





Wall-mounted Home Battery System User Manual

LFP Wall Series



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About this Document

This document describes the installation, electrical connection, operation and commission of Wall-mounted Battery System (hereafter simply put LFP Wall Series). Before installing and operating LFP Wall Series, ensure that you are familiar with product features, functions, and safety precautions provided in this document.

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1 Product Information

1.1 Battery Overview

The battery is a wall mounted lithium battery pack which consists of long span LiFePO4 battery cells and functional BMS. It can store and release electric energy based on the requirements of the inverter controller. It is mainly for home energy storage system.

Features

- LiFePO4 prismatic cell
- > 6000 cycles @0.5C conditions
- Maximum 1C charge and discharge capability
- Wall mounted IP54 grade
- Protective and active BMS allows greater reliability and control
- Building in terminal design
- Fully recyclable at the end of life

1.2 Appearance



2 Safety Information

2.1 General Safety

Please carefully read the manual safety precautions, and observe all the safety instructions on the equipment and in this document.

The "DANGER", "WARNING", and "NOTICE" statements in this document do not cover all the safety instructions. They are only supplements to the safety instructions.

For user safety and utilization efficiency of this manual, a list of symbols are designed to alert people from danger. You must understand and comply with the emphasized information to avoid personal injury and property damage. Relative safety symbols have been listed below.

Danger	DANGER indicates a hazardous situation which, if not avoided will result in serious injury and fire.
Warning	WARNING indicates a hazardous situation which, if not avoided will result in property loss or void warranty.
Notice	NOTICE indicates normal situation which, if not avoided will result in that battery doesn't work.

Follow local laws and regulations when installing, operating, or maintaining the equipment. The safety instructions in this document are only supplements to local laws and regulations.

2.2 Personal Safety

Personal Requirements

People who plan to install or maintain battery equipment must be trained, understood all necessary safety precautions, and are able to perform all operations correctly.

Only qualified professionals or trained people are allowed to install, operate, and maintain the equipment.

Personal Safety



- > Do not place battery at a children or pet touchable area.
- > Do not touch the energized battery, as the enclosure is hot.
- > Do not touch the energized battery terminals.
- > Do not stand on, lean on, or sit on the battery.

2.3 Electrical Safety

Symbols on Battery

There are some electrical symbols on battery relate to electrical safety. Please make sure you have fully understand them before installation.

4	Electrical danger	Voltage exits when the battery is powered on. Only qualified engineers are allowed to operate.
(-)	Earth connector	Earth connection.
+ -	DC positive and negative connectors	Identify positive and negative connectors of DC power source.
Œ	CE mark	The product meets CE certification.
) M	WEEE tag	Can't leave battery as garbage disposal.
	Recycle	Battery can be recycled.

2.3 Electrical Safety

Electrical Safety



- Before installation, ensure that the equipment is intact. Otherwise, electric shocks or fire may occur.
- Do not connect or disconnect power cables when battery is power-on. Which may cause electric arcs and sparks more overfire or personal injury. Before connecting a power cable, check the positive or negative connectors are correct.
- > Batteries are not allowed in series.
- > Different batteries should not be connected in parallel.
- > Do not connect battery with AC directly.
- > Do not connect battery with PV wiring directly.
- > Do not connect batteries in series.
- > Do not connect battery to faulty or unqualified inverter or charger.
- > Do not create short circuits with the external connection.
- > Make sure the grid is cut off and the battery is powered off before maintenance.
- > Make sure the earth cable is connected correctly.

🚹 Warning

- > Recharge battery in every six months.
- > Recharge battery within 10 days after battery is fully discharged.
- Please engage greater than or equal to four batteries when maximum charge current is more than 100A.
- > Make sure battery cable placement is installed correctly.
- When the battery is being installed or repaired, make sure the battery is powered off and using a multimeter to make sure there is no voltage in the positive and negative terminals.

2.3 Electrical Safety

2.3 Electrical Safety

A Notice

- > Please use dedicated insulated tools for install and maintenance.
- > Please make sure all batteries are power-off when multiple parallel connection.
- > Please check lights on sequence when battery power-on.
- Please make sure communication connection connect correctly with battery and inverter.
- Please make sure ADDS dip switch settings are correctly for single or multiple batteries.
- Please check inverter alarm or SOC reading when there is BMS communicated with inverter.

Environment Safety



- > Ensure that the equipment is installed in a dry and well-ventilated environment.
- > The installation position must be away from direct sunlight and rain.
- > The installation position must be far away from fire sources.
- > The installation position must be far away from water sources such as taps, sewer pipes, and sprinklers to prevent water seepage.
- > The bracket must be installed solidly and horizontally.
- > Do not expose the equipment to flammable or explosive gas or smoke.
- > Do not perform any operation on the equipment in such environments.
- The operation and service life of the battery depends on the operating temperature. Operate the battery at a temperature equal to or better than the ambient temperature. The recommended operating temperature range is from 0°C to 30°C.



