

## 1000W Rugged, Industrial Power Supply with PFC-Input in 5" X 5" X 12" Package PFC 1K Series



- Compact size
- Electronic power factor correction
- Adjustable output
- Full electronic protection
- Robust industrial quality
- Field-proven design

The PFC 1K Series rugged, industrial quality AC/DC power supply with power factor corrected input uses a field proven design to generate up to 1000W output power. It has an excellent track record in numerous heavy-duty applications. Cooling is by a built-in fan, with additional conduction via the baseplate. It has 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.

### SPECIFICATIONS

#### Input Voltage

95VAC to 264VAC  
47 - 63Hz  
Input current 13A max at 95V

Power Factor is min.0.97 at full load for the entire input range.  
Meets EN61000-3-2

#### 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

#### Standards

Compliance to EN60950 and related standards  
Please consult factory for approval status for the requested input/output configuration

#### EMI

Meets and EN 55022 Class A with wide margins

#### Switching Frequency

55kHz +/- 3kHz

#### Hold-up Time

Min. 10ms at full load for 5% drop of output voltage

#### Output Voltages

12V/75A; 24V/40A; 48V/20A; are standard  
+/-5% adjustable  
Output is floating, either terminal can be grounded  
Consult factory for other voltages

#### Redundancy Diode

Not installed  
Available as option

#### Line/Load Regulation

±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

Better than 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20MHZ BW)

#### Output Overload Protection

Rectangular current limiting with short circuit protection  
Thermal shutdown with automatic reset in case of insufficient airflow

#### Output Overvoltage Protection

Double regulator loop

#### Efficiency

80% - 84% at full load, depending on output voltage

#### Operating Temperature Range

0 to +50°C for full specification with proper cooling  
Extended temp. range available

#### 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  
Heavy ruggedizing and conformal coating available as option

#### Shock/Vibration

IEC 61373 Cat 1 A&B

#### Humidity

5 - 95% non-condensing

#### MTBF

120,000 hours @ 45°C  
Demonstrated MTBF is significantly higher.

#### Indicators

None

#### Control Input

None

#### Alarm Output

None  
Available as option

#### Dimensions (W x H x L)

U5512: 127 x 127 x 315mm (5" x 5" x 12.4") enclosed case  
Four M6 PEM nuts for mounting on the under-surface

#### Weight

5.2 kg (11.5 lb.)

#### Connections

Barrier-type terminal block and brass studs for higher output current

#### RoHS Compliance

Fully compliant

#### Warranty

Two years subject to application within good engineering practice

**Enhancements to these general specifications and customizing can be accommodated upon request. Specifications subject to change.**

*Designer and manufacturer of quality ac-dc power supplies and battery chargers, converters, inverters, dc-output UPS systems, complete rack mount systems and DC-input fluorescent lamp inverters since 1982. Custom or standard. Absopulse is a BABT-approved Facility.*



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