

[Manuals.plus](#) /

› [Talentcell](#) /

› Talentcell 24V 6Ah LiFePO4 Battery Pack LF8011 Instruction Manual

Talentcell LF8011

Talentcell 24V 6Ah LiFePO4 Battery Pack LF8011 Instruction Manual

Model: LF8011 | Brand: Talentcell

1. PRODUCT OVERVIEW

The Talentcell 24V 6Ah LiFePO4 Battery Pack LF8011 is a deep cycle rechargeable lithium iron phosphate battery designed for various applications. It offers a long cycle life and high capacity, making it a lighter and more efficient alternative to traditional lead-acid batteries. This package includes one 24V LiFePO4 battery pack, one LiFePO4 battery charger, and two female spade crimp terminal wires.



Image 1: Talentcell 24V 6Ah LiFePO4 Battery Pack LF8011 with included charger and wires.

2. KEY FEATURES

- **Long Cycle Life:** Over 2000 cycles, ensuring extended usability and reliability.
- **High Capacity:** 25.6V 6000mAh (153.6Wh) provides consistent and reliable power output.
- **Lightweight Design:** Significantly lighter than comparable lead-acid batteries, enhancing portability and ease of installation.
- **Built-in BMS Protection:** Features comprehensive Battery Management System (BMS) protection against overvoltage, overcurrent, short circuit, extreme temperatures, and overcharge/discharge.
- **Wide Application:** Compatible with a variety of devices including trolling motors, RVs, camping equipment, LED strip lights, CCTV cameras, IP cameras, LED panels, amplifiers, modems, Celestron NexStar telescopes, speakers, car DVRs, and children's electric vehicles.

BMS Protection



Overvoltage Protection



Overcurrent Protection



Short Circuit Protection



Temperature Protection



Overcharge Discharge Protection



Image 2: Illustration of the Battery Management System (BMS) protection features including overvoltage, overcurrent, short circuit, temperature, and overcharge/discharge protection.

3. SPECIFICATIONS

Feature	Detail
Model	LF8011
Battery Type	LiFePO4 (Lithium Iron Phosphate)
Nominal Voltage	25.6V
Capacity	6Ah (6000mAh) / 153.6Wh
Output Voltage Range	29.2V - 18V (Nominal: 25.6V)

Adapt Battery to Extreme Temperatures

Discharge Temperature

-20°C

Low Temperature

60°C

High Temperature

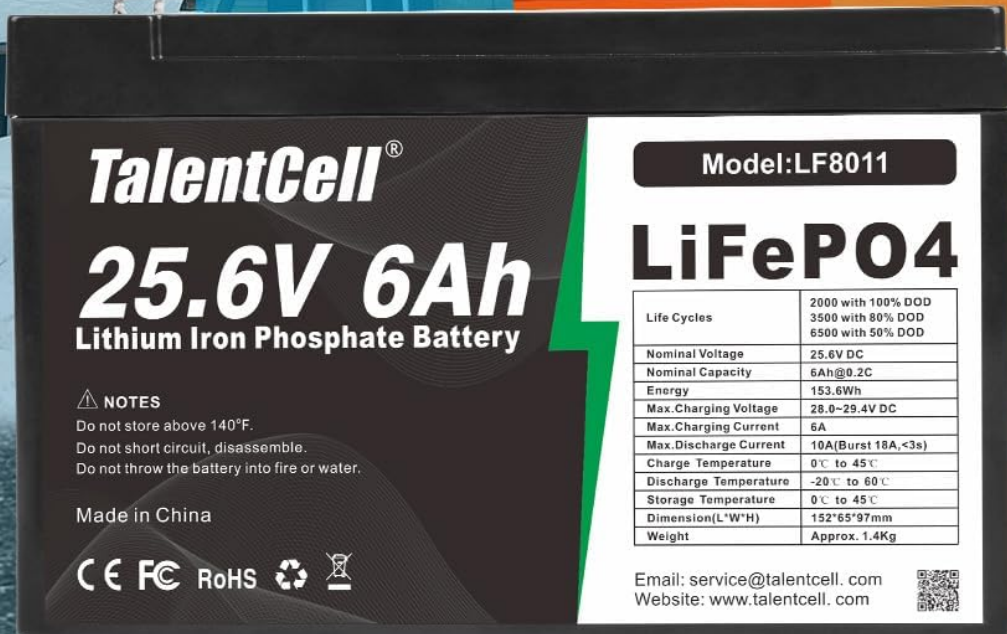


Image 4: Illustration of the battery's adaptability to extreme temperatures, showing discharge temperature range from -20°C to 60°C.

