

[Manuals.plus](#) /

› [Litime](#) /

› LiTime 12V 100Ah H190 LiFePO4 Lithium Battery with Bluetooth User Manual

LiTime 12V100Ah H190 Bluetooth

LiTime 12V 100Ah H190 LiFePO4 Lithium Battery with Bluetooth User Manual

Model: 12V100Ah H190 Bluetooth

1. PRODUCT OVERVIEW

The LiTime 12V 100Ah H190 LiFePO4 Lithium Battery with Bluetooth is a high-performance, deep-cycle battery designed for recreational vehicles (RVs), vans, solar systems, and other off-grid applications. This battery features a compact design, lightweight construction, and an advanced Battery Management System (BMS) for enhanced safety and longevity. Integrated Bluetooth connectivity allows for real-time monitoring via a smartphone application.



Image: The LiTime H190 LiFePO4 battery shown in a scenic coastal environment with an RV, highlighting its suitability for mobile and off-grid power needs.

Key Features:

- **Compact & Lightweight:** Specifically designed to fit under European RV seats (L358 x W177 x H188 mm) and weighs only 11 kg.

- **Smart Bluetooth Monitoring:** Connects via Bluetooth 5.0 to a dedicated app for real-time data on State of Charge (SOC), voltage, current, and temperature.
- **Advanced 100A BMS:** Provides over 20 protection functions including overcharge, short-circuit, and over-temperature, with automatic pre-charge and troubleshooting.
- **Low-Temperature Protection:** Automatically stops charging below 0°C and discharging below -20°C to protect battery cells and extend lifespan.
- **Long Cycle Life:** Offers 4000 to 15000 deep cycles at 100% Depth of Discharge (DOD), providing a lifespan of up to 10 years.
- **Scalable System:** Supports connecting up to 4 units in series or parallel for increased voltage or capacity.

2. SETUP AND INSTALLATION

2.1 Unpacking and Inspection

Carefully unpack the battery and inspect it for any signs of damage during transit. If any damage is found, contact customer support immediately.

2.2 What's in the Box

- LiTime 12V 100Ah H190 LiFePO4 Battery
- Instructions Manual
- Quick Guide Card
- Screws and Insulating Cap
- Washers
- Bluetooth Battery Card

2.3 Physical Dimensions and Placement

The battery measures 35.8 cm (L) x 17.7 cm (W) x 18.8 cm (H) and weighs approximately 11 kg. Its compact design is optimized for installation under seats in European RVs and vans, where height clearance is typically around 190mm.



Image: The LiTime H190 battery with its length (358mm), width (177mm), and height (188mm) clearly marked, demonstrating its compact size for RV installations.

2.4 Electrical Connections

Connect the battery to your system using appropriate cables and terminals. Ensure all connections are secure and properly insulated. The battery supports connection in series or parallel for increased voltage or capacity, up to a maximum of 4 units. When connecting multiple batteries, ensure they are of the **same brand, type, voltage, capacity, BMS, and manufactured within 3 months** to prevent imbalances and potential damage.

2.5 Important Safety Notes

- **Do not use this battery for golf carts.**
- **Do not use this battery as a starter battery.**
- Always follow local electrical codes and safety guidelines during installation.
- Ensure proper ventilation around the battery.



Image: Visual warnings indicating that the battery should not be used for golf carts or as a starter battery, and emphasizing the importance of matching specifications when connecting multiple batteries.

3. OPERATION

3.1 Initial Charging

Before first use, it is recommended to fully charge the battery using a compatible LiFePO4 charger. The battery's BMS will manage the charging process.

3.2 Bluetooth App Control and Monitoring

The LiTime battery features integrated Bluetooth 5.0 for smart monitoring via a dedicated smartphone application. This app allows you to view real-time battery data and manage certain functions.

1. **Download the App:** Scan the QR code provided on the Bluetooth battery card or visit www.litime.com/pages/app-download to download the LiTime app from the Apple App Store or Google Play Store.
2. **Pairing:** Ensure your smartphone's Bluetooth is enabled and you are within 5-10 meters of the battery. Open the app and follow the on-screen instructions to pair your device, often involving scanning a QR code on the battery.
3. **Monitoring:** Once connected, the app displays critical information such as:
 - State of Charge (SOC)

- Current (Charge/Discharge)
- Power
- Battery Voltage
- Capacity
- Battery Temperature
- Battery On/Off Control



Image: Screenshots of the LiTime mobile application interface, illustrating the steps for Bluetooth connection, QR code scanning, and real-time display of battery parameters like SOC, voltage, and temperature.

