

## CYCCLEVOLT C512-200

# CYCCLEVOLT 51.2V 200Ah Wall Mounted LiFePO4 Battery User Manual

MODEL: C512-200

## 1. INTRODUCTION

Thank you for choosing the CYCCLEVOLT 51.2V 200Ah Wall Mounted LiFePO4 Battery. This manual provides essential information for the safe and efficient installation, operation, and maintenance of your battery system. Please read this manual thoroughly before installation and keep it for future reference.

## 2. SAFETY GUIDELINES

**WARNING: Failure to follow these safety instructions may result in electric shock, fire, serious injury, or death.**

- Always wear appropriate personal protective equipment (PPE) including insulated gloves and eye protection during installation and maintenance.
- Ensure the battery is installed by qualified personnel in accordance with local electrical codes and regulations.
- Do not short-circuit the battery terminals.
- Do not expose the battery to fire, water, or extreme temperatures.
- Keep the battery away from children and pets.
- Do not disassemble, puncture, or modify the battery.
- Ensure proper ventilation around the battery during operation.

## 3. PRODUCT OVERVIEW

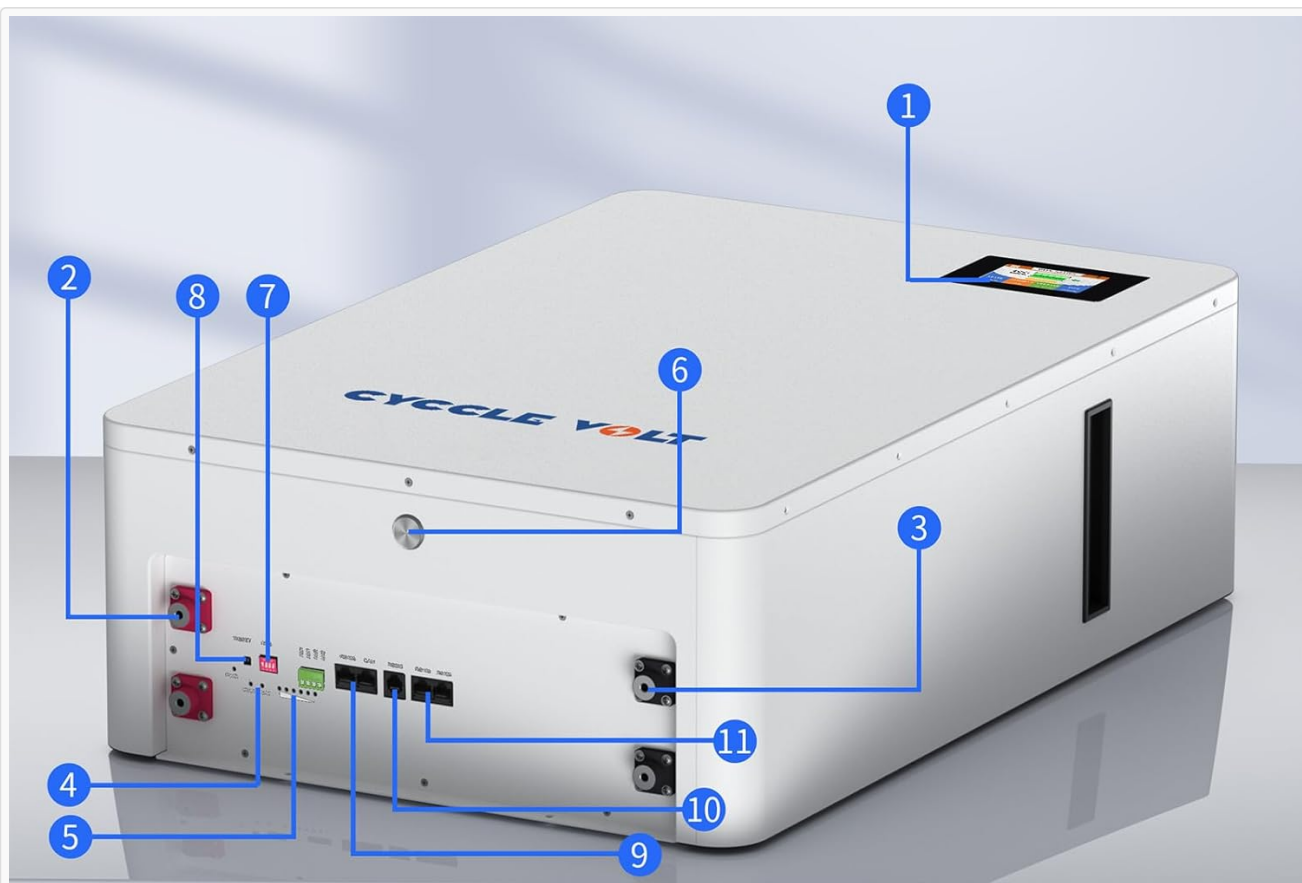
The CYCCLEVOLT 51.2V 200Ah LiFePO4 battery is a high-performance energy storage solution designed for various applications including home solar systems, off-grid setups, and RVs. It features advanced technology for reliability and longevity.

