



## PSP1500 POWER SUPPLY

### SERIES PSP1500

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.

Customized versions are also available.

### APPLICATIONS

- Marine / Automotive / RV
- Electric Utilities and Substations
- Telecom Power Plants
- Manufacturing Locations
- Steel Mills
- Military Applications (COTS)
- Industrial Controls
- OEM Applications
- Solar / Alternative Power Systems
- Fuel Cells

### FEATURES

- 1500W output power
- Rugged industrial quality
- Inrush current limiting
- Over-temperature shutdown (self resetting)
- Field-proven design
- Fan cooling
- Full electronic protection
- Optional N+1 redundancy



High frequency technology



Light weight, compact size



Full electronic protection



Optional Extended temperature range



Output fail alarm (Form C)

# SPECIFICATIONS

Input Voltage	95-264Vac (Universal) 47... 63Hz Input Current: 18Arms max. Power Factor is better than 0.97 at full load for the entire input range. Meets EN61000-3-2 and EN61000-3-12
Input Protection	Inrush current limiting Varistor Internal safety fuse Lower voltage than the specified minimum input will not damage the unit
Isolation	2250VDC input to chassis 4300VDC input to output 8mm spacing 500VDC output to chassis
Switching Frequency	100kHz PFC input section 55kHz $\pm$ 3kHz output section
Hold Up Time	Min. 10ms at any input for 5% drop in the output voltage
Output Voltage	12Vdc/120A, 24Vdc/60A, 28Vdc/53A, 48Vdc/30A, 54Vdc/27A or 125Vdc/12A Output is floating, either terminal can be grounded Maximum output power 1500W Other outputs available on request
Output Separation Diode	None. Available on request Not available for 12V version
Load/Line Regulation	$\pm$ 1% combined from zero load to full load
Dynamic Response	Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time
Output Ripple Noise	Less than 1% peak-to-peak or 0.2% RMS of the output voltage (20MHz BW)
Efficiency	80% - 84% at full load, depending on output voltage
Output Overload Protection	Rectangular current limiting with short-circuit protection (no hiccup) Thermal shutdown in case of insufficient cooling (self resetting)
Output Overvoltage Protection	Second regulator loop completely stable and independent of the main regulator loop.
Standards	Designed to meet EN60950-1 and related standards
EMI	EN55022 Class A with wide margins

Operating Temperature	0 to +50°C for full specification with proper cooling Extended temperature ranges available on request
Humidity	5 - 95% non-condensing
Temperature Drift	0.03% per °C over operating temperature range
Cooling	Forced air by high quality built-in fan and conduction to customer heat-sink or chassis
Environmental Protection	Basic ruggedizing Heavy ruggedizing and conformal coating available as option
Shock/Vibration	IEC 61373 Cat 1 A&B
Dimensions	U5512: 127 x 127 x 316mm (5" x 5" x 12.5") including terminal blocks and M6 grounding stud Four M6 PEM nuts for mounting on the under-surface
Weight	5.2 Kg
Connections	Terminal block for input and output M6 stud for chassis GND
MTBF	120,000 hours at 45°C Demonstrated MTBF is significantly higher
Indicators	Diagnostic Output ON LED visible through the rear cooling slots
Control Input	None
Alarm output	None Available as an option
RoHS Compliance	Fully compliant
Warranty	2 years

