

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



- Rugged, industrial quality
- Conduction/convection cooled - no fan
- Full electronic protection
- Field-proven design topology

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. It 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

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

#### Input Protection

Inrush current limiting by surgistor  
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 60950-1  
and related standards

#### EMI

EN55022 Class B

#### Switching Frequency

47kHz  $\pm$ 2kHz

#### Output Voltages/Currents

13.8Vdc  $\pm$ 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

$\pm$  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  $\pm$ 0.5A  
(without battery)  
Battery Line: 25A fuse  
Output: 15A fuse

#### Output Overvoltage Protection

Second regulator loop set at  
16.0V  $\pm$ 1V

#### Low Voltage Disconnect

10.5V  $\pm$ 0.5V

#### Efficiency

Min. 80% at full load

#### Operating Temperature Range

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

#### Battery Temp. Compensation

None

#### 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

#### Shock/Vibration

IEC 61373 Cat 1 A&B

#### 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 (W x H x D)

Aluminum case:  
140 x 178 x 254 mm  
5.5" x 7" x 10" 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



European Stocking Distributor  
Phone: +41 44 730 33 53

Email: [sales@hvps-condatas.com](mailto:sales@hvps-condatas.com) / [www.hvps-condatas.com](http://www.hvps-condatas.com)  
Rietbachstrasse 7, 8952 Schlieren (ZH), Switzerland