



Battle Born®

2000W Inverter Model: BBI2000

2000W Inverter/Charger Model: BBIC2000

Featuring

DRAGONFLY
Intelligence

Battle Born 2000W Inverter and Inverter/Charger

Inverter/Charger Model Shown in Images

The **Battle Born 2000W Inverter and Inverter/Charger** deliver clean, reliable power with pure sine wave output and high-surge capability, ensuring smooth operation for sensitive electronics and heavy loads.

Designed for seamless integration with Battle Born lithium batteries, these systems optimize performance, extend battery life, and support flexible configurations such as load shedding and stacking for increased power. Offering intelligent, efficient energy solutions, they are built to meet the demands of a wide range of applications.



Key Features

3-Year Warranty

2000W Pure Sine Wave AC Power with High Surge Capability

Pure Sine Wave AC power just like the utility grid power to power any kind of AC loads. 2X High Surge capability to power high surge loads like motors.

Power Control

The Battle Born 2000W Inverter and Inverter/Charger will reduce the charger current to support AC loads to mitigate nuisance AC input breaker tripping, thus preventing the generator or grid from being overloaded.

Inverter Assist

Boosts the capability of the grid or generator

The Battle Born 2000W Inverter and with Inverter Assist the inverter will switch on to support temporary AC load peak power demand which is often required only for a limited period. The Battle Born 2000W Inverter & Inverter/Charger will compensate insufficient generator, shore or grid power with power from the battery. When the load reduces, the spare power is used to recharge the battery.

Load Shed Function

Besides Power Control to optimize the use of available AC shore power, the Battle Born 2000W Inverter and Inverter/Charger is also equipped with a load shed feature to shed non-critical loads on AC Out 2 with the use of a digital output control signal. This can help to reduce nuisance breaker tripping during temporary high load surge periods.

Note: an external relay or circuit breaker controlled via the digital output must be used in order to employ this feature.

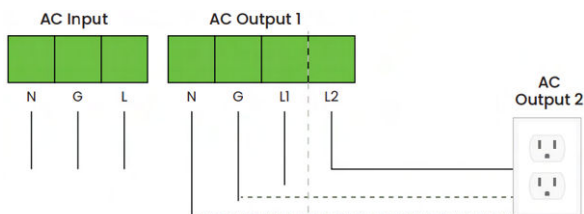
Integrated Automatic Transfer Switch

Seamlessly switches between shore power and battery power without interruption. This simplifies installation, eliminates the need for separate wiring for inverter and shore power circuits, and prevents unnecessary battery cycling. The transfer occurs in under 20 milliseconds—fast enough to keep sensitive electronics like TVs uninterrupted.

Two AC Outputs

This inverter features a second AC output (labeled L2), which functions as a dedicated passthrough circuit. This output is only active when AC input power is available, ensuring efficient power management.

Example Diagram



Power Corrected Multi-Stage Charger

With a PFC (Power Factor Corrected) charger energy usage is most efficient when charging batteries, making more usable AC power available for AC loads reducing nuisance shorepower breakers tripping.

Stacking

Parallel Stacking

Parallel stacking two units to double the power to 4KW.

Series Stacking

To create a 12VDC 4KW split phase 240 VAC input and output inverter charger system.

*Available in Inverter/Charger Model Only

Dead Battery Charging

Can recharge batteries that have entered low-voltage protection, even when system voltage has fallen below 9VDC. Automatically “wakes” lithium batteries whose BMS has shut off due to deep discharge, allowing charging to resume without external jump-start equipment.

Advanced Absorption Charging Settings

Now includes two user-adjustable features for enhanced battery balancing:

Absorption Exit Current (Setting 34)

Set the charge current threshold (2–50A) before exiting absorption.

Minimum Absorption Time (Setting 35)

Keeps the charger in absorption mode for 1–6 hours regardless of current level.

