

## 800W, 1U, Rugged, Industrial Power Supply Shelf HBL 800-1U Series

- Rugged, industrial quality
- Field-proven design
- Low-profile 1U rack-mount enclosure
- Cooled by internal fans
- Full electronic protection
- N+1 redundancy as an option



The HBL 800 Series is a rugged, industrial quality AC/DC power supply that utilizes field-proven technology to deliver up to 800W, depending on output voltage. It is a mature design with a track record in numerous applications. An optional built-in redundancy diode allows for the outputs to be connected in parallel for N+1 redundancy, or increased power. Cooling is by built-in fans. The unit has full electronic protection. Low component count, large design headrooms, and the use of components with established reliability result in a high MTBF. Additional ruggedizing and conformal coating are available. The unit is manufactured at our plant under strict quality control.

### SPECIFICATIONS

#### Input Voltage

230Vac  $\pm 15\%$ ; 47-63Hz  
115Vac can be selected by internal jumper.  
Other voltages or DC input are available on request

#### 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  
1500VDC output to chassis

#### Standards

Designed to meet EN 60950 and corresponding standards

#### EMI

Meets EN 55022 Class A with large design headroom  
Class B version as option.

#### Switching Frequency

55 KHz  $\pm 3$ KHz (on AC/DC section)

#### Hold Up Time

Minimum 5ms at full load for 5% drop of output voltage at nominal input

#### Output Voltage/Current

Any single voltage 12V to 150Vdc  
Other voltages as customized versions

#### Redundancy Diode

Not installed.  
Available as option

#### Line/Load 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

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

#### Overload Protection

Rectangular current limiting with short circuit protection (no hiccup)  
Thermal shutdown with automatic reset in case of insufficient airflow

#### Output Overvoltage Protection

Double regulator loop

#### Efficiency

Typ.80% at full load, depending on output voltage

#### Operating Temperature

0°C to +50°C for full specification  
Wider temperature ranges as option

#### Temperature Drift

0.03% per °C over operating temperature range

#### Cooling

Forced air by built-in fans

#### Environmental Protection

Basic ruggedizing  
Optional heavy ruggedizing and conformal coating

#### Shock/Vibration

IEC 61373 Cat 1 A&B

#### Humidity

5 - 95% non-condensing

#### MTBF

110,000 hours @ 45°C (fans not included)  
Demonstrated MTBF is significantly higher.

#### Indicators

Green LEDs on front-panel  
"Output ON"

#### Control Input

None

#### Alarm Outputs

None  
Available as option

#### Package/Dimensions (W x H x D)

1U (1.75") x 19" x 11", including terminal blocks.  
Rack-mount chassis

#### Weight:

Approx. 4 kg (9 lbs)

#### Connections

Input/output: barrier-type terminal block, 3/8" spacing

#### 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 converters, inverters, UPS systems, complete rack mount systems and DC-input fluorescent lamp inverters since 1982. Custom or standard. Absopulse is a BABT-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)