N2Power XR125 RE AC-DC Series
Ultrasmall, High Efficiency Power Supplies

HIGHLIGHTS
• 125 W AC-DC
• Up to 91% efficiency
• High power density: 6.7 W / cu in.
• Universal AC input
• Active PFC (90-264 VAC)
• Built in OR-ing Diode/MOSFET for N+1 (Optional)
• Single wire current sharing (most models)
• Small footprint: 3” X 5”
• <1U High: 1.32”
• 5 Vsb @ 1amp & remote enable on all models
• No load operation
• RoHS compliant
• 3 year warranty

SAVE ENERGY WITH PFC
All XR125 RE products incorporate active PFC technology with universal input to provide superior efficiency in each supply. Comparisons of power loading show that our supplies can reduce consumption up to 50%.

UNMATCHED POWER DENSITY
With an overall height of 1.32” and a 3” x 5” footprint, the XR125 RE series boasts a power density of 6.7 watts per cubic inch. It is ideally suited for OEMs using industry standard 1U chassis. Additionally, most models come standard with market leading built-in technology for active Intelligent current sharing and an OR-ing Diode/Mosfet for N+1 (up to 4).

TYPICAL MECHANICAL DRAWING:
Inches (millimeters), connectors, and pinouts may vary with model. Refer to XR125 Product Specification for complete information.

N2Power leads the power density race with its high efficiency XR125 RE AC-DC power supplies, which provide up to 91% 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.

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

Call 805.583.7744
N2Power.com
Rev051520
N2Power XR125 RE AC-DC Series
Ultrasmall, High Efficiency Power Supplies

<table>
<thead>
<tr>
<th>MODEL</th>
<th>PART NUMBER</th>
<th>OUTPUT</th>
<th>VOLTAGE</th>
<th>REGULATION (%)</th>
<th>MAXIMUM CURRENT (A)</th>
<th>RIPPLE &amp; NOISE (P-P)</th>
</tr>
</thead>
<tbody>
<tr>
<td>XR125-03 RE</td>
<td>400168-03-5</td>
<td>V1</td>
<td>3.3</td>
<td>±3</td>
<td>32.0</td>
<td>30 mV</td>
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<tr>
<td>XR125-03 CS RE</td>
<td>400168-04-3</td>
<td>V2</td>
<td>12</td>
<td>±5</td>
<td>1.0</td>
<td>120 mV</td>
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<tr>
<td>XR125-05 RE</td>
<td>400165-03-1</td>
<td>V1</td>
<td>5</td>
<td>±3</td>
<td>25.0</td>
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<td>400165-04-9</td>
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<tr>
<td>XR125-07 RE</td>
<td>400166-02-1</td>
<td>V1</td>
<td>5</td>
<td>±3</td>
<td>1.0</td>
<td>120 mV</td>
</tr>
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<td>400155-03-2</td>
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<td>12</td>
<td>±3</td>
<td>10.5</td>
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</tr>
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<td>±5</td>
<td>1.0</td>
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<tr>
<td>XR125-15 RE</td>
<td>400156-03-0</td>
<td>V1</td>
<td>15</td>
<td>±3</td>
<td>8.3</td>
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<td>400156-04-8</td>
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<td>±5</td>
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<td>XR125-19 CS RE</td>
<td>400157-02-0</td>
<td>V1</td>
<td>19</td>
<td>±3</td>
<td>0.6</td>
<td>190 mV</td>
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<tr>
<td>XR125-24 RE</td>
<td>400158-03-6</td>
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<td>±5</td>
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<tr>
<td>XR125-24 CS RE</td>
<td>400158-04-4</td>
<td>V3</td>
<td>5b</td>
<td>±5</td>
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<td>XR125-28 RE</td>
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<td>V1</td>
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<td>±3</td>
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<tr>
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<td>±5</td>
<td>1.0</td>
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<td>XR125-30 RE</td>
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<td>±3</td>
<td>4.2</td>
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<td>±5</td>
<td>1.0</td>
<td>120 mV</td>
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<tr>
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<td>48</td>
<td>±3</td>
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<td>±5</td>
<td>1.0</td>
<td>120 mV</td>
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<td>51</td>
<td>±3</td>
<td>2.5</td>
<td>510 mV</td>
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<td>XR125-54 RE</td>
<td>400163-03-6</td>
<td>V2</td>
<td>12</td>
<td>±5</td>
<td>1.0</td>
<td>120 mV</td>
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<tr>
<td>XR125-54 CS RE</td>
<td>400163-04-4</td>
<td>V3</td>
<td>5b</td>
<td>±5</td>
<td>1.0</td>
<td>50 mV</td>
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<td>XR125-58 RE</td>
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<td>56</td>
<td>±3</td>
<td>2.2</td>
<td>560 mV</td>
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<tr>
<td>XR125-58 CS RE</td>
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<td>1.0</td>
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<tr>
<td>XR125-59 CS RE</td>
<td>400165-04-2</td>
<td>V3</td>
<td>5b</td>
<td>±5</td>
<td>1.0</td>
<td>50 mV</td>
</tr>
</tbody>
</table>

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.

CS = Current Sharing, plus an OR-ing diode/MOSFET on V1 output.
RE = Remote Enable, turns V1 / V2 outputs on/off.
sb = standby voltage

Compliance (See Product Spec for additional information):

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
EMC: FCC part 15, subpart B

Europe
2006/95/EC - “Low Voltage (Safety) Directive”
EN 62368-1:2014 / A11:2017

International
IEC 62368-1:2014
Safety of Information Technology Equipment
IEC 61204-3 Class B

INPUT SPECIFICATIONS
Nominal Input Voltage: 100 – 240 VAC
Maximum AC Input: 90 – 264 VAC
Input Frequency Range: 47 – 63 Hz
Input Current: 1.8 A @ 100 VAC
Input Protection: 3.15 A fuse
Safety Isolation: 3000 VAC input to output
Inrush Current: 33 A @ 115 VAC
Leakage Current: 750 mA
Power Factor Active PFC circuitry, meets or exceeds EN61000-3-2

OUTPUT SPECIFICATIONS
Total Power: 125W
Hold-up Time: Minimum 28 mS at all input voltages
Efficiency: Up to 91% Tiered
Minimum Load: No load Tiered
Over / Under Shoot: Maximum 10% at turn-on
5V STBY (ATX Models): 5V / 1A

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 over-temperature conditions

OPERATING SPECIFICATIONS
Operating Temperature: -25°C to +70°C
Temperature Derating: 2.5% / degree C to 70°C
Storage Temperature: -40°C to +85°C
Forced Air Cooling: 10 CFM Tiered
Convection Cooling: See product specification
MTBF: > 600,000 hours @ 25°C Tiered

SIGNALS
Remote Sense: On main output Tiered
Current Sharing (Optional): Active current sharing with OR-ing diode or MOSFETs Tiered
Power Good: Provided
PS_OK: Output Tiered
LED (PG): All models Tiered
Remote Enable: All models Tiered

† See Product Specification
^ Some Models
* See MTBF Report for additional temperature values

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

Call 805.583.7744
N2Power.com Rev051520

All information and specifications are based on our knowledge of the products at the time of printing.
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