

## 1000W Power Supply in 5" X 5" X 12" Package HBC 1000 Series

- Compact size
- Adjustable output
- 1000W of output power
- Full electronic protection
- Robust industrial quality
- Field-proven design



The HBC1000 Series is a compact AC/DC converter which uses established design techniques to ensure high reliability. Suitable for a wide range of applications, the HBC1000 features full electronic protection, high efficiency and low output noise. The built-in fan provides sufficient airflow for operation without de-rating up to 50°C ambient temperature. The chassis has four M6 PEM nuts for mounting on the bottom surface. A power factor corrected version, the PFC1000, is also available.

### SPECIFICATIONS

#### Input Voltage

115/230VAC ± 15%  
Selectable by internal jumper  
47 - 63Hz  
Input current 19Arms max at 95V

#### 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. 5msec at nominal input

#### Output Voltages

24V/41A; 28V/35A; 48V/20A;  
54V/18A 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

Min 80% at full load

#### Operating Temperature

0° C to +50° C

#### Temperature Drift

0.03% per °C over operating temperature range

#### Cooling

By built-in fan

#### Environmental protection

Basic ruggedizing

#### MTBF

100,000 hours at 45°C  
Fan excluded

#### Indicators

None

#### Control Input

None

#### Alarm Output

None  
Available as option

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

U5512: 127 x 127 x 314mm  
(5" x 5" x 12") enclosed case

#### Weight: 5.2 kg (11.5 lb.)

#### Connections

Terminal blocks

#### RoHS Compliance

According to requirements

#### 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 BAPT-approved Facility.*



**ABSOPULSE ELECTRONICS LTD**  
110 Walgreen Road  
Ottawa, Ontario. K0A 1L0. CANADA  
Tel: (613) 836-3511 Fax: (613) 836-7488  
E-mail: [absopulse@absopulse.com](mailto:absopulse@absopulse.com)  
[www.absopulse.com](http://www.absopulse.com)