

# SF100X Balcony Energy Storage System-Battery

## Usage Guidelines



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## Attention

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- 1. Please read the product user manual carefully before using.**
- 2. Do not handle the product violently, impact it, or puncture it.**
- 3. Please recycle and dispose this product according to local laws and regulations.**
- 4. Do not disassemble the product by yourself. If you have to disassemble this product, you must obtain authorization from the manufacturer.**
- 5. During installation, please pay attention to the positive and negative polarity of the cables to avoid incorrect connections or short circuits.**
- 6. If you need to replace the cables or add additional expansion batteries during daily use, please turn off the product and disconnect the power supply. Otherwise, it may cause a spark and cause fire.**
- 7. Before shipping this product, we have careful inspections and packaging. If you receive a damaged package or missing parts, please contact the dealer for assistance. We are delight to help.**

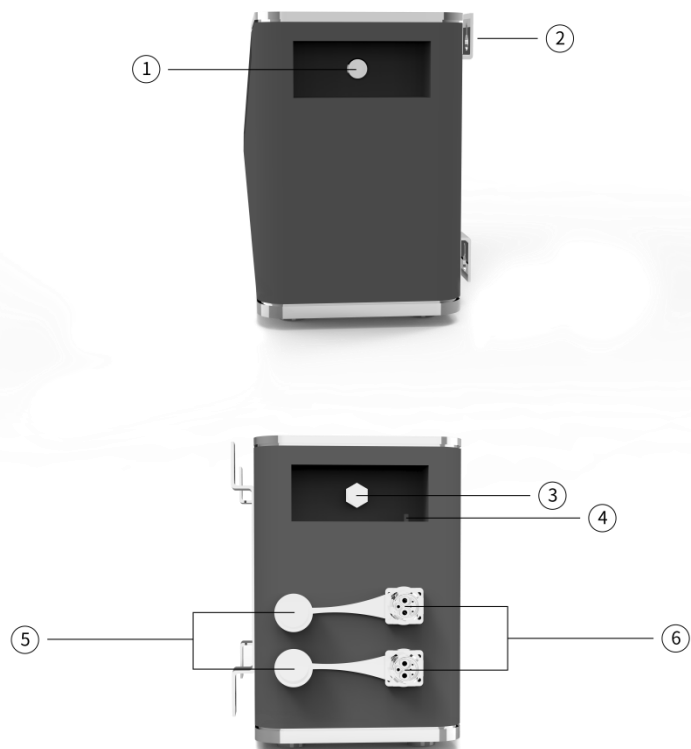
## 1. Product Introduction

This product is a balcony energy storage system expansion battery, suitable for SF series balcony energy storage system battery capacity expansion, the product built-in lithium iron phosphate battery 1382Wh, the maximum SF series balcony energy storage system battery capacity expansion to 6910Wh. Users can match extended battery packs according to solar panel energy storage needs or household power needs.

When purchasing this product, please confirm whether the product in the SF series balcony energy storage system has the parallel expansion function. When expanding the battery capacity, only one cable can be connected to complete the battery capacity expansion, which is convenient and fast.

## 2. Product Functions Introduction







- ① ON/OFF Button
- ② Wall Mounted Metal Frame
- ③ Waterproof Vent Valve
- ④ Ground Wire
- ⑤ Waterproof Cover
- ⑥ Parallel Port



### 3. Product Technical Parameters

|                       | Item                            | Specification   |
|-----------------------|---------------------------------|-----------------|
| <b>Appearance</b>     | Model                           | SF100X          |
|                       | Weight                          | 20Kg±0.2Kg      |
|                       | Size                            | 490*170*255mm   |
| <b>Battery System</b> | Battery Type                    | LiFePO4 Battery |
|                       | Battery Lifecycle               | 6000+ times     |
|                       | Rated Battery Voltage           | 51.2V           |
|                       | Battery Operating Voltage Range | 43.2V-58.4V     |
|                       | Capacity                        | 27Ah            |
|                       | Battery Capacity                | 1382Wh          |
|                       | Charging Current                | ≤30A            |
|                       | Discharge Current               | ≤30A            |
|                       | Battery Capacity Expansion      | Support         |
|                       | IP Grade                        | IP65            |
|                       | Charge Temperature Range        | -20-55℃         |
|                       | Discharge Temperature Range     | -30-60℃         |
|                       | Relative Humidity               | 60±25%          |
|                       | Storage Temperature             | 5-30℃           |
|                       | Altitude Range                  | ≤ 2000m         |

