

MFUZOP MF-48100-BG

MFUZOP 51.2V 100Ah Wall Mount LiFePO4 Battery User Manual

Model: MF-48100-BG

1. INTRODUCTION

Thank you for choosing the MFUZOP 51.2V 100Ah Wall Mount 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 INFORMATION

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

- Always disconnect power before performing any installation or maintenance.
- Installation should be performed by a qualified professional to ensure safety and proper functionality.
- Do not attempt to open, disassemble, or modify the battery. There are no user-serviceable parts inside.
- Avoid exposing the battery to fire, high temperatures, or direct sunlight.
- Keep the battery away from water, moisture, and corrosive substances.
- Ensure proper ventilation around the battery during operation.
- Use only compatible chargers and inverters.
- Wear appropriate personal protective equipment (PPE) such as insulated gloves and eye protection during installation.
- The battery pack is heavy; use proper lifting techniques or assistance during installation.

3. PRODUCT OVERVIEW

The MFUZOP 51.2V 100Ah LiFePO4 battery is a high-performance energy storage solution designed for home backup, RV, off-grid solar systems, and marine applications. It features a compact wall-mounted design, a robust 100A Battery Management System (BMS), and intelligent monitoring capabilities.

Key Features:

- **5.12kWh Energy Storage:** Provides reliable power with Grade A LiFePO4 cells.

- **Long Cycle Life:** Over 6000 deep cycles at 80% Depth of Discharge (DOD).
- **Advanced 100A BMS:** Offers comprehensive protection against overcharge, overdischarge, overcurrent, short circuit, reverse connection, and extreme temperatures. Includes active cell balancing.
- **Dual Physical Safety Switches:** Side rotary power switch and DC air breaker for complete power cut-off.
- **Intelligent Monitoring:** High-definition LCD touchscreen displays real-time data (charge, voltage, current, temperature, status). Multiple LED indicators and a buzzer for alerts.
- **Communication Ports:** RS232, RS485, and CAN ports for compatibility with most mainstream solar inverters.
- **Parallel Expansion:** Supports multi-unit parallel expansion (up to 15 units) via DIP address switch for increased capacity (series connection is forbidden).
- **Flexible Installation:** Supports both wall-mounted and floor-standing options.
- **Weather-Resistant Design:** IP20 rated sturdy metal cabinet suitable for indoor and mobile outdoor scenarios.

Components and Dimensions:

The battery package includes the main battery unit, a wall mount bracket, cables for parallel connection, mounting screws, and a communication line.



Image: MFUZOP 5.12kWh LiFePO4 Battery with its dimensions (62.9cm/24.7in H, 36.7cm/14.4in W, 16.5cm/6.5in D) and included accessories: wall mount bracket, cables, mounting screws, and communication line.

TECHNICAL SPECIFICATIONS OF LITHIUM BATTERY



Image: Detailed view of the battery's interface, showing CAN232/485 ports, ADD switch, dry contact ports, power switch, reset button, and circuit breaker.

4. SPECIFICATIONS

Below are the technical specifications for the MFUZOP 51.2V 100Ah LiFePO4 Battery (Model MF-48100-BG).

Parameter	Value
Model Number	MF-48100-BG
Usable Capacity	5.12 kWh
Rated Voltage	51.2V
Voltage Range	43.2-58.4V
Max Continuous Charge Current	100A

Parameter	Value
Max Continuous Discharge Current	100A
Max Output Power	5120W
Recommended Output Power	2500W
Display Screen	LED Display
Depth of Discharge (DOD)	≥95%
Modules Connection	1-15 in parallel
Communication	RS485/CAN
Ingress Protection	IP21
Cycle Life	≥6000 cycles
Working Temperature Range (Discharge)	-10°C to +50°C
Working Temperature Range (Charge)	0°C to +60°C
Product Dimensions (L x W x H)	36.7cm x 16.5cm x 62.9cm (14.4in x 6.5in x 24.7in)



Image: Technical specifications table for the MFUZOP LiFePO4 battery, including Max. Charging Voltage (58.4V), Floating charging Voltage (57.6V), Max. Charging Current (100A), and Cut-off voltage (43.2V).

