

## 1500W, Portable Battery Charger for Field Applications BCP 1K5-PEL



- Rugged industrial quality
- Field-proven design
- Fan cooled
- Full electronic protection
- Input breaker ON/OFF
- Output breaker /crowbar diode
- Volt and Amp meter

This rugged, industrial quality battery charger is housed in a water-proof Pelican case with a sturdy handle for easy use in the field. It uses high-frequency conversion technology to deliver up to 1500W continuous output power. The charging voltage and current are indicated on digital meters on the front panel. The unit is built with field-proven internal power modules. The Pelican case must be open during operation. High quality built-in fans provide sufficient airflow for operation within the specified temperature range without derating. All heat generating components are installed on aluminum heatsink blocks which are thermally connected to the baseplate. This also ensures exceptional mechanical ruggedness. Conformal coating provides protection against humidity and airborne contaminants. Full electronic protection, low component count, large headroom and the use of components with established reliability result in a high MTBF. The unit is manufactured at our plant under strict quality control. Custom options, as well as versions with higher output power and for different battery voltages, are also available.

### SPECIFICATIONS

#### Input Voltage

180Vac to 264Vac  
 Universal input on request  
 47 -63Hz  
 Input current 10Arms max  
 Power Factor is better than 0.97 at full load for the entire input range.  
 Meets EN61000-3-2  
 Consult factory for other voltages

#### Input Protection

Inrush current limiting  
 Varistor  
 Input breaker also serves as ON/OFF switch  
 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

Designed to meet IEC 62103 Ed. 1, EN/IEC 60950-1 Ed. 2 and related standards

#### EMI

Meets EN 55022 Class A with margins

#### Switching Frequency

80kHz  $\pm$ 5kHz

#### Charging Current and Voltage

Any requested voltage in the 20 - 400V range  
 1500W continuous  
 Output is floating, either terminal can be grounded

#### Output Separation Diode

Installed internally

#### Line Regulation

$\pm$ 1% for open circuit voltage

#### 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  
 Thermal shut-down with automatic recovery in case of insufficient cooling  
 Output crowbar diode  
 Output breaker for protection against accidental reverse battery connection

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

#### Output Overvoltage Protection

Double regulator loop. Second regulator loop, completely stable and independent of main regulator loop.

#### Efficiency

Typically over 85% at full load

#### Operating Temperature

0°C to +50°C without de-rating.  
 Extended temperature range available on request

#### Temperature Drift

0.03% per °C over operating temperature range

#### Cooling

Two high quality built-in fans

#### Environmental Protection

Heavy ruggedizing  
 Conformal coating

#### Shock/Vibration

IEC61371 Cat 1 A&B

#### Humidity

5 - 95% non-condensing

#### MTBF

100,000 hours at 45°C (fans not included)  
 Demonstrated MTBF significantly higher

#### Indicators

Analog voltmeter and ammeter on the front-panel (upper surface).

#### Control Input

None

#### Alarm Outputs

None

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

Pelican Case #1520  
 50 x 40 x 19 cm  
 19.8" x 15.8" x 7.4"

#### Weight

12kg. (26lbs).

#### Connections

AC-input: IEC receptacle for 230V input version  
 Output <130V: Anderson  
 Output >130V: AMP CPC or TBD

#### RoHS Compliance

Compliant

#### Warranty

Two years subject to application within good engineering practice  
 Contamination related failures and shipping cost excluded

**Please note that ABSOPULSE power supplies are designed and built to customer specifications. The specifications on this data sheet are generic and will vary depending on input/output configuration and other customer requirements. Generic specifications are 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: +1-613-836-3511 | Fax: +1-613-836-7488

E-mail: [absopulse@absopulse.com](mailto:absopulse@absopulse.com) | <https://absopulse.com>