## 4. Product Packing List

| Serial number | Item                       | Quantity | Picture   |
|---------------|----------------------------|----------|---|
| 1             | Host SF100X                | 1        |    |
| 2             | Installation Brackets      | 2        |    |
| 3             | Screw Mounting Rubber Plug | 4        |    |
| 4             | Screw                      | 4        |   |
| 5             | Parallel Connection Cable  | 1        |  |
| 6             | Usage Guidelines           | 1        |  |

## 5. Product Use

(1) This product has a built-in lithium iron phosphate battery of 1382Wh. When expanding the battery capacity in parallel with the SF series balcony energy storage system, a maximum of 4 products can be supported in parallel, which can expand the battery capacity of the SF series balcony energy storage system to 6910Wh.

(2) This product supports SF100-E, SF100D-E, SF200D-E battery capacity expansion in SF series products.

(3) When connecting this product to expand the battery capacity, please turn off

the power switch of the connected and connected product to avoid damage to the product caused by excessive instantaneous current.

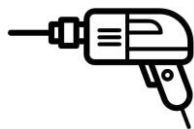
(4) When the connection is successful, turn on the power switch, you can check the working status of the product through the SF balcony energy storage system APP.

## 6. Product Installation

### (1) Preparation Before Installation:



Phillips Screwdriver



Electric Drill



Gloves



Multimeter



Safety Goggles



Measuring Tape



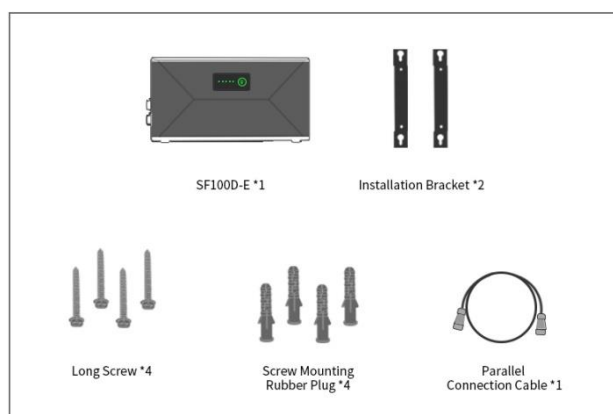
Insulated Shoes



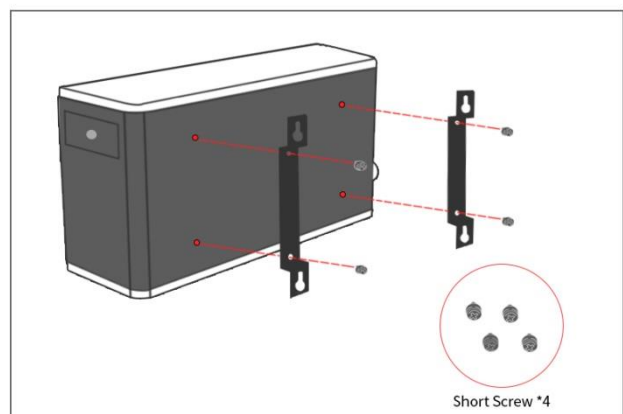
Hammer

**Tools:** Phillips screwdriver; Electric drill, Gloves, Multimeter, Safety goggles, Measuring tape, Insulated shoes.

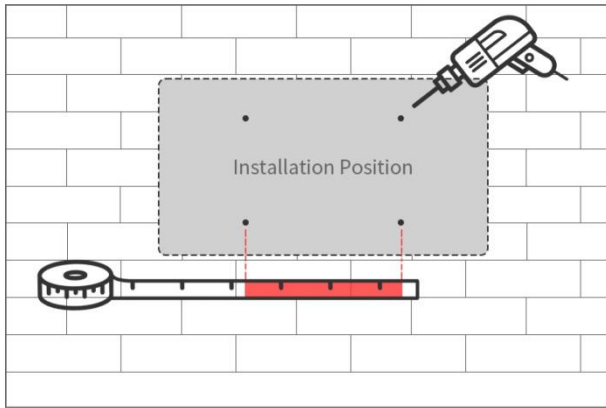
### (2) Installation Steps



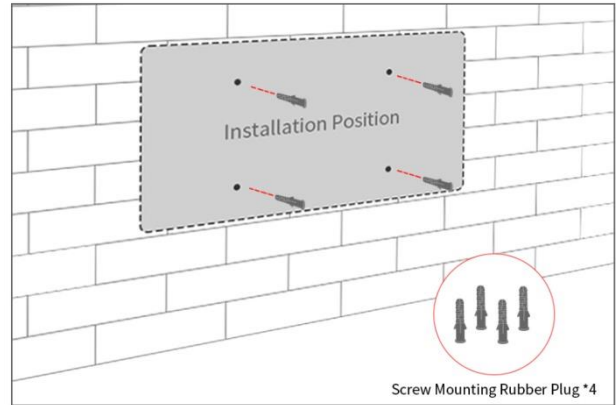
Step 1 : Sort all the accessories of the product.



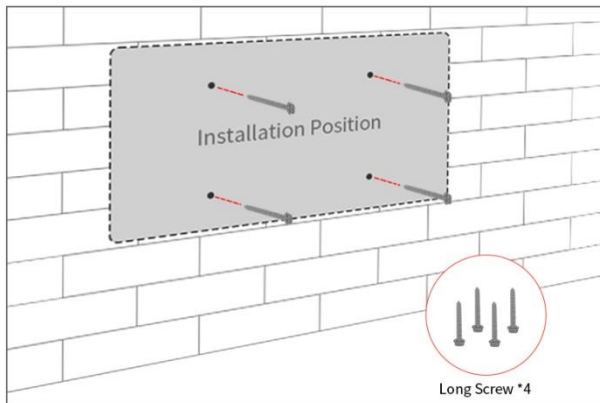
Step 2 : Use 4 short screws to secure the 2 mounting brackets to the back of the product and ensure that the screws are securely installed.



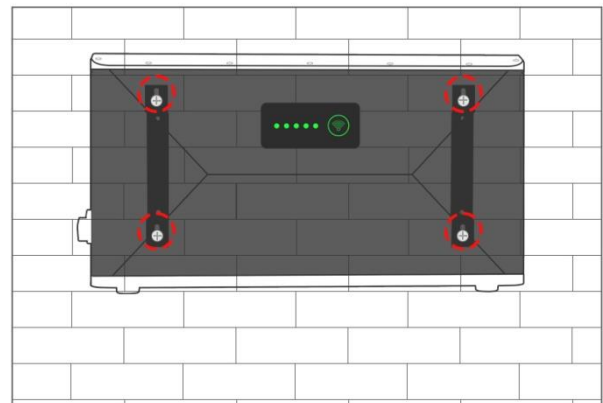
**Step 3 :** According to the distance of the bracket hanging hole on the back of the product, choose a wall that can withstand gravity, and mark the wall with a ruler.



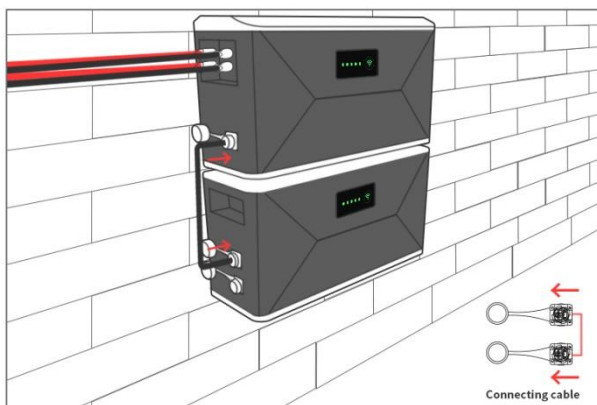
**Step 4 :** Use an electric drill to drill holes and insert screw plugs into the wall, Knock the screw plugs flat with a hammer to the wall.



**Step 5 :** then screw the long screws into the screw mounting holes, The distance between the screw caps and the wall must be 8mm.