2.4 Transportation Safety



- > The products passed certification UN38.3.
- > The products have MSDS.
- The products belong to class 9 dangerous goods.
- Please protect the packing case from the below situations.
- > Being dampened by rains, snows, or falling into water.
- > Falling or mechanical impact.
- > Being upside-down or tilted.

3 Attentions

- Before using the battery pack, please read the manual carefully to understand the usage and precautions;
- Non-professionals shall not disassemble the battery without authorization;
- Be sure to use the original special charger for charging or the charger agreed by both parties;
- During use or storage, if you find abnormal heating, discoloration, deformation or other abnormalities in the battery, please stop using the battery;
- The storage temperature of the battery is -10~35°C, please place the battery in a dry and cool environment
- Do not bump, apply external force or make the battery fall from high altitude during use;
- If the battery is not used for a long time, the battery pack needs to be charged to more than 80%, turn off the power switch, and store it in a ventilated and dry environment.

4 Specifications

Model	LFP Wall 25.6V100Ah
Usable Capacity	2.56kWh
Nominal Voltage	25.6V
Nominal Capacity	100Ah
Working Voltage Range	22.4-29.2V
Max. Charging Current	100A
Recommended Charging Current	50A
Max. Discharging Current	100A
Recommended Discharge Current	50A
Max. Output Power	2560W
Communication	CAN OR RS485
Cycle Life	>6000 (@0.5C 90%DOD >80%SOH)
Working Temp. Range	Charge: 0°C~50°C Discharge: -20°C~60°C
Storage Temperature	-10°C~45°C
Net Weight	23kg
Product Dimension	472*400*155mm

Specifications

Model	LFP Wall 25.6V150Ah
Usable Capacity	3.84kWh
Nominal Voltage	25.6V
Nominal Capacity	150Ah
Working Voltage Range	22.4-29.2V
Max. Charging Current	150A
Recommended Charging Current	75A
Max. Discharging Current	150A
Recommended Discharge Current	75A
Max. Output Power	3840W
Communication	CAN OR RS485
Cycle Life	>6000 (@0.5C 90%DOD >80%SOH)
Working Temp. Range	Charge: 0°C~50°C Discharge: -20°C~60°C
Storage Temperature	-10°C~45°C
Net Weight	35kg
Product Dimension	500*400*185mm

Model	LFP Wall 25.6V200Ah
Usable Capacity	5.12kWh
Nominal Voltage	25.6V
Nominal Capacity	200Ah
Working Voltage Range	22.4-29.2V
Max. Charging Current	100A
Recommended Charging Current	50A
Max. Discharging Current	100A
Recommended Discharge Current	50A
Max. Output Power	2560W
Communication	CAN OR RS485
Cycle Life	>6000 (@0.5C 90%DOD >80%SOH)
Working Temp. Range	Charge: 0°C~50°C Discharge: -20°C~60°C
Storage Temperature	-10°C~45°C
Net Weight	53kg
Product Dimension	675*400*165mm

Specifications

Model	LFP Wall 51.2V100Ah
Usable Capacity	5.12kWh
Nominal Voltage	51.2V
Nominal Capacity	100Ah
Working Voltage Range	44.8V-58.4V
Max. Charging Current	100A
Recommended Charging Current	50A
Max. Discharging Current	100A
Recommended Discharge Current	50A
Max. Output Power	51200W
Communication	CAN OR RS485
Cycle Life	>6000 (@0.5C 90%DOD >80%SOH)
Working Temp. Range	Charge: 0°C~50°C Discharge: -20°C~60°C
Storage Temperature	-10°C~45°C
Net Weight	53kg
Product Dimension	675*400*165mm

Model	LFP Wall 51.2V150Ah
Usable Capacity	7.68kWh
Nominal Voltage	51.2V
Nominal Capacity	150Ah
Working Voltage Range	44.8-58.4V
Max. Charging Current	150A
Recommended Charging Current	75A
Max. Discharging Current	150A
Recommended Discharge Current	75A
Max. Output Power	7680W
Communication	CAN OR RS485
Cycle Life	>6000 (@0.5C 90%DOD >80%SOH)
Working Temp. Range	Charge: 0°C~50°C Discharge: -20°C~60°C
Storage Temperature	-10°C~45°C
Net Weight	84kg
Product Dimension	670*400*185mm

4 Specifications

LFP Wall 51.2V200Ah
10.24kWh
51.2V
200Ah
44.8V-58.4V
100A
50A
100A
50A
51200W
CAN OR RS485
>6000 (@0.5C 90%DOD >80%SOH)
Charge: 0°C~50°C Discharge: -20°C~60°C
-10°C~45°C
108kg
690*500*246mm



Learn More: www.lybess.com

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