## **PS5000R Power Supply**



Chassis-mount



#### 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**

#### PS5000R Series 5000VA

#### Description

The PS5000R Series modular, rugged, industrial quality AC/DC power supply system uses established design techniques to deliver up to 5000W output power, depending on the input/output configuration.

It is a mature product with a track record in numerous applications. Built-in fans provide sufficient airflow for operation without de-rating to the specified temperature.

The unit features full electronic protection and low output noise. Low component count, large design headrooms, and the use of components with established reliability result in a high MTBF.

An optional built-in redundancy diode allows for several shelves to be paralleled for higher output power. Other options include extended operating temperature and alarm output. Additional ruggedizing and conformal coating are available for operation in extreme environments.

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

#### Features

- Industrial quality
- 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)

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Input Voltage	240VAC, range (180-264VAC) +/-15% 47-63Hz 3-phase and other input options
Input Protection	Inrush current limiting Varistor
	Internal safety fuses
	Lower voltage than the specified minimum input will not damage the unit
Input Isolation	2250VDC input to chassis
	4300VDC input to output 8mm spacing
	500VDC output to chassis
Output Voltages	24V/200A, 48V/100A, 125V/40A or 250V/20A Consult factory for other voltages
Switching Fraguency	55KHz +/- 3KHz
Switching Frequency	
Redundancy Diode	Available on request
Hold Up Time	Minimum 5ms at full load for 5% drop of output voltage @ 240V nominal input
Line/Load Regulation	+/-1% combined from zero load to full load
Dynamic Response	Max 5% voltage deviation for 10% to 50% load step, better than 1 msec recovery time
Output Overvoltage Protection	Double regulator loop completely stable and independent of main loop
Output Overload Protection	Rectangular current limiting with short circuit protection Thermal shutdown with automatic reset in case of insufficient airflow
Efficiency	Min 80% at full load
EMI	Meets EN 55022 Class A as a minimum
Output Ripple/Noise	Better than 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20MHZ BW)
Operating Temperature	0 to +50°C for full specification Extended operating temperature range available
Temperature Drift	0.03% per °C over operating temperature range
Cooling	Forced air by built-in fans. Fans draw air into the unit, air exits at the rear.
Environmental Protection	Basic ruggedizing Optional heavy ruggedizing and conformal coating
MTBF	Min. 150,000 hours @45°C (fan are not included) Demonstrated MTBF is significantly higher.
Indicators	None
Control Input	None (Remote SD as option)
Alarm Output	None on the standard version (Module fail alarm available as option (Form C))
Connections	Terminal blocks or studs. Other connectors according to customer requirements
Dimensions	Chassis-mount: 3U7: 132 x 432 x 407mm including connectors Rack-mount: 3U7: 132 x 483 x 407 mm including connectors
Weight	Approx. 14 kg depending on configuration
RoHS Compliance	Fully compliant
Safety	Designed to meet EN60950 and corresponding UL and CSA standards
Warranty	2 years

#### Available from:







The power conversion company

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