

# PSP1000 Series AC Power Supply



## Benefits

- Active Powerfactor Correction (PFC)
- Power sensitive electronics without interference
- Rugged & Reliable
- Ensure years of safe and trouble free operation

## Applications

- Marine & other rugged environments
- Mobile Offices (TV and Radio Vans)
- Automotive / RV
- Electric Utilities and Substations
- Base Station Power (Radio & Telecommunications)
- Industrial Controls (OEM Applications)
- Field Work / Construction Sites
- Solar / Alternative Power Systems
- Emergency Power Backup (UPS)
- Security Systems
- Product Burn-in Facilities

## Power Supplies

### PSP1000 Series 1000W

## Description

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.

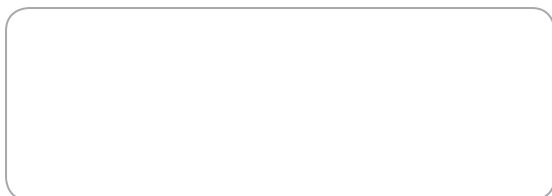
## Features

- Adjustable output
- 1000W output power
- Full electronic protection
- Inrush current limiting
- Over-temperature shutdown (self resetting)
- Extremely rugged and well suited for marine and other demanding environments
- Telecom quality
- Field-proven design topology
- 2 years parts and labour warranty

# Specifications ( Specifications Subject to Change Without Notice)

<b>Input Voltage range</b>	95VAC to 264VAC, 47 - 63Hz Input current 13A max at 95V
<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 Isolation voltages correspond to input/output combination
<b>Standards</b>	Compliance to EN60950 and related standards Please consult factory for approval status for the requested input/output configuration
<b>EMI</b>	EN 55022 Class A as a minimum
<b>Switching Frequency</b>	55 KHz +/-3KHz
<b>Hold-up Time</b>	Min. 10ms at full load for 5% drop of output voltage
<b>Output Voltage/Current</b>	12V/75A; 24V/40A; 48V/20A; are standard +/-5% adjustable Output is floating, either terminal can be grounded Consult factory for other voltages
<b>Redundancy Diode</b>	Not installed Available as option
<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 Ripple/Noise</b>	Better than 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20MHZ BW)
<b>Output Overload Protection</b>	Rectangular current limiting with short circuit protection Thermal shutdown with automatic recovery in case of reduced airflow
<b>Output Overvoltage Protection</b>	Double regulator loop
<b>Efficiency</b>	80% - 84% at full load, depending on output voltage
<b>Operating Temperature Range</b>	0 to +50°C for full specification with proper cooling Extended temp. range available
<b>Temperature Drift</b>	0.03% per °C over operating temperature range
<b>Cooling</b>	Forced air by two built-in fans and conduction to customer heatsink or chassis
<b>Environmental Protection</b>	Basic ruggedizing Heavy ruggedizing and conformal coating available as option
<b>Shock/Vibration</b>	IEC 61373 Cat 1 A&B
<b>Humidity</b>	5 – 95% non-condensing
<b>MTBF</b>	120,000 hours @ 45°C Demonstrated MTBF is significantly higher.
<b>Indicators</b>	None
<b>Controls</b>	None
<b>Alarm Output</b>	None Available as option
<b>Dimensions</b>	U5512: 127 x 127 x 315mm enclosed case Four M6 PEM nuts for mounting on the under-surface
<b>Connections</b>	Barrier-type terminal block and brass studs for higher output current
<b>RoHS Compliance</b>	Fully compliant
<b>Warranty</b>	2 years

Available from:



## RIPEnergy®

The power conversion company

RIPEnergy AG  
Wägitalstrasse 24  
CH-8854 Siebnen  
Switzerland

Ph +41-(0)43-818 53 85  
Fax +41-(0)43-818 53 87  
www.ripenergy.ch