

# 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

This rugged, industrial quality AC/DC power supply with PFC input delivers up to 1500W output power.

It is based on design topology that has an excellent track record in numerous heavy-duty applications.

An optional built-in redundancy diode in each module allows for parallel connection and N+1 redundant operation.

Cooling is by a high quality internal fan, which provides sufficient airflow for operation at the specified temperature without de-rating.

Full electronic protection, low component count, large design headroom, and the use of components with established reliability result in a high MTBF.

The chassis has four M6 PEM nuts for mounting on the under-surface.

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

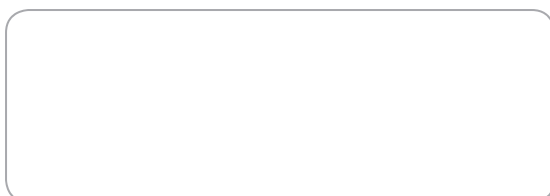
#### Features

- 1500W output power
- Full electronic protection
- Inrush current limiting
- 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)

<b>Input Voltage range</b>	95-264Vac (Universal) 47... 63Hz    Input Current: 18Arms max.
<b>Input Protection</b>	Inrush current limiting Varistors Internal safety fuse Lower voltage than the specified minimum input will not damage the unit
<b>Power Factor</b>	better than 0.97 at full load for the entire input range. Meets EN61000-3-2 and EN61000-3-12
<b>Isolation</b>	2250VDC input to chassis 4300VDC input to output 8mm spacing 500VDC output to chassis Isolation voltages correspond to input/output combination
<b>Standards</b>	Compliance to EN60950 and related standards Please consult factory for approval status for the requested input/output configuration
<b>EMI</b>	EN55022 Class A with margins
<b>Switching Frequency</b>	100kHz PFC input section, 55kHz $\pm$ 3kHz output section
<b>Hold-up Time</b>	Min. 10ms at any input for 5% drop in the output voltage
<b>Output Voltage/Current</b>	12Vdc/120A, 24Vdc/60A, 28Vdc/53A, 48Vdc/30A, 54Vdc/27A or 125Vdc/12A Output is floating, either terminal can be grounded Other outputs available on request
<b>Redundancy Diode</b>	None. Available on request Not available for 12V version
<b>Line / Load Regulation</b>	$\pm$ 1% combined from no load to full load
<b>Dynamic Response</b>	Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time
<b>Output Ripple/Noise</b>	Better than 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20MHZ BW)
<b>Output Overload Protection</b>	Rectangular current limiting with short-circuit protection (no hiccup) Thermal shutdown in case of insufficient cooling (self resetting)
<b>Output Overvoltage Protection</b>	Second regulator loop completely stable and independent of the main regulator loop.
<b>Efficiency</b>	80% - 84% at full load, depending on output voltage
<b>Operating Temperature Range</b>	0°C to +50°C for full specification with proper cooling Extended temperature ranges available on request
<b>Temperature Drift</b>	0.03% per °C over operating temperature range
<b>Cooling</b>	Forced air by high quality built-in fan and conduction to customer heat-sink or chassis
<b>Environmental Protection</b>	Basic ruggedizing    Heavy ruggedizing and conformal coating available as option
<b>Shock/Vibration</b>	IEC 61373 Cat 1 A&B
<b>Humidity</b>	5 – 95% non-condensing
<b>MTBF</b>	120,000 hours @ 45°C Demonstrated MTBF is significantly higher.
<b>Indicators</b>	Diagnostic Output ON LED visible through the rear cooling slots
<b>Controls</b>	None
<b>Alarm Output</b>	None Available as option
<b>Dimensions</b>	U5512: 127 x 127 x 316mm including terminal blocks and M6 grounding stud Four M6 PEM nuts for mounting on the under-surface
<b>Weight</b>	5.2kg
<b>Connections</b>	Terminal block for input and output, M6 stud for chassis GND
<b>RoHS Compliance</b>	Fully compliant
<b>Warranty</b>	2 years

Available from:



## RIPEnergy®

The power conversion company

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