

Li-lon vs. Lead Acid Batteries

1/5 of the Weight

5x Faster Charging

> 10x Longer Lifespen

2x-3x More Power

# BB1250 / BB1250H

50 Amp Hour • 12 Volt • LiFePO<sub>4</sub> Battery



**Features** 

Maintenance Free

100% Depth of Discharge

10-Year Warranty

Heated Options Available



UN38.3

ntertek Conforms to UL STD 62133-2 011501 Certified to CSA STD C22.2# 621:

# **Specifications**

- 50 Amp Hour, 12 Volt Battery
- LiFePO4 Chemistry
- 3,000 to 5,000 Cycles
- Dimensions (L x W x H): 10.49" x 7.11" x 8.95"
- 22 lbs.
- Operating Temp Range:
  -4°F (-20°C) to 135°F (57.2°C)
  (Batteries should not be submerged)
- Water Resistant and Sealed
- Built in BMS (Battery Management System)

## Charging Parameters

- Absorption Voltage: 14.2V to 14.6V
- Float Voltage: 13.4V to 13.8V
- Equalization Voltage: 14.4V (if Applicable)
- Absorption Time: 20 to 30 minutes per 50Ah battery bank
- No Temperature Compensation



## **Built-In BMS**

Our BMS keeps you and your battery safe and ensures your battery will last for years.

- 60 Amps Continuous
- 100 Amps Surge for 30 Seconds
- 1/2 Second Surge for Larger Loads
- High/Low Voltage Protection
- Short Circuit Protection
- High/Low Temperature Protection
- Cold Charging Protection
- Automatic Cell Balancing at Top of Charge
- Please Note: This built-in protection will reset after five seconds in most fault conditions.
   Disconnecting the battery from loads will also reset the BMS

# BB1250 / BB1250H FAQ'S

#### Can LiFePO<sub>4</sub> batteries be mounted in any position?

You can mount our batteries in any position. Our batteries use a non-liquid based chemistry and do not emit any fumes or gases. When mounting, make sure to properly secure and protect your terminals.

#### How can I check my batteries voltage?

If you do not have a battery monitor, you can purchase a multimeter to monitor the voltage of your batteries. Please reference the voltage vs. capacity table on the right.

#### How do I properly store my LiFePO<sub>4</sub> batteries?

We recommend bringing the Battle Born Batteries to a 100% state of charge. Then disconnect the battery from any loads by removing the negative cable from one battery. On average, the batteries lose approximately 2-3% capacity per month. This is subject to increase if placed in extreme environmental conditions while in storage.

#### What is the maximum amperage I can charge my batteries?

Our batteries allow a charge of 50 amps per 100-amp hour battery bank. For more than one battery, you can simply take the entire amp hours of the bank and cut it in half (e.g. a total of 100-amp hours can be charged at 50 amps).

#### Is it necessary to charge my batteries out of the box?

Yes, if you are connecting your batteries in series you will need to change your batteries out of the box. If you are connecting in parallel then you do not need to. See the diagram below.

## GET OUT THERE. STAY OUT THERE.



### Voltage vs. Capacity

\*for a single battery\*

14.4V	100%
13.6V	100%
13.4V	99%
13.3V	90%
13.2V	70%
13.1V	40%
13.0V	30%
12.9V	20%
12.8V	17%
12.5V	14%
12.0V	9%
10.0V	0%

Remaining Capacity

### Quick Installation Tips:

- Torque specifications 9 to 11 ft-lb.
  DO NOT finger tighten
- Our batteries do not require ventilation since they do not emit fumes or gases, so you can put them in enclosed areas.
- Our batteries can be mounted in any orientation that is suitable for you.
- DO NOT reverse the polarity of the battery and the device connected.
- The batteries come equipped with a 3/8" hole on the terminal to fit either a 3/8" or a 5/16" bolt.

Please see the manual for additional installation instructions.



#### Warranty

Every Battle Born Battery is backed by an industry-leading 10-year warranty. Your batteries are assembled in Reno, NV making it easier and quicker in the event of an issue!

Warranty is non-transferable.

Visit battlebornbatteries.com for additional information.