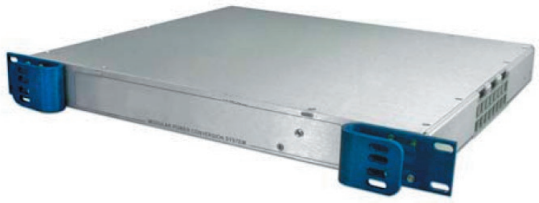
# PS1600 Power Supply



## Benefits

- Quiet operation
- Power sensitive electronics without interference
- Rugged & Reliable
- Ensure years of safe and trouble free operation

## Applications

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

# Power Supplies

PS1600 Series 1600W

## Description

The PS1600 Series heavy-duty modular AC/DC power supply system utilizes a field-proven full-bridge design to deliver up to 1600W, depending on output voltage.
It is built with two internal modules.
An optional built-in redundancy diode would allow for the outputs to be connected in parallel for N+1 redundancy, or increased power.
Cooling is by two built-in fans and conduction to customer heatsink or chassis.
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.
Additional ruggedizing and conformal coating are available for operation in extreme environments.
The unit is manufactured at our plant under strict quality control.

## Features

- Robust Industrial quality
- Low-profile 1U rack-mount enclosure
- Cooled by internal fans
- Single phase input
- Full electronic protection
- Field-proven design
- N+1 redundancy as an option
- 2 years parts and labour warranty

# *Specifications* *( Specifications Subject to Change Without Notice)*

| | |
|---|---|
| **Input Voltage** | 230Vac ±15%; 47-63Hz<br>115Vac can be selected by internal jumper<br>250Vdc (190 – 370V)<br>Other voltages on request |
| **Input Protection** | Inrush current limiting Varistors<br>Internal safety fuses<br>Lower voltage than the specified minimum input will not damage the unit |
| **Input Isolation** | 2250VDC input to chassis<br>4300VDC input to output 8mm spacing<br>500VDC output to chassis |
| **Output Voltages** | Any single voltage 12V to 150Vdc |
| **Switching Frequency** | 55 KHz +/-3KHz (on AC/DC section) |
| **Redundancy Diode** | Available as option |
| **Hold Up Time** | Minimum 5ms at full load for 5% drop of output voltage at 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 |
| **Output Overload Protection** | Rectangular current limiting with short circuit protection (no hiccup)<br>Thermal shutdown with automatic reset in case of insufficient airflow |
| **Efficiency** | Typ 80% at full load, depending on output voltage |
| **EMI** | Meets EN 55022 Class A with large design headroom Class B version as option |
| **Output Ripple/Noise** | Better than 1% of output voltage peak to peak or<br>0.2% RMS of the output voltage (20MHZ BW) |
| **Operating Temperature** | 0ºC to +50ºC for full specification with proper cooling<br>Wider temperature ranges as option |
| **Temperature Drift** | 0.03% per °C over operating temperature range |
| **Cooling** | Forced air by two built-in fans and conduction to customer heatsink or chassis |
| **Environmental Protection** | Basic ruggedizing<br>Optional heavy ruggedizing and conformal coating |
| **MTBF** | 110,000 hours @ 45°C<br>Demonstrated MTBF is significantly higher |
| **Indicators** | Green LEDs on front-panel “Output ON” |
| **Control Input** | None |
| **Alarm Output** | None, available as option |
| **Connections** | Input/output: barrier-type terminal block, 3/8” spacing |
| **Dimensions (W x H x L)** | 1U x 19” x 406mm<br>rack-mount chassis, including terminal blocks |
| **Weight** | 6 kg |
| **RoHS Compliance** | Fully compliant |
| **Safety** | Designed to meet EN60950 and corresponding standards |
| **Warranty** | 2 years |

## Available from:

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The power conversion company

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