### Key Features

- **Premium Grade A+ Cells:** Constructed with 16 Grade A+ prismatic cells for enhanced safety, lighter weight, and higher efficiency.
- **Smart 200A BMS & Low Temp Cutoff:** Integrated 200A Battery Management System (BMS) provides protection against overcharging, over-discharging, short circuits, and manages high/low temperature cutoffs (charging above 167°F (75°C) and discharging below -4°F (-20°C)). Supports up to 10 kW load power.
- **Real-time Monitoring:** Features an intelligent display for real-time data on voltage, current, and State of Charge (SOC).
- **Communication Ports:** Equipped with CAN/RS485/RS232 communication for seamless integration with leading 48V solar inverters (e.g., Victron, SMA, DEYE, GoodWe, Growatt).
- **Easy Wall-mounted & Space-saving:** Designed for wall mounting to conserve space, ideal for home or RV installations.
- **Long Lifespan:** Supports over 8,000 cycles with a lifespan of up to 10 years.
- **Scalable Energy:** Supports parallel connection of up to 15 units for a total capacity of 150kWh.

## Battery Components and Ports

The following diagram illustrates the main components and connection ports of the CYCCLEVOLT 51.2V 200Ah LiFePO4 Battery.



- |                        |                        |                           |
|------------------------|------------------------|---------------------------|
| 1 LCD Screen           | 2 Positive             | 3 Negative                |
| 4 Run/ALM Light        | 5 SOC Light            | 6 Power Switch            |
| 7 ADS                  | 8 Reset Key            | 9 RS485/CAN- for Inverter |
| 10 RS232- for Computer | 11 RS485- for Parallel |                           |

**Image Description:** A detailed diagram showing the top and front view of the CYCCLEVOLT battery with numbered labels pointing to its various components. These include (1) LCD Screen, (2) Positive Terminal, (3) Negative Terminal, (4) Run/ALM Light, (5) SOC Light, (6) Power Switch, (7) ADS, (8) Reset Key, (9) RS485/CAN for Inverter, (10) RS232 for Computer, and (11) RS485 for Parallel connection.

## 4. SETUP AND INSTALLATION

### Unpacking

Carefully unpack the battery and inspect for any damage. Ensure all components are present:

- 1 × 48V 200Ah LiFePO4 Lithium Battery
- 1 × Wall Mounted Bracket & Expansion bolts
- 2 × Power Cable
- 1 × Communication Cable

### Mounting the Battery

The battery is designed for wall mounting. Follow these steps for secure installation:

1. Install the I-beam bracket securely on the wall using appropriate fasteners.
2. Attach the wall-hanging fittings to the back of the battery.
3. Carefully lift and install the battery onto the wall-mounted I-beam, ensuring it locks into place.



**Image Description:** A visual guide demonstrating the three steps for wall mounting the battery. It shows an I-beam bracket being installed on a tiled wall, then fittings attached to the back of the battery, and finally the battery being hung onto the wall bracket.

## Wiring Connections

Connect the battery to your inverter and other system components. Ensure all connections are tight and correct polarity is observed (positive to positive, negative to negative).

- Connect the positive and negative terminals to your inverter using the provided power cables.
- For communication with an inverter, use the RS485/CAN port. Refer to your inverter's manual for specific connection details.
- For computer monitoring or firmware updates, use the RS232 port.