4. SETUP AND INSTALLATION

This LiFePO4 battery pack is designed to replace traditional lead-acid batteries in many applications. Its similar form factor allows for direct installation in many cases.

4.1. Replacing Existing Batteries

When replacing lead-acid batteries, ensure the total voltage requirement of your device matches the 24V output of this battery pack. If your previous setup used multiple 12V batteries in series to achieve 24V, this single 24V LiFePO4 battery can often replace them, simplifying the wiring and reducing weight.

- 1. Disconnect Old Batteries:** Carefully disconnect the existing batteries from your device, noting the positive and negative terminals. Always disconnect the negative terminal first.
- 2. Prepare Wiring:** The Talentcell LF8011 battery pack comes with female spade crimp terminal wires. Connect these to the battery terminals (red to positive, black to negative).

3. **Integrate Fuse (if applicable):** If your device requires an inline fuse, ensure it is properly connected between the battery and the device's power input. The provided wires can be spliced into existing fuse holders if necessary.
4. **Connect to Device:** Connect the prepared battery wires to your device's power input, ensuring correct polarity (positive to positive, negative to negative).
5. **Secure Battery:** Place the battery securely within the device's battery compartment. If there is excess space, use foam packaging or other non-conductive material to prevent movement and potential damage.



Video 1: A demonstration of the Talentcell 24V 6Ah LiFePO4 battery pack and its features, including size and application examples.

5. OPERATING INSTRUCTIONS

5.1. Charging the Battery

Use only the provided 29.4V 0.95A AC/DC charger or a compatible LiFePO4 charger with appropriate voltage and current specifications. Connect the charger to the battery's charging port and then plug it into a standard wall outlet. The charger will typically have an indicator light to show charging status (e.g., red for charging, green for fully charged).

5.2. Discharging the Battery

The battery provides a nominal output of 25.6V. During discharge, the output voltage will typically range from 24V to 26V for over 90% of the discharge cycle. The maximum output current is 10A. Ensure your device's power requirements do not exceed these specifications to prevent damage to the battery or device.

6. MAINTENANCE AND STORAGE

- **Periodic Charging:** If the battery is not used for an extended period, it may enter an over-discharged state due to self-discharge. To prevent this, charge the battery periodically to maintain its voltage between 20V and 26V. Over-discharging can lead to irreversible loss of cell performance or battery functions.
- **Storage Temperature:** Store the battery within the recommended long-term storage temperature range of 15°C to 25°C (59°F to 77°F). The acceptable storage temperature range is -10°C to +50°C (14°F to 122°F).
- **Clean Terminals:** Keep battery terminals clean and free from corrosion to ensure optimal electrical connection and prevent power loss.
- **Avoid High Humidity:** Do not store or use the battery in places with high humidity or where it may be exposed to wet conditions.

7. SAFETY INFORMATION AND WARNINGS

Adhering to these safety guidelines is crucial for safe operation and to prevent damage to the battery or injury.

- **Temperature Limits:** Do not store or operate the battery above 140°F (60°C).
- **Moisture Exposure:** Do not use the 24V lithium battery pack in places with high humidity or where it may be exposed to wet conditions.
- **No Modification:** Do not modify or disassemble the power bank. Unauthorized modifications can be dangerous and void the warranty.
- **Disposal:** Do not throw the 24V power bank into fire or water. Dispose of batteries according to local regulations.
- **Polarity:** Do not reverse the polarity of the battery pack. Incorrect polarity can cause severe damage to the battery and connected devices.

- **Children:** Keep the battery and its components out of reach of children.

8. TROUBLESHOOTING

If you experience issues with your Talentcell LiFePO4 battery pack, consider the following general troubleshooting steps:

- **Battery Not Charging:** Ensure the charger is correctly connected to both the battery and a working power outlet. Verify the charger's indicator light for proper operation.
- **Device Not Powering On:** Check all connections for proper seating and correct polarity. Inspect any inline fuses for continuity and replace if blown. Ensure the battery is sufficiently charged.
- **Reduced Performance:** If the battery's performance seems diminished, ensure it has been charged fully. Review the operating temperature range to confirm it's not being used in extreme conditions outside its specifications.

For persistent issues or problems not covered here, please contact customer support.

9. WARRANTY AND SUPPORT

For warranty information and customer support regarding your Talentcell 24V 6Ah LiFePO4 Battery Pack LF8011, please refer to the documentation included with your purchase or contact Talentcell Technology directly.

Email: service@talentcell.com

Website: www.talentcell.com

© 2023 Talentcell Technology. All rights reserved.

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