	120 mV
		V5	5sb	±5	1.0	50 mV
	400050-04-3	V1	48	±4	3.0	480 mV
		V2	5	±4	10.0	50 mV
XL260-4ATX		V3	12	±5	4.0	120 mV
		V4	12	±5	0.7	120 mV
		V5	5sb	±5	1.0	50 mV
	400027-03-3	V1	3.3	±2	15.0	50 mV
		V2	5	±4	20.0	50 mV
		V3	12	±5	6.0	120 mV
XS285-ATX		V4	-12	±5	1.0	120 mV
		V5	5sb	±5	1.0	50 mV
		V6	24	±3	5.2	240mV
		V7	12	±5	1.0	120 mV

INPUT SPECIFICATIONS					
Nominal Input Voltage:	100 – 240 VAC				
Tested Input Limits:	90 – 264 VAC				
Input Frequency Range:	47 – 63 Hz				
Input Current:	See Product Specification				
Safety Isolation:	3000 VAC in to out				
Inruch Current:	1500 VAC in to ground				
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Leakage Current:	@ 240 VAC / 60 Hz				
Power Factor	Active PFC circuitry, meets or				
Correction:	exceeds EN61000-3-2				
OUTPUT SPECIFICATIONS					
Total Output:	125W – 285W				
Hold-up Time:	Minimum 22 ms				
Efficiency:	Up to 87%				
Minimum Load:	No load				
Over / Under Shoot:	Max 10% at turn-on				
PROTECTION					
Input Overcurrent Protection: See Product Specification					
Overvoltage Protection:	V1, V2 and V3 (latches off)				
Overpower Protection:	Protected / Auto-recovery				
Short Circuit Protection:	Auto recovery of all outputs protected against short circuit				
Thermal Shutdown:	Auto recovery protection against over temperature conditions				
ENVIRONMENTAL SPECIFICATIONS					
Operating Temperature:	–25 to +50°C				
Temperature Derating:	2.5% / degree, 50°C to 70°C				
Storage Temperature:	– 40 to +85°C				
Forced Air Cooling:	10 CFM minimum *				
MTBF:	>200,000 hours (calculated)				
SIGNALS					
Remote Sense	See Product Specification				
Fan Output	See Product Specification				
Remote Enable Input	Low-true input				
Power Good	Positive true				

\* XS285-ATX contains fan



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Rev: 04-30-18

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MODEL	PART NUMBER	OUTPUT	VOLTAGE	REGULATION (%)	MAXIMUM Current (A)	RIPPLE & NOISE (P-P)
XR125-1ATX	400150-02-5	V1	3.3	±3	10.0	50 mV
		V2	5	±5	15.0	50 mV
		V3	12	±5	5.0	120 mV
		V4	-12	±5	1.0	120 mV
		V5	5sb	±5	1.0	50mV
	400151-02-3	V1	2.5	±3	12.0	50 mV
		V2	5	±4	15.0	50 mV
XR125-7ATX		V3	12	±5	5.0	120 mV
		V4	-12	±5	1.0	120 mV
		V5	5sb	±5	1.0	50mV
	400152-02-1	V2	5	±5	16.5	50 mV
		V3	12	±5	5.0	120 mV
XR120-0A1X		V4	-12	±5	1.0	120 mV
		V5	5sb	±5	1.0	50mV
	400125-02-7	V1	3.3	±3	15.0	50 mV
		V2	5	±5	20.0	50 mV
XR160-1ATX		V3	12	±5	6.0	120 mV
		V4	-12	±5	1.0	120 mV
		V5	5sb	±5	1.0	50mV
	400126-02-5	V1	2.5	±3	15.0	50 mV
		V2	5	±4	20.0	50 mV
XR160-7ATX		V3	12	±5	6.0	120 mV
		V4	-12	±5	1.0	120 mV
		V5	5sb	±5	1.0	50mV
	400127-02-3	V2	5	±5	20.0	50 mV
		V3	12	±5	6.0	120 mV
XR160-8ATX		V4	-12	±5	1.0	120 mV
		V5	5sb	±5	1.0	50mV

## Compliance <sup>1</sup>

### USA / Canada

#### Europe

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

EMC: FCC part 15, subpart B

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

RoHS

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

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IEC 61204-3 Class B

<sup>1</sup> 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.

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