- For parallel connections with other CYCCLEVOLT batteries, use the dedicated RS485 port for parallel communication.

## 5. OPERATING INSTRUCTIONS

### Initial Power-Up

After installation and wiring are complete, switch on the battery's power switch. The LCD screen will illuminate, displaying the battery's status.

### Real-time Monitoring

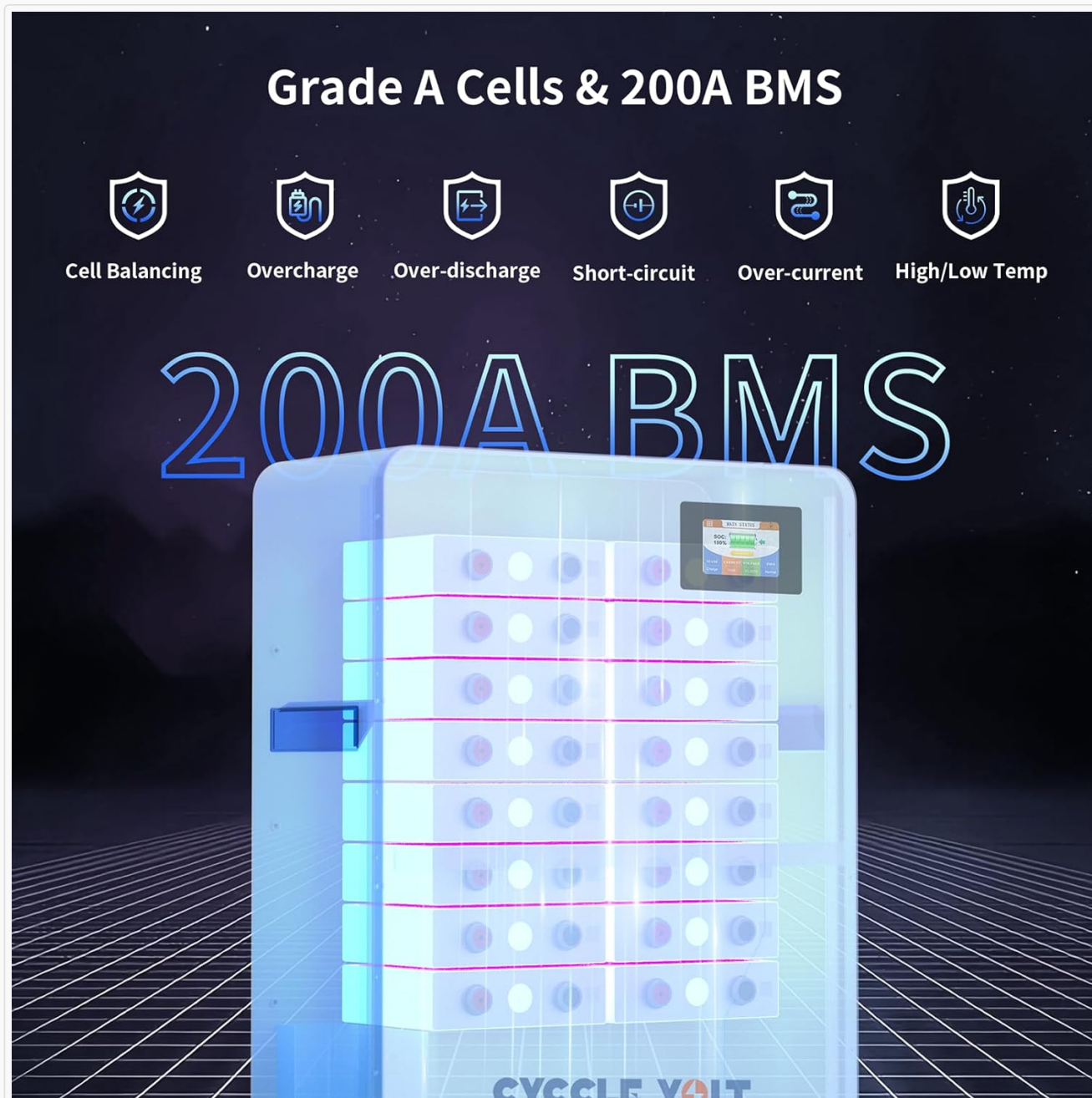
The integrated LCD screen provides real-time data. Additionally, the battery supports communication protocols for external monitoring.