ENERGY STORAGE SYSTEM



Easy Operation For Battery Capacity Expansion

- ✓ Supports connecting up to 15 Parallel
- ✓ Max. 1500A Continuous Charge/Discharge Current
- ✓ Max. 37.5 KW load Power
- ✓ Supports connecting up to 15 Parallel
- ✓ Max. 76.8Kwh Usable Battery Energy
- ✓ 6000+ Cycles Life

Projector(100wh)
51.2 Hrs

Desktop(200w)
25.6 Hrs

Kettle(500w)
10.24 Hrs

Coffee Maker(1000W)
5.12 Hrs

Printer(300w)
17.1 Hrs

Image: Illustration of the battery's operating temperature ranges: Discharge from -10°C to +50°C and Charge from 0°C to +60°C, highlighting its all-weather capability.

5. SETUP AND INSTALLATION

The MFUZOP battery offers flexible installation options: wall-mounted or floor-standing. Always ensure the power is off before beginning installation. Professional installation is highly recommended.

Installation Steps (Wall-Mounted Example):

- 1. Install Wall-Mount Bracket:** Securely attach the provided wall-mount bracket to a sturdy wall surface using appropriate fasteners. Ensure the bracket is level and can support the battery's weight.
- 2. Mount Battery:** Carefully lift the battery and hang it onto the installed wall-mount bracket. Ensure it is securely seated and balanced.
- 3. Connect Wiring:** Connect the power cables and communication lines according to your system's wiring diagram. Pay close attention to polarity.

4. **Parallel Connection (Optional):** If connecting multiple batteries in parallel, use the provided cables and set the DIP address switches on each battery as per the user manual's wiring guide. **Series connection is forbidden.**

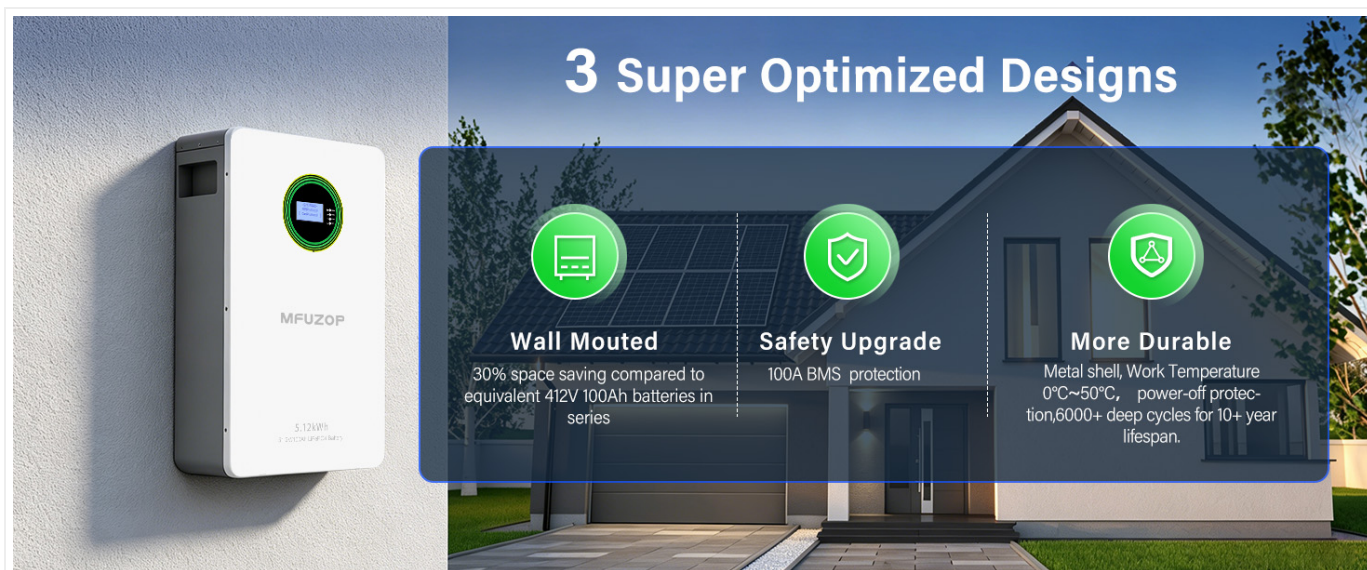


Image: Visual guide for wall-mount installation, showing steps to install the bracket, hang the battery, and connect the conduit box. A caution note reminds users that the battery is heavy and requires multiple people to install.