Battery SOC Display on Remote Panel

View the State of Charge (SOC) of your Battle Born Smart Batteries directly on the remote panel, providing greater visibility and control.

Intelligent Charging Decisions Using SOC

Unlike most systems that rely solely on voltage, our advanced technology will use the SOC to make more accurate charging decisions. This feature ensures optimized charging performance and extends battery life.



Seamless Integration with Smart Battle Born Batteries

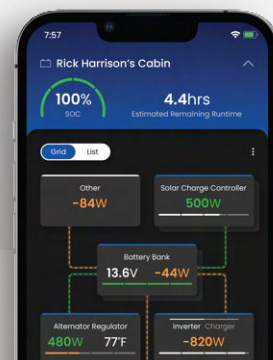
For Better System Performance and Battery Life

Also Compatible with Third Party Lithium and Lead Lead Acid Batteries



Battle Born® Mobile App

Available in the iOS App Store and on Google Play.





Removable Control Panel

The square, removable control panel can be rotated for optimal viewing no matter the mounting orientation—ensuring a clean install and ease of use.

Optional Accessories

Stacking Module



GFCI

Technical Specifications

Inverter

Output voltage	120 VAC
Continuous power	2000W at 40°C with output derated above 104°F
Continuous current	16.7 A
Surge power (5 sec)	4000 W
Frequency	60 (or 50) Hz
GFCI protection	Customer-provided
Wave shape	Pure Sine Wave
Peak efficiency	91%
Full load efficiency	>86%

DC Input

Operating voltage range	LBCO voltage to 18.0 VDC
Maximum non-operating voltage	25.2 VDC
Nominal voltage	12.0 VDC
Nominal current at full load	192 ADC - Two AC Outputs (AC Out 1 & 2)

Charger (for Battle Born 2000W Inverter/Charger Model Only)

DC Input

Operating voltage range	85–140 VAC
Safe non-operating voltage range	up to 240 VAC
Full load maximum current	24 Amps
Nominal frequency	60 (or 50) Hz
Power factor at full charge	98%

DC Output for Charging

Nominal voltage	12.0 VDC
Min. battery voltage for charging	0.0 VDC
Max. output voltage	18.0 VDC (custom battery type)
Nominal output current	User selectable: 5 to 100A
Charger current derating	May reduce charger current based on ambient temperature.
Efficiency at nominal output	91%

Regulator Certifications

Product Safety
EMI

UL458 and UL458 Marine Supplement, and CSA 107.1
CFR 47, (FCC Part 15) Subpart B, Class B

General

Transfer relay rating	30A (24A continuous)*	* Note: This product will not be able to light up 1 leg of a 50a panel, in a 50a coach, this will be a Sub-Circuit inverter solution.
Transfer time (milliseconds)		
Shore to inverter:	<20 milliseconds	
Inverter to shore:	<20 milliseconds with a 20-second delay	
Transfer voltage (V)		
Shore to inverter:	<85 V and >140 V	
Inverter to shore:	<135 V and >90 V	
Cooling	Fan, activated by any of the following: High internal temperature, High AC output power	

Environmental Specification

Operating Temperature Range	-4 - 140°F (-20 - 60°C), with output derated above 104°F (40°C)
Storage Temperature Range	-40 - 203°F (-40 - 95°C)
Humidity: Operation/Storage	5-95% RH, non-condensing

Physical Specifications

Battle Born 2000W Inverter	14.6" x 12.0" x 4.0" (390mm x 306mm x 101mm) L x W x H (Includes Flanges)
Battle Born 2000W Inverter/Charger	16.1" x 12.0" x 4.0" (410mm x 306mm x 101mm) L x W x H (Includes Flanges)
Net Weight	
Battle Born 2000W Inverter	17.2 lbs (7.8 Kg)
Battle Born 2000W Inverter/Charger	18.7 lbs (8.5 Kg)

Battle Born 2000W Inverter and Inverter/Charger Drawing

