

LOSSIGY SME-36V100AH

LOSSIGY 36V 100Ah LiFePO4 Lithium Battery Instruction Manual

MODEL: SME-36V100AH

1. Introduction

Welcome to the instruction manual for your LOSSIGY 36V 100Ah LiFePO4 Lithium Battery. This manual provides essential information for the safe and efficient use, installation, and maintenance of your battery. Please read it thoroughly before operation to ensure proper handling and to maximize the lifespan of your product.

2. Important Safety Instructions

Failure to follow these safety instructions can result in serious injury, property damage, or damage to the battery. Always exercise caution when handling batteries.

- Do not throw the battery into fire or incinerate it.
- Do not reverse the positive and negative connections.
- Do not short-circuit the battery terminals.
- Do not heat the battery above 60°C (140°F).
- Do not disassemble the battery pack.
- Use only a compatible LiFePO4 charger designed for 36V lithium batteries.
- Keep the battery out of reach of children.
- Avoid direct contact with battery terminals and wear appropriate personal protective equipment (PPE) when handling.
- Ensure proper ventilation when charging or discharging the battery.
- In case of damage, swelling, or leakage, immediately disconnect the battery and contact customer support.



Image 1: LOSSIGY LiFePO4 Battery showing dimensions and safety warning label. The warning indicates not to throw into fire, incinerate, reverse connections, short-circuit, or heat above 60°C.

3. Product Features

- **Advanced BMS System:** Equipped with a built-in 200A Bluetooth Battery Management System (BMS) featuring automatic cell balancing. This system allows for safe parallel connection to form larger capacity 36V battery banks. **Note: These batteries cannot be connected in series.**
- **Grade A Cells:** Constructed with high-quality automotive-grade A LiFePO4 cells, ensuring higher energy density, stable performance, and greater power output.
- **Easy Installation:** Designed for straightforward installation and portability, offering a more convenient solution compared to traditional lead-acid batteries.
- **Extended Lifespan:** Provides a long cycle life of at least 4000 cycles. The integrated BMS effectively protects the battery from damage due to high/low temperature, short circuits, over-current, and over-discharge.

4. Specifications

Parameter	Value
Nominal Capacity	100Ah
Watt Hour	3840Wh
Nominal Voltage	36V
Charge Voltage Range	42.6V - 43.8V
Full Charge Voltage Range	40.2V - 41.4V
BMS	200A
Max. Continuous Current	100A
Peak Current	1000A
Waterproof Grade	IP65
Operating Temperature (Charge)	32°F ~ 113°F (0°C ~ 45°C)
Operating Temperature (Discharge)	-4°F ~ 140°F (-20°C ~ 60°C)
Storage Temperature	10°F ~ 122°F (-12°C ~ 50°C)
Product Size (L x W x H)	20.47 x 10.59 x 8.66 inches (520 x 269 x 220 mm)
Weight	30kg / 66.9lb
Terminals	Removable M8 stud terminal (8mm / 5/16 inch bolt, 16mm / 5/8 inch length)



Image 2: Detailed view of the LOSSIGY LiFePO4 Battery, illustrating its physical dimensions and the specifications of the M8 stud terminals.

5. Setup and Installation

Before beginning installation, ensure the battery is fully charged and all connection points are clean and secure. Always wear appropriate safety gear.

5.1. Connecting in Parallel

This battery is designed to be connected in parallel to increase the overall capacity of your 36V battery bank. This is suitable for applications requiring higher amp-hours.

- Ensure all batteries have similar voltage levels before connecting them in parallel.
- Connect all positive terminals together and all negative terminals together.
- Use appropriate gauge cables for your specific application to safely handle the expected current.
- **Important: Do not connect these batteries in series.** Connecting in series can damage the battery's internal components and will void the product warranty.

5.2. Terminal Connection

The battery is equipped with removable M8 stud terminals. Use the provided bolts and washers for secure electrical connections.

- Ensure all connections are tight to prevent arcing, overheating, and potential damage.
- If possible, use a torque wrench to tighten terminals to the manufacturer's recommended specifications. If not available, tighten until snug, then apply an additional quarter turn.
- Apply anti-corrosion grease to the terminals after connection for enhanced protection against environmental factors.



Image 3: General view of the LOSSIGY 36V 100Ah LiFePO4 Lithium Battery, showing the top terminals for connection.

6. Operating Instructions

6.1. Charging

To charge your LOSSIGY LiFePO4 battery, use a dedicated LiFePO4 charger that provides a voltage within the range of 42.6V to 43.8V.

- Connect the charger's positive lead to the battery's positive terminal and the negative lead to the battery's negative terminal.
- Monitor the charging process, especially during the initial charges, to ensure proper operation.
- The built-in BMS will provide protection against overcharging and undercharging, but it is good practice to use a charger with appropriate settings.
- Charge the battery within the recommended operating temperature range of 32°F ~ 113°F (0°C ~ 45°C).

6.2. Discharging

The battery is capable of delivering a maximum continuous current of 100A and a peak current of 1000A for short durations.

- Operate the battery within the recommended discharge temperature range of -4°F ~ 140°F (-20°C ~ 60°C).
- Avoid drawing current beyond the specified maximum continuous or peak current ratings to prevent damage to the battery and connected equipment.
- The BMS will automatically protect the battery from over-discharge, disconnecting the load if the voltage drops too low.

7. Maintenance and Storage

7.1. Regular Checks

- Periodically inspect the battery for any signs of physical damage, loose connections, or corrosion on the terminals.
- Keep the battery's exterior clean and dry.

7.2. Storage

For optimal long-term storage, store the battery at approximately 50% of its charge capacity and recharge it every 3 months to maintain cell health.

- Store the battery in a cool, dry place, away from direct sunlight, heat sources, and extreme temperatures.
- The recommended storage temperature range is 10°F ~ 122°F (-12°C ~ 50°C).
- Ensure that the terminals are protected to prevent accidental short circuits during storage.

8. Troubleshooting Guide

This section provides solutions for common issues you might encounter with your battery.

Problem	Possible Cause	Solution
Battery not charging	Charger not connected properly, faulty charger, BMS protection activated (e.g., due to extreme temperature)	Check all charger connections. Test the charger with another device if possible. Allow the battery to reach the recommended charging temperature range.
Battery not discharging / No power output	BMS protection activated (e.g., over-discharge, over-current, extreme temperature), load too high, short circuit	Reduce the load on the battery. Allow the battery to reach the recommended operating temperature. Check for any short circuits in the system. Recharge the battery if it's in over-discharge protection.
Low voltage output	Battery is discharged, cell imbalance	Recharge the battery fully. The built-in BMS will automatically balance the cells during the charging process.
Bluetooth not connecting to app	App issue, battery is off, out of range, interference	Restart the Bluetooth application on your device. Ensure the battery is powered on. Move your device closer to the battery. Check for other Bluetooth devices causing interference.

9. Warranty and Customer Support

LOSSIGY provides a **5-year manufacturer warranty** for this product, covering defects in materials and workmanship under normal use.

In addition to the warranty, LOSSIGY offers **90 days of worry-free after-sales service** and **24-hour online professional technical support**. Should you encounter any issues or require assistance, please do not hesitate to contact our customer service team for the fastest possible solution.

For warranty claims, technical assistance, or general inquiries, please refer to the contact information provided with your purchase or visit the official LOSSIGY website.