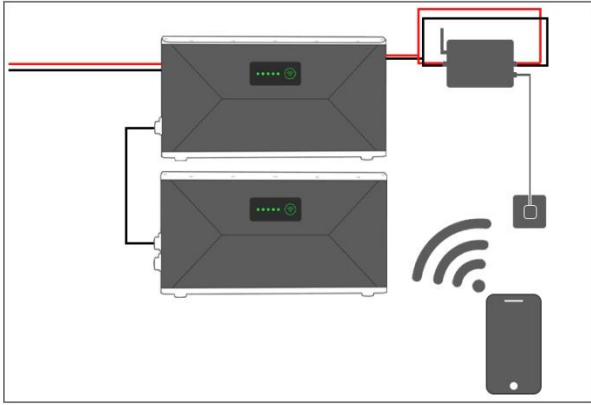


**Step 6 :** Align the mounting bracket hanging hole on the back of the product with the screw on the wall, hang the product on the wall, and ensure that the installation is firm.



**Step 7 : Connecting cable**

- A.** Please turn off the power switch of SF balcony energy storage system.
- B.** Open the SF balcony energy storage system and the waterproof cover of the parallel port of this product, connect one end of the parallel expansion cable to the SF balcony energy storage system, and connect the other end to the product.
- C.** Check that the cable is fully inserted and then turn on the power switch.



**Step 8 : Check the connection status through the APP**

When the product is successfully connected, you can view the power and status of the product through the SF balcony energy storage system APP.

## 7. Safety Guidelines

- (1) Do not place this product near any heat sources, such as open flames or heating furnaces.
- (2) Do not place this product into position nearby any liquid, and do not drop this product into water.
- (3) It is prohibited to use this product in areas with strong static electricity or strong magnetic fields.
- (4) Do not dismantle the product or puncture it with any sharp objects.
- (5) Do not short-circuit the product using wires or other metallic objects.
- (6) Please use solar panels and microinverters manufactured by reputable companies to prevent damage to the product.
- (7) When using this product, strictly adhere to the recommended operating temperature range stated in the user manual. High temperatures may cause the battery to catch fire or explode.
- (8) Do not stack any heavy objects on top of this product.

(9) Avoid impact, dropping, or severe vibration. If significant external force is applied, immediately disconnect the power and cease using the product.

(10) In case of a fire, please use the following recommended extinguishing materials in the given order: water or water mist, sand, fire blanket, dry powder, carbon dioxide fire extinguisher.

(11) Install this product in a location where children and pets cannot access it.

## **8. Disposal**

This product contains a lithium iron phosphate battery, and should be professionally disassembled and disposed of according to local laws and regulations, with materials sorted accordingly.

## **9. Troubleshooting**

### **(1) Solar panel not charging**

- A. Check that the solar panel's working range matches this product;
- B. Check that the solar panel cable is securely connected and that the positive and negative terminals are correct;
- C. Check that the solar panel is exposed to sunlight. If the solar panel is not exposed to sunlight, it may not work.

### **(2) Product not discharging**

- A. Check whether the product's battery has power. If it doesn't, charge the product first;
- B. Check if the product switch is turned on;

- C. Check if the cable connecting the product and microinverter is connected securely and the polarity is correct;
- D. Check if the microinverter is functioning properly;
- E. Check if the grid has power. When the grid is down, the microinverter will not operate.

## 10. After-sales service

When a fault occurs during the use of the product, please follow the "troubleshooting" method in Article 9 and still cannot eliminate the fault, please contact the dealer in time to give clear feedback to the after-sales personnel: product model, purchase date, contact phone number, fault phenomenon.

### **(1) The product warranty period is five years.**

The warranty period starts from the date of purchase by the consumer. To determine the purchase date, please keep related receipts or online purchase records.

### **(2) Within the warranty period, if any damage is caused by product design, materials, or non-human factors, the company will assume the obligation of free maintenance and replacement of parts.**

### **(3) The following situations are not covered by the warranty:**

- A. Unauthorized repairs or modifications;
- B. Product performance failure caused by human factors;
- C. Damage caused by natural disasters, lightning, accidents, or other irresistible factors;
- D. Damage to the appearance of the product caused by use, which is not covered by the warranty.

**(4) Warranty record**

Date of purchase:

Product SN:

| Maintenance date | Fault cause | Maintenance result | Maintenance person |
|------------------|-------------|--------------------|--------------------|
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