**Image Description:** The CYCCLEVOLT battery is shown connected to an inverter, highlighting its CAN/RS485 dual communication capability. Logos of various compatible 48V solar inverter brands such as GoodWe, Sofar, Deye, Must, Victron Energy, Growatt, and others are displayed, indicating broad compatibility.



The advanced BMS ensures safe operation by monitoring various parameters:



**Image Description:** An illustration depicting the internal structure of the battery with Grade A cells and the protective functions of the 200A BMS. Icons represent key protections: Cell Balancing, Overcharge, Over-discharge, Short-circuit, Over-current, and High/Low Temperature protection.

## Parallel Connection

For increased energy storage capacity, multiple CYCCLEVOLT 51.2V 200Ah batteries can be connected in parallel. The system supports up to 15 units, achieving a maximum energy of 153.6 kWh and a maximum load power of 76.8 kW.

# Flexible Expansion LiFePO4 Battery

Up to **15PCS** in Parallel



Max. Energy

**153.6kwh**



Max. Load Power

**76.8kW**



**Image Description:** An outdoor scene showing a house with solar panels and multiple CYCCLEVOLT batteries wall-mounted and connected in parallel. Text overlays indicate 'Max. Energy 153.6kWh' and 'Max. Load Power 76.8kW', illustrating the flexible expansion capability of the LiFePO4 battery system.

## Typical Applications

This battery is suitable for various energy needs, providing reliable power for extended periods.



