

# PSP200 Series AC Power Supply



## Benefits

- Electronic power factor correction (PFC)
- Ultra-Quiet
- Power sensitive electronics without interference
- Rugged & Reliable
- Ensure years of safe and trouble free operation

## Applications

- Marine / Automotive / RV
- Electric Utilities and Substations
- Telecom Power Plants
- Manufacturing Locations
- Steel Mills
- Military Applications (COTS)
- Industrial Controls
- OEM Applications
- Solar / Alternative Power Systems
- Fuel Cells

## Power Supplies

### PSP200 Series 200W

#### Description

The PSP200 Series is a high reliability rugged industrial quality AC/DC power supply with power factor correction (PFC).

The unit utilizes field-proven topology to generate 200W output power.

It is a mature design with a track record in hundreds of applications.

The design has large design headroom and is rated for 50°C operation without derating.

Cooling is via baseplate to a heatsinking surface and by natural convection.

Low component count and the use of components with established reliability results in a high MTBF.

The unit has two output terminals "Redundant" via a built-in redundancy diode, and "Non-Redundant" which is direct.

The unit is manufactured at our plant under strict quality control.

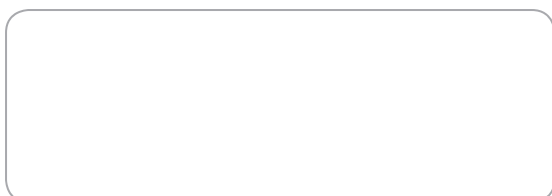
#### Features

- Compact size
- Rugged, industrial quality
- Single regulated and adjustable output
- Convection/conduction cooling
- 200W output power
- Full electronic protection
- Field-proven design
- N+1 redundancy available

# Specifications ( Specifications Subject to Change Without Notice)

<b>Input Voltage range</b>	Universal 95 ... 264Vac 47 - 420Hz Input current 2.6 Arms max.
<b>Input Protection</b>	Inrush current limiting Varistors Internal safety fuse Lower voltage than the specified minimum input will not damage the unit
<b>Power Factor</b>	Min. 0.97 at full load for the entire input range. Meets EN61000-3-2
<b>Isolation</b>	2250VDC input to chassis 4300VDC input to output 8mm spacing 500VDC output to chassis
<b>Switching Frequency</b>	50-150KHz Boost section (dependent on the load) 55 KHz +/-3KHz for the DC/DC (half-bridge) section
<b>Hold Up Time</b>	Minimum 10ms at full load for 5% drop of output voltage at nominal input
<b>Output Voltages</b>	12V/16A; 24V/8A, 48V/4A or 125V/1.6A on the "Redundant" output Voltage on the "Direct" terminal is one diode drop higher. Output is floating, either terminal can be grounded. Consult factory for other voltages
<b>Redundancy Diode</b>	Installed internally on the Redundant" terminal
<b>Line / Load Regulation</b>	± 1% combined from no load to full load
<b>Dynamic Response</b>	Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time
<b>Output Overvoltage Protection</b>	Double regulator loop completely stable and independent of main loop
<b>Output Overload Protection</b>	Rectangular current limiting with short-circuit protection (no hiccup) Thermal shutdown in case of insufficient cooling (self resetting)
<b>Efficiency</b>	80% - 87% at full load, depending on output voltage
<b>EMI</b>	EN 55022 Class A as minimum
<b>Output Ripple/Noise</b>	Less than 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20MHZ BW)
<b>Operating Temperature</b>	0 to +50°C for full specification with proper cooling Extended temperature range available
<b>Temperature Drift</b>	0.03% per °C over operating temperature range
<b>Cooling</b>	Conduction via base plate to customer heatsink or chassis and natural convection
<b>Environmental Protection</b>	Basic ruggedizing
<b>Humidity</b>	5 – 95% non-condensing
<b>MTBF</b>	150'000 at 45°C Demonstrated MTBF is significantly higher
<b>Indicators</b>	Green "Output ON" LED visible through the cooling slots
<b>Alarm Output</b>	Form C contacts
<b>Connections</b>	9 pole barrier type terminal block with 3/8" spacing
<b>Dimensions</b>	F2: 112.4 x 57.2 x 256 mm including terminal block and flanges Mounting holes are clear
<b>Weight</b>	1.12 kg
<b>Standards</b>	Designed to meet EN60950 and corresponding US and CSA standards
<b>RoHS Compliance</b>	Fully compliant
<b>Warranty</b>	2 years

Available from:



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The power conversion company

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