SPACE-SAVING DUAL INSTALLATION DESIGN

Wall-Mounted or Floor-Standing

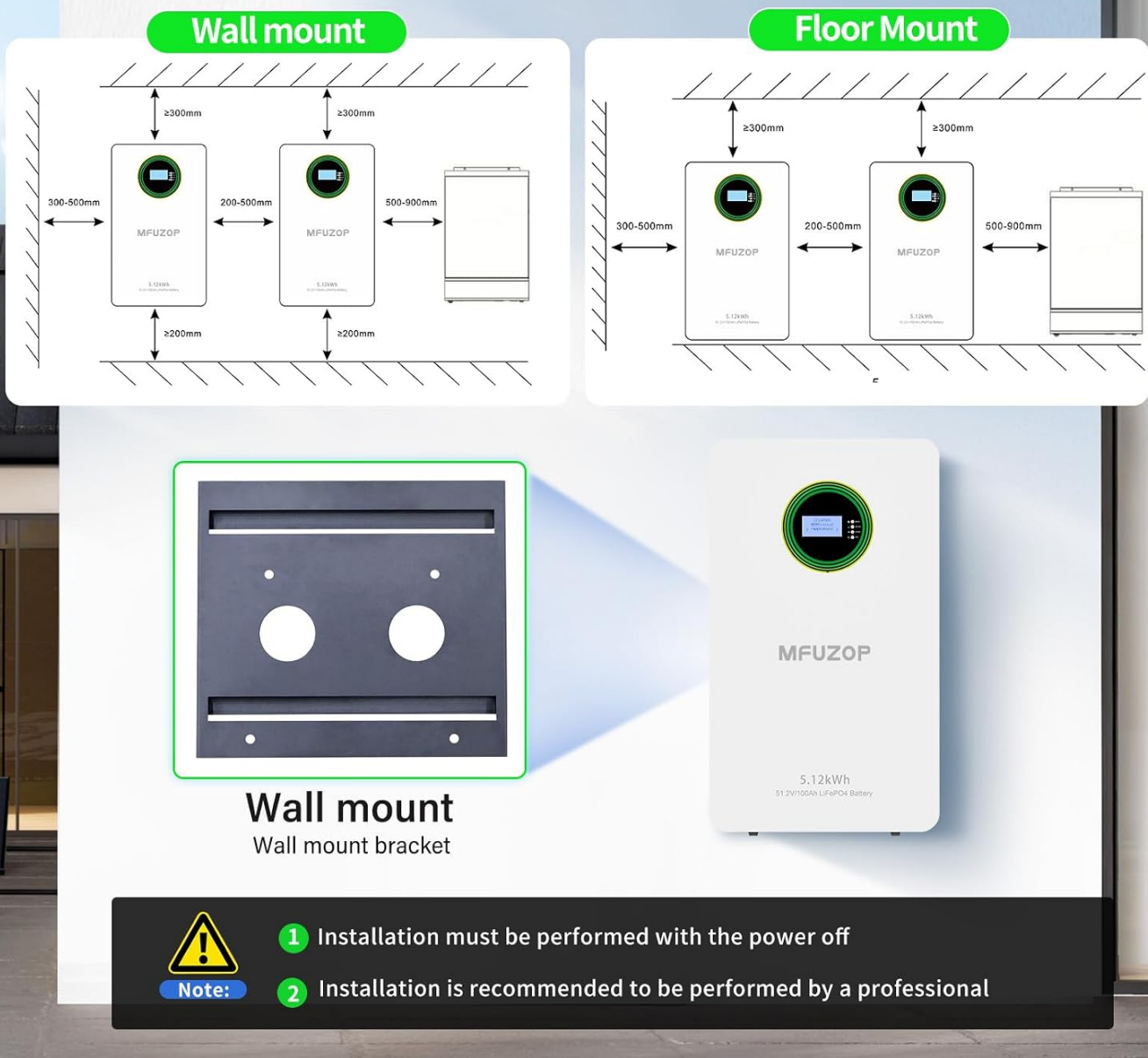


Image: Diagram illustrating both wall-mount and floor-stand installation options, including recommended spacing for heat dissipation.

6. OPERATING INSTRUCTIONS

Once installed and connected, the MFUZOP battery is designed for straightforward operation.

Powering On/Off:

- To power on, rotate the side power switch to the 'ON' position and ensure the DC air breaker is closed.
- To power off, open the DC air breaker first, then rotate the side power switch to the 'OFF' position.

LCD Touchscreen and Indicators:

The high-definition LCD touchscreen provides real-time monitoring of key battery parameters:

- Remaining charge (SOC)

- Voltage
- Current
- Temperature
- Charge/Discharge status

Multiple LED indicator lights offer intuitive feedback on the battery's status. A built-in buzzer will alert users to malfunctions or critical events.



Image: Close-up of the HD smart screen displaying system parameters and charge status indicators (SOC levels).

Communication:

The battery is equipped with RS232, RS485, and CAN communication ports to interface with compatible inverters and monitoring systems. Refer to your inverter's manual for specific connection and configuration details.

Reset Button:

A reset button is provided for system restarts if necessary. Consult the troubleshooting section or contact support before using the reset button for critical issues.

7. MAINTENANCE

The MFUZOP LiFePO4 battery is designed for minimal maintenance. However, regular checks can ensure optimal performance and longevity.

- **Visual Inspection:** Periodically inspect the battery for any signs of physical damage, loose connections, or corrosion.
- **Cleanliness:** Keep the battery and its terminals clean and free from dust and debris. Use a dry cloth for cleaning.
- **Ventilation:** Ensure that the area around the battery remains clear to allow for proper airflow and heat dissipation.
- **Firmware Updates:** If available, check with MFUZOP support for any recommended firmware updates for the BMS.