# 10kWh Long-lasting for Daily Needs



Air Conditioner

**1000W**

**10H**



Washing Machine

**850W**

**11.7H**



Microwave

**800W**

**12.5H**



TV

**200W**

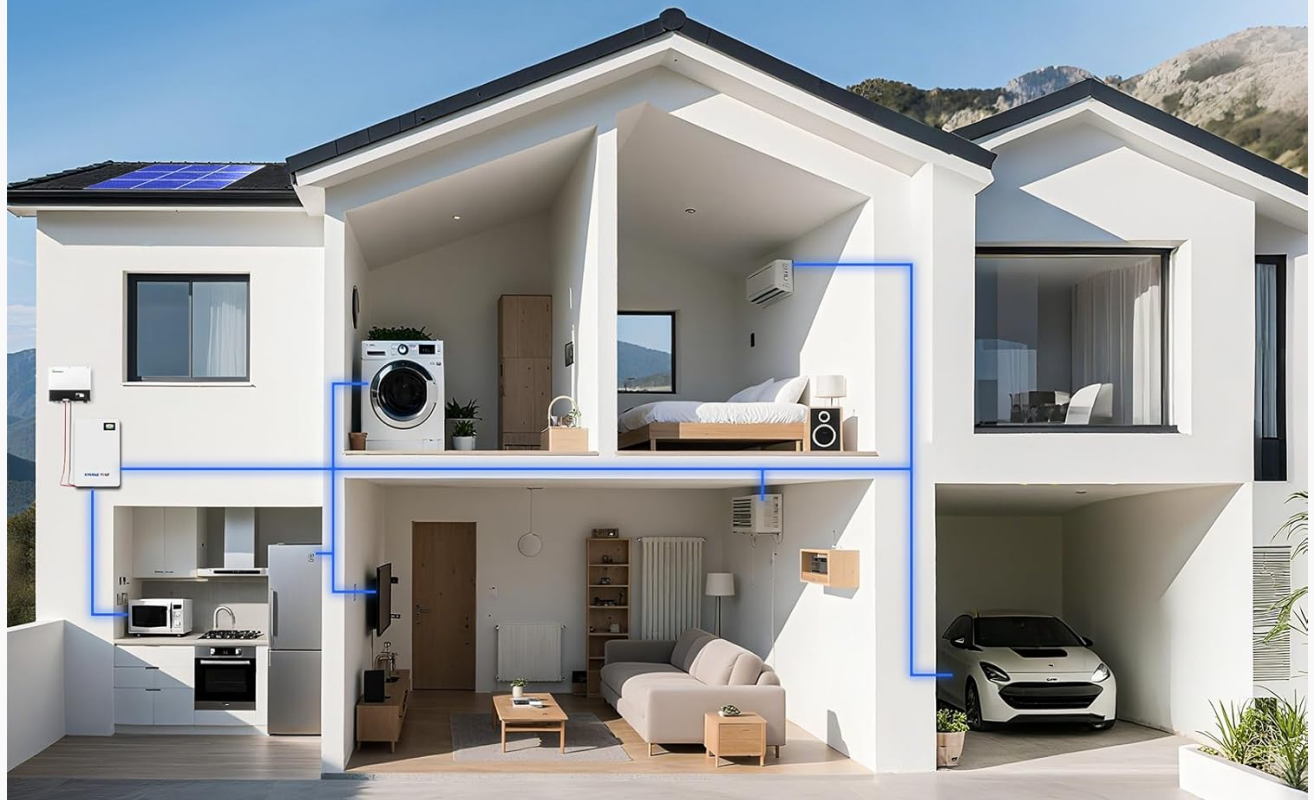
**50H**



Fridge

**300W**

**33H**



**Image Description:** A cutaway illustration of a house showing various appliances and their typical power consumption and estimated run times with a 10kWh battery. Examples include Air Conditioner (1000W, 10H), Washing Machine (850W, 11.7H), Microwave (800W, 12.5H), TV (200W, 50H), and Fridge (300W, 33H).



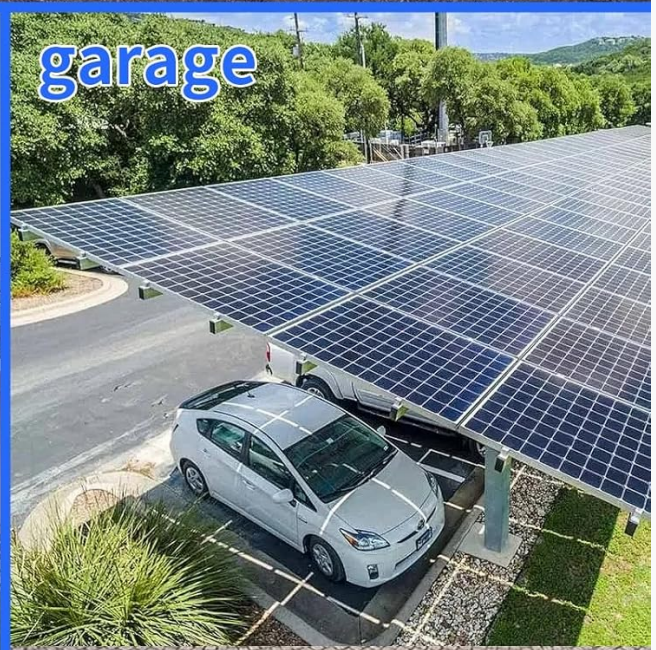
## RV Travel



## off Grid



## garage



**Image Description:** A collage of three images demonstrating diverse applications for the battery. The top image shows an RV in a scenic mountain setting (RV Travel). The bottom left image depicts a modern house with solar panels (Off-Grid). The bottom right image shows a car parked under a solar-covered garage (Garage).

## 6. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your LiFePO4 battery.

- **Regular Inspection:** Periodically check the battery and connections for any signs of damage, corrosion, or loose wiring.
- **Cleaning:** Keep the battery clean and free from dust and debris. Use a dry cloth for cleaning.
- **Temperature Management:** Ensure the battery operates within its specified temperature range. The built-in BMS protects against extreme temperatures, but maintaining a stable environment is crucial.
- **Firmware Updates:** If available, regularly check for and apply firmware updates to the BMS for improved performance and features.
- **Storage:** If storing the battery for an extended period, ensure it is charged to approximately 50% State of Charge (SOC) and stored in a cool, dry place.

## 7. TROUBLESHOOTING

This section provides solutions to common issues. For problems not listed here, please contact customer support.

