

OCELL RCELL-48V 60Ah -58.4V 10A Charger

OCELL 48V 60Ah LiFePO4 Battery User Manual

Model: RCELL-48V 60Ah -58.4V 10A Charger

Brand: OCELL

1. INTRODUCTION

Thank you for choosing the OCELL 48V 60Ah LiFePO4 Battery. This deep cycle lithium iron phosphate battery is designed for a wide range of applications including golf carts, marine trolling motors, off-grid solar systems, RVs, and emergency backup power. It offers superior performance, longer lifespan, and lighter weight compared to traditional lead-acid batteries.

Our batteries feature high-quality Automotive Grade LiFePO4 cells with UL certification and an advanced 100A Battery Management System (BMS) for optimal safety and performance. This manual provides essential information for the safe and efficient setup, operation, and maintenance of your OCELL LiFePO4 battery.

2. SAFETY INFORMATION

WARNING: Please read all safety precautions carefully before using this battery. Failure to do so may result in property damage, serious injury, or death.

- **UL Certified Cells & UN38.3 MSDS Certified Pack:** Our battery utilizes high-quality, certified cells and pack for utmost safety.
- **Integrated 100A BMS:** Provides protection against overcharge, over-discharge, over-current, and short circuits.
- **Temperature Ranges:**
 - Operating Charging Temperature Range: 32°F~113°F (0°C to 45°C)
 - Operating Discharge Temperature Range: -4°F~140°F (-20°C to 60°C)
 - Storage Temperature Range: 14°F~95°F (-10°C to 35°C)
- **Do NOT Disassemble or Alter:** Do not attempt to disassemble or alter any part of this product. This will void the warranty and may cause severe damage.

- **Liquid Contact:** If water or liquids enter the battery interior, immediately unplug the product from the battery. Continued use may result in fire or electrical shock.
- **Heat Exposure:** Do not place this product near a heat source or expose the battery to direct flame or heat, as the battery may explode.
- **Charger Compatibility:** Only use a dedicated LiFePO4 Lithium type charger. Do NOT use lead-acid or NCM lithium battery chargers.

3. PRODUCT FEATURES

- **Advanced Safety:** UL Certified Grade A LiFePO4 cells, UN38.3 MSDS Certified Pack, and a robust 100A BMS for comprehensive protection.
- **High Capacity & Expandability:** 3072Wh energy (3kWh) with support for 5120W load power. Connect up to 4 batteries in parallel for a massive 12.2kWh energy (4P) system.
- **Long Lifespan & Cost Savings:** Up to 10 years lifespan with 4000-15000 cycles, offering significant long-term power cost savings.
- **Lightweight & High Energy Density:** Weighs only 62.17 lbs, approximately 1/3 the weight of comparable lead-acid batteries, with an impressive energy density of 48.25Wh/lb.
- **Versatile Application:** Ideal for golf carts, marine trolling motors, off-grid solar, RVs, and various backup power needs.
- **Included Charger:** Comes with a dedicated 58.4V 10A charger for optimal charging.
- **Easy Installation:** Designed for drop-in replacement in many applications.



Figure 3.1: OCELL 48V 60Ah LiFePO4 Battery with included charger and cables.



Figure 3.2: Key dimensions and specifications of the OCELL 48V 60Ah LiFePO4 Battery.



Figure 3.3: Diagram illustrating the built-in Battery Management System (BMS) protections.

4. SETUP AND INSTALLATION

Proper installation is crucial for the performance and longevity of your OCELL LiFePO4 battery. Follow these general guidelines and refer to the provided videos for visual assistance.

4.1 Unboxing and Initial Inspection

Carefully unbox the battery and charger. Inspect for any visible damage. Ensure all components listed in the packaging are present.

Your browser does not support the video tag.

Video 4.1: Unboxing and initial inspection of an OCELL LiFePO4 battery. This video demonstrates the careful unboxing process and initial handling of the battery unit.

4.2 Battery Placement and Securing

Choose a dry, well-ventilated location for the battery. Ensure it is secured to prevent movement during operation. The compact size of OCELL batteries allows for flexible placement.

Your browser does not support the video tag.

Video 4.2: Installation of an OCELL 24V 80Ah LFP Battery with a Minnkota Trolling Motor. This video provides practical examples of securing the battery in a marine environment and connecting it to a trolling motor system.

Your browser does not support the video tag.

Video 4.3: Installation of an OCELL 48V 40Ah LFP Battery on an EZGO Golf Cart. This video demonstrates the process of replacing lead-acid batteries with an OCELL LiFePO4 battery in a golf cart, including securing the battery in the compartment.