3.3 Charging Sources

The LiTime LiFePO4 battery can be charged using various compatible sources:

- **LiFePO4 Charger:** A dedicated 12V 20A (0.2C) LiFePO4 charger can fully charge the battery in approximately 5 hours.
- **Solar Panel:** A solar panel system (e.g., $\geq 400W$) can charge the battery over a sunny day.
- **Generator:** A generator with a DC-DC charger (e.g., 20A) can charge the battery in approximately 5 hours.



Image: A visual representation of different charging methods for the LiTime battery, including a dedicated LiFePO4 charger, solar panels, and a portable generator.

4. MAINTENANCE

4.1 Low-Temperature Protection

The battery features an intelligent low-temperature protection system to ensure optimal performance and longevity:

- **Charging:** Charging automatically stops when the battery temperature drops below 0°C. Charging resumes when the temperature rises above 5°C.
- **Discharging:** Discharging automatically stops when the battery temperature drops below -20°C.



Image: A diagram illustrating the low-temperature protection thresholds: charging stops below 0°C, resumes above 5°C, and discharging stops below -20°C.

4.2 General Care

- Keep the battery terminals clean and free from corrosion.
- Store the battery in a cool, dry place when not in use for extended periods.
- Avoid exposing the battery to extreme heat or direct sunlight.
- Regularly check the battery's State of Charge (SOC) via the app, especially during storage.

5. TROUBLESHOOTING

The integrated Battery Management System (BMS) is designed to automatically handle many common issues and protect the battery. If you encounter problems, refer to the following:

- **No Power Output:** Check all cable connections for tightness and proper contact. Verify the battery's SOC via the Bluetooth app. The BMS may have activated a protection mode (e.g., low voltage, over-discharge).
- **Battery Not Charging:** Ensure the charger is compatible with LiFePO4 batteries and is functioning correctly. Check the battery temperature via the app; charging will stop below 0°C. Verify all charging connections.
- **Bluetooth Connection Issues:** Ensure you are within the 5-10 meter range of the battery. Restart the app and your phone's Bluetooth. Ensure no other devices are interfering with the connection.
- **Unusual Readings on App:** If the app displays abnormal voltage, current, or temperature readings, disconnect the battery from all loads and charging sources and contact customer support.

For persistent issues or complex problems, the BMS provides automatic troubleshooting capabilities. Consult the detailed instructions in the full manual or contact LiTime customer support for assistance.

6. SPECIFICATIONS

Attribute	Value
Brand	Litime
Model	12V100Ah H190 Bluetooth
Battery Type	LiFePO4 Lithium
Nominal Voltage	12.8 Volts
Capacity	100 Amp-hours
Energy	1280 Wh
Max Continuous Charge Current	100 A
Max Continuous Discharge Current	100 A
Max 5-second Discharge Current	280 A
Cycle Life	4000-15000 cycles at 100% DOD
Dimensions (L x W x H)	35.8 x 17.7 x 18.9 cm (14.09 x 6.97 x 7.44 inches)
Weight	9.91 kg (21.85 lbs)
Reusability	Rechargeable
IP Rating	IP65
Operating Temperature (Charge)	0°C to 50°C
Operating Temperature (Discharge)	-20°C to 60°C
Storage Temperature	-10°C to 50°C
Country of Origin	China

7. WARRANTY AND SUPPORT

7.1 Warranty Information

The LiTime 12V 100Ah H190 LiFePO4 Lithium Battery is covered by a**5-year warranty**. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims.

97 % de livraisons à temps

5 entrepôts locaux en Europe



Image: A visual representation of the 5-year service commitment, emphasizing that support begins from the moment of product opening.

7.2 Customer Support

LiTime is committed to providing excellent customer service. Our expert technical support team is available to assist you with any questions or issues. We aim to provide a response within 24 hours.

For support, please refer to the contact information provided in your product packaging or visit the official LiTime website.

7.3 Product Liability Insurance

This LiTime product is covered by AIG product liability insurance, ensuring an additional layer of protection and peace of mind for our customers.

Mise à niveau de la protection

Ce produit LiTime est couvert par l'assurance responsabilité civile produits d'AIG, à compter du 22 mai 2026.



Image: A glowing blue shield icon on a digital background, representing the product liability insurance coverage for LiTime products.