Do not attempt to perform internal maintenance or repairs. Contact qualified service personnel for any issues beyond basic cleaning and inspection.

8. TROUBLESHOOTING

This section provides guidance for common issues. For complex problems, contact MFUZOP customer support.

Problem	Possible Cause	Solution
Battery not powering on	Power switch off, DC air breaker open, loose connections, low voltage	Check power switch and DC air breaker. Verify all cable connections. If voltage is too low, attempt to charge with a compatible charger.
No charge/discharge	Inverter not connected, BMS protection active, communication error	Ensure inverter is correctly connected and configured. Check LCD for BMS fault codes. Verify communication cable connections.
Buzzer alarm sounds	Over-voltage, under-voltage, over-current, over-temperature, cell imbalance	Check LCD for specific alarm details. Address the underlying cause (e.g., reduce load, check charging voltage, ensure ventilation). The dual dry contact ports can also trigger external alarms for battery failure or low SOC.
LCD display not working	Power issue, display fault	Check battery power. If battery is on but display is blank, contact support.

9. WARRANTY AND SUPPORT

Warranty:

The MFUZOP 51.2V 100Ah Wall Mount LiFePO4 Battery comes with a **2-year manufacturer's warranty**. This warranty covers defects in materials and workmanship under normal use. It does not cover damage caused by improper installation, misuse, abuse, unauthorized modifications, or natural disasters. Please retain your proof of purchase for warranty claims.

Customer Support:

For technical assistance, warranty claims, or any questions regarding your MFUZOP battery, please contact our customer support team through the retailer where you purchased the product or visit the official MFUZOP website for contact information.

When contacting support, please have your product model number (MF-48100-BG) and purchase date available.

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

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