

# PS5000 Power Supply



## Benefits

- Quiet operation
- 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

### PS5000 Series 5000VA

## Description

The PS5000 Series AC/DC power supply utilizes field-proven topology to deliver 5000W output power.

The compact chassis size is 11.5"x 5.25"x 18".

This rugged, fan-cooled power supply is rated for operation at full power from 0°C to 50°C without de-rating, with an extended temperature range available.

The modules are ruggedized and conformal coated for operation in extreme environments.

The modular construction of the unit allows for easy customizing. The unit features full electronic protection and low output noise.

This design is optimized for low component count and high efficiency.

The use of components with established reliability results in high MTBF. The unit is manufactured at our plant under strict quality controls.

Custom versions are also available.

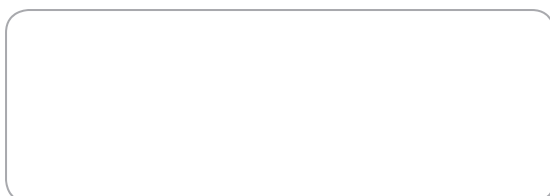
## Features

- Robust Industrial quality
- Compact modular construction
- Flexible design for customizing
- Telecom quality & Industrial Grade
- Fan cooling
- Full electronic protection
- Field-proven design topology
- Single phase 240Vac input
- 2 years parts and labour warranty

# Specifications ( Specifications Subject to Change Without Notice)

|                                      |   |
|--------------------------------------|---|
| <b>Input Voltage</b>                 | 240VAC, range (180-264VAC) +/-15% 47-63Hz or<br>250VDC (220 - 350VDC range)   |
| <b>Input Protection</b>              | Inrush current limiting Varistors<br>Internal safety fuses<br>Lower voltage than the specified minimum input will not damage the unit |
| <b>Input Isolation</b>               | 2250VDC input to chassis<br>4300VDC input to output 8mm spacing<br>500VDC output to chassis   |
| <b>Output Voltages</b>               | 24V/200A, 48V/100A, 125V/40A or 250V/20A<br>Consult factory for other voltages  |
| <b>Switching Frequency</b>           | 55KHz +/- 3KHz  |
| <b>Redundancy Diode</b>              | Available on request  |
| <b>Hold Up Time</b>                  | Minimum 5ms at full load for 5% drop of output voltage @ 240V nominal input   |
| <b>Line/Load Regulation</b>          | +/-1% combined from zero load to full load  |
| <b>Dynamic Response</b>              | Max 5% voltage deviation for 10% to 50% load step, better than 1 msec 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<br>Thermal shutdown with automatic reset in case of insufficient airflow   |
| <b>Efficiency</b>                    | Min 80% at full load  |
| <b>EMI</b>                           | Meets EN 55022 Class B  |
| <b>Output Ripple/Noise</b>           | Better than 1% of output voltage peak to peak or<br>0.2% RMS of the output voltage (20MHZ BW)   |
| <b>Operating Temperature</b>         | 0 to +50°C for full specification<br>Extended operating temperature range available   |
| <b>Temperature Drift</b>             | 0.03% per °C over operating temperature range   |
| <b>Cooling</b>                       | Forced air by built-in fans.<br>Fans draw air into the unit, air exits at the rear.   |
| <b>Environmental Protection</b>      | Ruggedizing<br>Conformal coating  |
| <b>Shock/Vibration</b>               | Designed to meet requirements of IEC 61373 Cat 1 A&B  |
| <b>MTBF</b>                          | Min. 100,000 hours @45°C (fan are not included)   |
| <b>Indicators</b>                    | None  |
| <b>Control Input</b>                 | None (Remote SD as option)  |
| <b>Alarm Output</b>                  | None on the standard version (Module fail alarm available as option)  |
| <b>Connections</b>                   | Input: Phoenix G10/2 terminal block<br>Output: ¼" brass studs   |
| <b>Dimensions (W x H x L)</b>        | 291 x 57.2 x 457.2 mm<br>(11.5" x 5.25" x 18")  |
| <b>Weight</b>                        | 13.6 kg (30 lbs.)   |
| <b>RoHS Compliance</b>               | Fully compliant   |
| <b>Safety</b>                        | Designed to meet EN60950 and corresponding UL and CSA standards   |
| <b>Warranty</b>                      | 2 years   |

Available from:



## RIPEnergy®

The power conversion company

RIPEnergy AG  
Talstrasse 2  
CH-8702 Zollikon  
Switzerland

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