Problem	Possible Cause	Solution
Battery not powering on	Power switch off, loose connections, low voltage	Check power switch, verify all cable connections, charge the battery if voltage is too low.
No output power	Overload, BMS protection activated, inverter issue	Reduce load, check BMS status on LCD, inspect inverter for faults.
Communication error with inverter	Incorrect cable, wrong protocol settings, inverter not compatible	Ensure correct communication cable is used, verify protocol settings on both battery and inverter, confirm inverter compatibility.
Battery not charging	Charger fault, BMS protection, high/low temperature	Check charger functionality, verify BMS status, ensure ambient temperature is within operating range.

## 8. TECHNICAL SPECIFICATIONS

Specification	Value
Brand	CYCCLEVOLT
Model Number	C512-200
Voltage	51.2 Volts
Battery Capacity	200 Amp Hours (10 kWh)
Amperage (Continuous Discharge)	200 Amps
Max. Load Power	10 kW
Product Dimensions (L x W x H)	17.7 x 7.8 x 26.8 inches (45 x 19.8 x 68 cm)
Item Weight	192 pounds (87 kg)
Cycle Life	8,000+ cycles
Lifespan	Up to 10 years
Communication Ports	CAN, RS485 (for Inverter & Parallel), RS232 (for Computer)
Low Temperature Cutoff (Discharge)	-4°F (-20°C)
High Temperature Cutoff (Charge)	167°F (75°C)

## 9. WARRANTY AND CUSTOMER SUPPORT

### Warranty Information

The CYCCLEVOLT 51.2V 200Ah LiFePO4 Battery comes with a ten-year warranty, ensuring dependable operation and peace of mind. Please retain your proof of purchase for warranty claims.

## Customer Support

CYCCLEVOLT is committed to providing excellent customer service. For any inquiries, technical assistance, or warranty support, please contact us through the following channels:


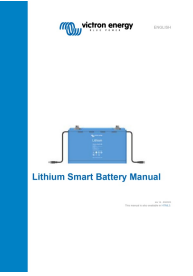
- **24-Hour Customer Service:** Our support team is available around the clock to assist you.
- **Engineer Remote Assistance:** Expert engineers can provide remote guidance for complex issues.
- **Local Warehouse in the US:** For efficient service and parts availability.







**Image Description:** Four circular icons representing CYCCLEVOLT's customer support services: 24-hour customer service, a 5-year guarantee (GTE), local warehouse in the US, and engineer remote assistance.

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## Related Documents - C512-200

	<p><a href="#">Amptron BluEdge 12V 200Ah LiFePO4 Battery User Manual</a></p> <p>User manual detailing the specifications, features, safety warnings, installation, and operation of the Amptron BluEdge 12V 200Ah 200A LiFePO4 battery (model AT-LFP-12-200-BTC-BV10).</p>
	<p><a href="#">Victron Energy Lithium Smart Battery Manual: Installation, Operation, and Safety Guide</a></p> <p>Comprehensive guide to Victron Energy Lithium Smart Batteries (LiFePO4/LFP), covering system design, BMS selection, installation, operation, safety, and troubleshooting for reliable energy storage solutions.</p>

	<p><a href="#">Amptron Outback SafeTrack 12V 200Ah Lithium Battery User Manual   AT-LFP-12-200-BT-BV12</a></p> <p>User manual for the Amptron Outback SafeTrack AT-LFP-12-200-BT-BV12 12V 200Ah 200A LiFePO4 lithium battery. Features, specifications, installation, safety, and maintenance guide.</p>
	<p><a href="#">PolarMax 12V 200Ah Li-ion Battery User's Guide</a></p> <p>Comprehensive user's guide for the PolarMax 12V 200Ah Li-ion Battery, covering installation, operation, charging, troubleshooting, and specifications. Includes details on product design, series and parallel connections, and Bluetooth app integration.</p>
	<p><a href="#">AllSpark Lithium Iron Phosphate Batteries User Manual</a></p> <p>Comprehensive user guide for AllSpark LiFePO4 batteries, detailing benefits, sizing, installation, charging, care, and warranty for off-road and recreational power solutions.</p>
	<p><a href="#">Amptron 12V 200Ah LiFePO4 Battery with Bluetooth User Manual</a></p> <p>User manual for the Amptron AT-LFP-12-200-BT-BV12, a 12V 200Ah LiFePO4 battery with Bluetooth connectivity. Includes specifications, safety warnings, charging, discharging, and storage advice, parallel and series connection guides, and Bluetooth app information.</p>