



- 3" x 5" Footprint
- High Power Density: > 12W/Inch³
- Up to 90% Efficiency
- Universal AC Input
- Active PFC (90-264VAC)
- Parallel Output Capability
- I²C Interface
- Remote On/Off
- 5V/1A Standby Output
- 12V/1A Auxiliary Output
- Active Inrush Current Protection
- RoHS Compliant

Electrical Specifications

<p>Input</p> <p>Input Voltage: 90-264VAC Input Frequency: 47-63 Hz Input Current: 3.5A @ 100VAC Input Protection: 5A Fuse Inrush Current: 13A @ 240VAC (Note 1) Power Factor: Per EN61000-3-2 Leakage Current: 700µA (Note 1) Safety Isolation: 3000VAC Input to output 1500VAC Input to ground Power Factor: Meets or exceeds EN61000-3-2</p>	<p>Signals</p> <table border="0"> <tr> <td>Remote Sense</td> <td>V1 & Return</td> </tr> <tr> <td>Current Sharing</td> <td>V1 using OR'ing MOFSET</td> </tr> <tr> <td>Passive Redundancy</td> <td>V2 & V3 may be wire OR'ed</td> </tr> <tr> <td>Power Good Output</td> <td>High-true CMOS logic & LED drive outputs</td> </tr> <tr> <td>Remote Enable Input</td> <td>Low-true enables V1 & V2</td> </tr> <tr> <td>Standby Output</td> <td>LED drive on when V1 & V2 disabled</td> </tr> <tr> <td>LED Indicators</td> <td>AC-On, Power Good</td> </tr> <tr> <td>Fan Output #1</td> <td>V2 on a 2-pin keyed connector</td> </tr> <tr> <td>Fan Output #2 (Note 1)</td> <td>On above 45°C ambient or hot transformer</td> </tr> <tr> <td>Fan Tachometer (Note 2)</td> <td>Reports fan speed via PMBus™</td> </tr> <tr> <td>I²C Data/Clock (Note 2)</td> <td>Provides PMBus™ control/status interface</td> </tr> </table>	Remote Sense	V1 & Return	Current Sharing	V1 using OR'ing MOFSET	Passive Redundancy	V2 & V3 may be wire OR'ed	Power Good Output	High-true CMOS logic & LED drive outputs	Remote Enable Input	Low-true enables V1 & V2	Standby Output	LED drive on when V1 & V2 disabled	LED Indicators	AC-On, Power Good	Fan Output #1	V2 on a 2-pin keyed connector	Fan Output #2 (Note 1)	On above 45°C ambient or hot transformer	Fan Tachometer (Note 2)	Reports fan speed via PMBus™	I ² C Data/Clock (Note 2)	Provides PMBus™ control/status interface		
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<p>Output</p> <p>Total Output: 275W Output Voltage: See table Hold Up Time: 22mS minimum Efficiency: Up to 90% (Note 1) Minimum Load: No minimum load Over/Under Shoot: 10% maximum @ turn-on</p>	<p>Environmental & Operating</p> <table border="0"> <tr> <td>Operating Temperature</td> <td>-25°C to +50°C</td> </tr> <tr> <td>Temperature Derating</td> <td>2.5%/°C from +50°C to +70°C</td> </tr> <tr> <td>Storage Temperature</td> <td>-40°C to +85°C</td> </tr> <tr> <td>Forced Air Cooling</td> <td>10CFM minimum (Note 1)</td> </tr> <tr> <td>Convection Cooling</td> <td>150W</td> </tr> <tr> <td>MTBF:</td> <td>>200,000 hours calculated</td> </tr> </table>	Operating Temperature	-25°C to +50°C	Temperature Derating	2.5%/°C from +50°C to +70°C	Storage Temperature	-40°C to +85°C	Forced Air Cooling	10CFM minimum (Note 1)	Convection Cooling	150W	MTBF:	>200,000 hours calculated												
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<p>Protection</p> <p>Overvoltage: V1 (latches off) Overpower: Auto recovery Short Circuit: Auto recovery (all outputs) Thermal Shutdown: Auto recovery against over temperature</p> <p>Notes:</p> <ol style="list-style-type: none"> See product specification Optional All specifications typical at 25°C unless noted. 	<p>Compliance</p> <table border="0"> <tr> <td>Safety Approvals</td> <td></td> </tr> <tr> <td>USA</td> <td>UL60950-1/2007</td> </tr> <tr> <td>Canada</td> <td>CSA-C22.2 No. 60950-1-07</td> </tr> <tr> <td>Europe</td> <td>Directive 2006/95/EC (Low Voltage Safety) IEC60950-1-2005 (Second Edition) CB Report, CB Certificate, CE Mark</td> </tr> <tr> <td>EMC</td> <td>Directive 2004/106/EC (EMC Directive)</td> </tr> <tr> <td>Harmonic Currents</td> <td>EN61204-3-2001</td> </tr> <tr> <td>Voltage Flicker</td> <td>EN61000-3-2</td> </tr> <tr> <td>Radiated Immunity</td> <td>EN61000-3-3</td> </tr> <tr> <td>EFT/Burst</td> <td>EN61000-4-3</td> </tr> <tr> <td>Surge Immunity</td> <td>EN61000-4-4</td> </tr> <tr> <td>Conducted Immunity</td> <td>EN61000-4-5</td> </tr> <tr> <td>Dips / Interruptions</td> <td>EN61000-4-6</td> </tr> </table>	Safety Approvals		USA	UL60950-1/2007	Canada	CSA-C22.2 No. 60950-1-07	Europe	Directive 2006/95/EC (Low Voltage Safety) IEC60950-1-2005 (Second Edition) CB Report, CB Certificate, CE Mark	EMC	Directive 2004/106/EC (EMC Directive)	Harmonic Currents	EN61204-3-2001	Voltage Flicker	EN61000-3-2	Radiated Immunity	EN61000-3-3	EFT/Burst	EN61000-4-3	Surge Immunity	EN61000-4-4	Conducted Immunity	EN61000-4-5	Dips / Interruptions	EN61000-4-6
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Models and Ratings Chart

Model	Output #	Voltage	Current	Regulation	Ripple & Noise (p-p)
PNA275-12 PNA275-12CS	V1	12	22.9A	3%	100mV
	V2	12	1A	5%	80mV
	V3	5sb	1A	5%	50mV
PNA275-15 PNA275-15CS	V1	15	18.3A	3%	150mV
	V2	12	1A	5%	80mV
	V3	5sb	1A	5%	50mV
PNA275-16 PNA275-16CS	V1	16	17.1A	3%	150mV
	V2	12	1A	5%	80mV
	V3	5sb	1A	5%	50mV
PNA275-24 PNA275-24CS	V1	24	11.5A	3%	200mV
	V2	12	1A	5%	80mV
	V3	5sb	1A	5%	50mV
PNA275-28 PNA280-75CS	V1	28	9.8A	3%	200mV
	V2	12	1A	5%	80mV
	V3	5sb	1A	5%	50mV
PNA275-48 PNA275-48CS	V1	48	5.7A	3%	200mV
	V2	12	1A	5%	80mV
	V3	5sb	1A	5%	50mV
PNA275-54 PNA275-54CS	V1	54	5.1A	3%	200mV
	V2	12	1A	5%	80mV
	V3	5sb	1A	5%	50mV
PNA275-56 PNA275-56CS	V1	56	4.9A	3%	200mV
	V2	12	1A	5%	80mV
	V3	5sb	1A	5%	50mV

Mechanical Outline

