RIPEENERGY
The Power Conversion Company

PSP1000 POWER SUPPLY

SERIES PSP1000

The PSP1000 Series rugged, industrial quality AC/DC power supply with power factor corrected input uses a field proven design to generate up to 1000W output power.

It has an excellent track record in numerous heavy-duty applications.

Cooling is by a built-in fan, with additional conduction via the baseplate.

It has full electronic protection.

Low component count, large design headroom, and the use of components with established reliability result in a high MTBF.

The chassis has four M6 PEM nuts for mounting on the under-surface.

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

Customized versions are also available.

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

FEATURES

- 1000W output power
- Rugged industrial quality
- Inrush current limiting
- Over-temperature shutdown (self resetting)
- Field-proven design
- Fan cooling
- Full electronic protection
- Optional N+1 redundancy

HF
High frequency technology

Light weight, compact size

Full electronic protection

Optional Extended temperature range

Output fail alarm (Form C)

SPECIFICATIONS

Input Voltage	90-264Vac, 47... 63Hz Input current 13A max at 95V Power Factor is better than 0.97 at full load for the entire input range. Meets EN61000-3-2
Input Protection	Inrush current limiting Varistor Internal safety fuse Lower voltage than the specified minimum input will not damage the unit
Isolation	2250VDC input to chassis 4300VDC input to output 8mm spacing 500VDC output to chassis
Switching Frequency	55kHz +/- 3kHz
Hold Up Time	Min. 10ms at any input for 5% drop in the output voltage
Output Voltage	12V/75A; 24V/40A; 48V/20A; are standard +/-5% adjustable Output is floating, either terminal can be grounded Consult factory for other voltages
Output Separation Diode	Not installed Available as option
Load/Line Regulation	± 1% combined from zero load to full load
Dynamic Response	Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time
Output Ripple Noise	Less than 1% peak-to-peak or 0.2% RMS of the output voltage (20MHz BW)
Efficiency	80% - 84% at full load, depending on output voltage
Output Overload Protection	Rectangular current limiting with short circuit protection Thermal shutdown with automatic reset in case of insufficient airflow
Output Overvoltage Protection	Double regulator loop
Standards	Designed to meet EN 60950-1, EN 62368-1 and CE
EMI	EN55032 Class A with wide margins

Operating Temperature	0 to +50°C for full specification with proper cooling Extended temp. range available
Humidity	5 - 95% non-condensing
Temperature Drift	0.03% per °C over operating temperature range
Cooling	Forced air by built-in fan and conduction to customer heatsink or chassis
Environmental Protection	Basic ruggedizing Heavy ruggedizing and conformal coating available as option
Shock/Vibration	IEC 61373 Cat 1 A&B
Dimensions	U5512: 127 x 127 x 315mm (5" x 5" x 12.4") enclosed case Four M6 PEM nuts for mounting on the under-surface
Weight	5.2 Kg
Connections	Barrier-type terminal block and brass studs for higher output current
MTBF	120,000 hours at 45°C Demonstrated MTBF is significantly higher
Indicators	None
Control Input	None
Alarm output	None Available as an option
RoHS Compliance	Fully compliant
Warranty	2 years

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Specifications Subject to Change Without Notice

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