4.3 Electrical Connections

Connect the battery using appropriate 4 AWG silicone cables with Closed Copper Nose DR8-25B to the M8 terminals. Ensure correct polarity (Red for Positive, Black for Negative). Tighten all connections securely.

5. OPERATING INSTRUCTIONS

5.1 Charging the Battery

Use the provided 58.4V 10A dedicated charger. Connect the charger to the battery and then to a power outlet. The charger will indicate charging status (e.g., red light for charging, green light for complete). Ensure charging occurs within the specified temperature range of 32°F~113°F (0°C to 45°C).

5.2 Discharging the Battery

The battery supports a continuous discharging current of up to 100A. Ensure your load does not exceed the maximum load power of 5120W. The operating discharge temperature range is -4°F~140°F (-20°C to 60°C).

Your browser does not support the video tag.

Video 5.1: OCELL 12V 22Ah LFP Battery in use with a Golf Trolley. This short video demonstrates the battery's performance in a real-world application, highlighting its suitability for portable power needs.

5.3 Parallel Connection

For increased capacity, up to 4 OCELL 48V 60Ah batteries can be connected in parallel. This allows for a total capacity of 12.2kWh. Consult OCELL support for specific instructions on BMS customization if needed for series connections.

6. MAINTENANCE

OCELL LiFePO4 batteries are largely maintenance-free. However, following these simple guidelines will ensure optimal performance and longevity:

- **Regular Charging:** Charge the battery regularly, especially when not in use. It is important to maintain at least 25% of your battery power. Failure to charge prior to use will reduce battery life.
- **Terminal Inspection:** Periodically check battery terminals for cleanliness and tightness. Ensure connections are secure to prevent power loss or damage.
- **Storage:** If storing the battery for an extended period, ensure it is charged to at least 25% and stored within the recommended temperature range of 14°F~95°F (-10°C to 35°C).

7. TROUBLESHOOTING

The OCELL LiFePO4 battery is equipped with a sophisticated BMS to prevent most common issues. If you encounter a problem, consider the following:

- **No Power/Low Voltage:** Check all cable connections for tightness and correct polarity. Ensure the battery is adequately charged. If the battery has been deeply discharged (0V Charging Mode), connect the dedicated 58.4V 10A charger to wake it up.
- **Over-current/Short Circuit Protection:** The BMS will automatically cut off power if an over-current or short circuit is detected. Disconnect the load, identify and resolve the issue, then reconnect.
- **Temperature Protection:** The BMS will protect the battery if operating temperatures exceed safe limits. Allow the battery to return to the specified operating temperature range before use.
- **Charger Issues:** Ensure you are using the correct LiFePO4 charger. Check the charger's indicator lights for status.

If the issue persists after checking these points, please contact OCELL customer support for assistance.

8. SPECIFICATIONS

Feature	Specification
Brand	OCELL
Model	RCELL-48V 60Ah -58.4V 10A Charger
Nominal Voltage	48V
Nominal Capacity	60Ah
Energy	3072Wh
Max. Charging Voltage	58.4V

Feature	Specification
Charger Included	58.4V 10A
Continuous Discharging Current	100A
Max Load Power	5120W
Dimensions (L*W*H)	20.47 x 10.51 x 8.7 inches
Weight	62.17 lbs
Terminal Type	M8
Operating Charging Temp. Range	32°F~113°F (0°C to 45°C)
Operating Discharge Temp. Range	-4°F~140°F (-20°C to 60°C)
Storage Temperature Range	14°F~95°F (-10°C to 35°C)

9. WARRANTY AND SUPPORT

OCELL is committed to providing high-quality products and excellent customer service.

- **5-Year Warranty:** Your OCELL LiFePO4 battery is covered by a 5-year warranty.
- **1-Month Free Return:** Enjoy a one-month free return period for your peace of mind.
- **Lifetime Technical Support:** OCELL provides lifetime technical support for all its products.
- **Repair/Replacement Policy:** If your product is damaged within one year, OCELL offers free repair service in the USA. If the battery cannot be repaired, a new one will be sent to you for free.
- **BMS Customization:** If you require specific BMS customization for series connections, please contact OCELL support.

Your browser does not support the video tag.

Video 9.1: O'CELL NEW ENERGY GROUP - 15-Year LiFePO4 Battery Factory Overview. This video provides an insight into OCELL's manufacturing capabilities, quality control, and commitment to sustainable energy solutions.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question