

## 12V DC-Output UPS UPS 12-14AH Series



- Rugged, industrial quality
- Conduction/convection cooled - no fan
- Fully protected
- Field-proven design
- Made in North America

This unit is a compact UPS with 12Vdc at 10A output (float voltage 13.8Vdc). A built-in BCH 151 battery management module provides current for 10A rated output and for float charging a built-in 14Ah battery. During normal operation, the UPS 12-14AH serves as a power conditioner, blocking surges, spikes and transients while maintaining stable voltage and float-charging the built-in 14AH gel- cell battery. If the AC power fails, the battery powers the load. The unit also has a low battery disconnect circuit to prevent damage to the battery by low discharge during prolonged AC failure. The unit is convection cooled. The use of components with many years of established reliability and generous headroom results in a high demonstrated MTBF. This UPS system is manufactured at our plant under strict quality control.

### SPECIFICATIONS

#### Input Voltage

95-264V AC universal  
47-63Hz  
Input Current: 3.2Arms max.

#### Input Protection

Inrush current limiting by surgeistor  
Varistor S14K275  
Battery fuse (internal)  
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

#### Standards

Designed to meet EN 60950 and related standards

#### EMI

EN55022 Class B

#### Switching Frequency

47kHz +/- 2kHz

#### Output Voltages/Currents

13.8Vdc +/-0.1V/10A  
Total 150W max. (incl. charging)  
The output is floating, either terminal can be grounded  
Consult factory for other voltages

#### Line/Load Regulation

± 2% combined from zero load to full load when charger is on.

#### Output Ripple/Noise

Better than 30mVrms or 120mVpp (@20MHz BW) without battery)

#### Output Overload Protection

Rectangular current limiting with hiccup type short-circuit protection  
Current Limit: 11A ±0.5A (without battery)  
Battery Line: 25A fuse  
Output: 15A fuse

#### Output Overvoltage Protection

Second regulator loop set at 16.0V ±1V

#### Low Voltage Disconnect

10.5V ±0.5V

#### Efficiency

Min. 80% at full load

#### Operating Temperature Range

0 to +50°C for full specification with proper installation  
Wider temperature ranges are available as an option

#### Temperature Drift

0.03% per deg. C over operating

#### Cooling

Conduction to customer heatsink or chassis and natural convection

#### Environmental Protection

Basic ruggedizing.  
Heavy ruggedizing for mobile applications available as option

#### MTBF

150,000h at 45°C  
Demonstrated MTBF is significantly higher

#### Indicators

Charger ON LED

#### Control Input

None

#### Alarm Outputs

Low battery alarm  
Charger/AC fail alarm

#### Package/ Dimensions

Aluminum case:  
140 x 254 x 178mm  
(5.5" x 10" x 7") including mounting flanges

#### Weight

Approx 9 kg (20 lbs.) including battery

#### Connections

9-pole terminal block for input, output and battery  
6-pole WECO for alarms

#### 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.*



**ABOPULSE 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)