

PS1000 Series Power Supply



Benefits

- Ultra-Quiet
- 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

PS1000 Series 1000W

Description

The PS1000 series AC/DC is a heavy-duty power supply that utilizes field-proven full-bridge topology to deliver up to 1000W depending on output voltage.

This power supply is rated for operation at full power from 0°C to 50°C without de-rating.

Additional ruggedizing and conformal coating are available for operation in extreme environments.

The unit features full electronic protection and low output noise.

This chassis-mount 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. Customized versions are also available.

Features

- Compact size
- 1000W output power
- Full electronic protection
- Field-proven design topology
- Single phase input
- Conduction/convection cooling, no fan
- 2 years parts and labour warranty

Specifications (Specifications Subject to Change Without Notice)

Input Voltage	115/230VAC \pm 15%; 47-63Hz 250VDC (190 – 370V) Voltage selection by internal jumper Other voltages on request
Input Protection	Inrush current limiting Varistor Internal safety fuse 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/38A, 28V/32A, 48V/21A, 56V/18A or 125V/8A Other outputs on request
Switching Frequency	55KHz +/- 3KHz
Redundancy Diode	None Available as option on outputs 48V and higher
Hold Up Time	Minimum 10ms at full load for 5% drop of output voltage at nominal input
Line/Load Regulation	+/-1% combined
Dynamic Response	Max 5% voltage deviation for 10% to 50% load step; better than 1msec recovery time
Output Overvoltage Protection	Double regulator 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	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
Temperature Drift	0.03% per °C over operating temperature range
Cooling	Conduction via base plate to customer chassis or heatsink and additional natural air convection through cooling slots
Environmental Protection	Basic ruggedizing Heavy ruggedizing and conformal coating as option
MTBF	Min. 160,000 hours @45°C
Indicators	None
Alarm Outputs	None
Connections	Input: Barrier-type terminal block, 3/8" spacing Output: 1/4" DIA brass studs
Dimensions	F6: 210 x 66 x 351 mm; including terminals and mounting flanges Mounting holes are clear
Weight	3.2kg
RoHS Compliance	Fully compliant
Safety	Designed to meet EN 60950 and corresponding CSA and UL standards
Warranty	2 years

Available from:



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The power conversion company

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