

150W, Universal Input UPS/Battery Charger with PFC-input BCP 150 Series

- Rugged industrial quality
- Conduction/convection cooled - no fan
- Fully protected
- Field proven design
- Low battery disconnect circuit



The BCP 150 is a compact DC output UPS system with external battery. The built-in battery charger provides 150W total power for the output and for float charging the battery. The unit has a low battery disconnect circuit to prevent damage to the battery by low discharge during prolonged AC failure. A built-in charger fail alarm (F/O or F/C) indicates either failure of the charger circuit or loss of AC input power. The battery input is protected against accidental reverse battery connection by a crossbar diode and internal safety fuse. The battery must be fused externally directly to the battery. Low component count and the use of components with established reliability result in a high MTBF. The unit is manufactured at our plant under strict quality control.

SPECIFICATIONS

Input

Mains Input:

95Vac to 264Vac universal 47 - 63Hz
Power Factor is min. 0.97 at full load
for the entire input range.

Meets EN61000-3-2

Battery Input:

12V, 24V or 48V battery

Input Protection

AC Input

Inrush current limiting
Varistor

Internal safety fuse

Lower voltage than the specified
minimum input will not damage the
unit

Battery Input:

Internal safety fuse and crossbar
diode

Low battery disconnect circuit
disengages battery

**Warning: Battery must be fused
externally, directly at the battery**

Input 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

Meets EN 55022 Class A with
margins

Switching Frequency

50-150KHz Boost section
(dependent on the load)
47KHz +/-2KHz for the DC/DC
section

Output Voltages/Currents

13.8V/10A or 27.6V/5.4A
55.2V/2.7A as a special version
Consult factory for other voltages

Output Separation Diode

Installed internally

Line/Load Regulation

±1.5% combined from no load to full
load including output separation
diode

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
hiccup mode short circuit protection
Thermal shut-down with automatic
recovery in case of insufficient
cooling
Internal battery safety fuse on
battery input

Output Overvoltage Protection

Double regulator loop, stable and
independent of the main feedback
loop

Efficiency

Typically 80 - 90% at full load
depending on output

Operating Temperature

0°C to +50°C without derating.
Extended temperature range
available

Temperature Drift

0.03% per °C over operating
temperature range

Cooling

Conduction to customer heatsink
or chassis and natural convection

Environmental Protection

Basic ruggedizing
Additional ruggedizing and
conformal coating available

Shock/Vibration

Designed to meet IEC 61373
Cat 1 A&B

Humidity

5 - 95% non-condensing

MTBF

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

Indicators

Charger ON LED visible through the
cooling slots

Control input

None

Alarm Outputs

Rectifier fail F/O or F/C only
(two terminals).
Please specify on order

Package/ Dimensions (WxHxL)

F2L package 114 x 58 x 310mm
(4.5" x 2.3" x 12.2") including
terminal block and flanges
Mounting holes are clear

Weight

1.5kg (3.3 lbs)

Connections

9-pole barrier type terminal block
with 3/8" spacing for all
connections

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 BAPT-approved Facility*



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