

PSP1500 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

PSP1500 Series 1500W

Description

The PSP1500 series AC/DC power supply with factor corrected input delivers up to 1500W output power.

This fieldproven design has a well documented record of reliable operation in very demanding applications.

Its rugged construction ensures that it can withstand high levels of shock and vibration.

The PSP1500 features low component count and high efficiency.

The use of professional quality components and rigorous quality control results in an MTBF exceeding 150,000 hours at 45°C.

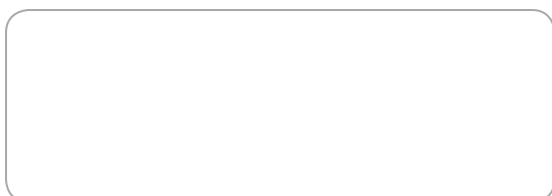
Features

- Adjustable output
- 1500W output power
- Full electronic protection
- Inrush current limiting
- Output Overload Protection
- Output Over-voltage Protection
- Short-circuit protection
- 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)

Input Voltage range	Universal 90 ... 264VAC, 47 - 63Hz
Input Protection	Inrush current limiting Varistors Internal safety fuse Lower voltage than the specified minimum input will not damage the unit
Power Factor	Min. 0.97 at full load for the entire input range. Meets EN61000-3-2
Isolation	2250VDC input to chassis 4300VDC input to output 8mm spacing 500VDC output to chassis
Switching Frequency	100KHz PFC section 55KHz +/-3KHz for the output section
Hold Up Time	Min. 10ms at any input for 5% drop in the output voltage
Output Voltages	12Vdc/120A, 24Vdc/60A, 28Vdc/53A, 48Vdc/30A, 54Vdc/27A, 125Vdc/12A are standard. Consult factory for other voltages
Redundancy Diode	Optional Not available for 12V version
Line / Load Regulation	± 1% combined from no load to full load
Dynamic Response	Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time
Output Overvoltage Protection	Second regulator loop
Output Overload Protection	Rectangular current limiting with short-circuit protection (no hiccup) Thermal shutdown in case of insufficient cooling (self resetting)
Efficiency	Typical 80% at full load (Output voltage dependent)
EMI	EN 55022 Class A as minimum
Output Ripple/Noise	Less than 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20MHZ BW)
Operating Temperature Range	0 to 50°C for full specification Extended temperature range available
Temperature Drift	0.03% per °C over operating temperature range
Cooling	Forced air by internal fan
Environmental Protection	Basic ruggedizing, Full ruggedizing and conformal coating on request
Humidity	5 – 95% non-condensing
MTBF	150'000 at 45°C (fans excluded)
Indicators	None
Alarm Output	Optional
Connections	Barrier-type terminal block and brass studs for higher output current
Dimensions	12.7 x 12.7 x 30.5 cm
Weight	5.2 kg
Standards	Designed to meet EN60950 and corresponding US and CSA standards
RoHS Compliance	According to requirements
Warranty	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