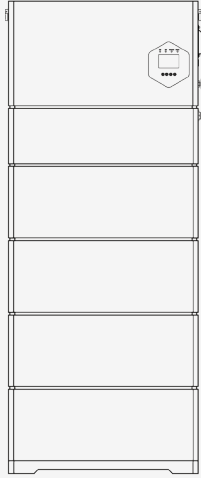


# Sunsynk Elite 5.1kWh BMS + Base IP65

SS-5.1kWh-ELITE-BMS+BASE-IP65-00



## Safety Instructions

Important safety instructions that must be followed when installing the Li-ion Battery System.

### Labels Description

-  This symbol indicates information that if ignored, could result in personal injury, physical damage or even death due to incorrect handling.
-  Electrical hazard.
-  Danger.
-  Do not dispose the device, accessories, and packaging with regular waste. Follow local ordinances or contact the manufacturer for disposal guidance.
-  CE mark is attached to the solar inverter to verify that the unit follows the provisions of the European Low Voltage and EMC Directives.
-  Read the manual.

## Qualified Personnel

The inverter and end-use system must only be commissioned and operated by qualified personnel to ensure safety and compliance. A qualified person is someone who has received proper instruction or supervision from an electrically skilled professional, allowing them to recognise electrical hazards and take necessary precautions.

To be considered qualified, an individual must have a thorough understanding of electrical safety protocols, electrical installations, and electromagnetic compatibility (EMC). They must also be authorised to perform tasks such as energizing, grounding, and tagging equipment, systems, and circuits in accordance with established safety standards.

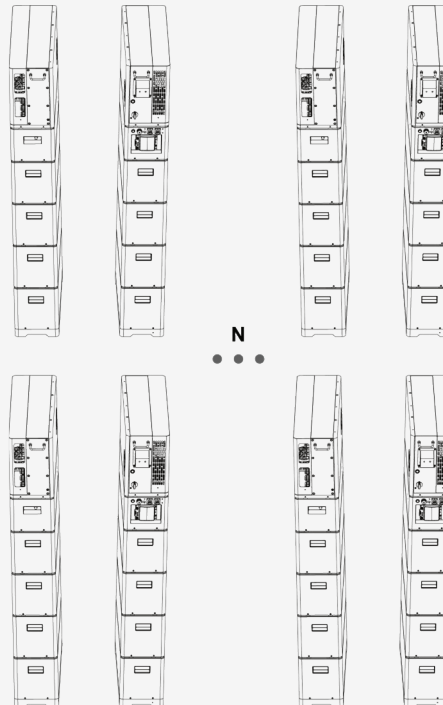
Strict adherence to these qualifications helps ensure the safe installation, operation, and maintenance of the system.

## Installation

This section provides critical safety instructions and environmental parameters required for setting up the Sunsynk rechargeable Li-ion battery system.

### Layout

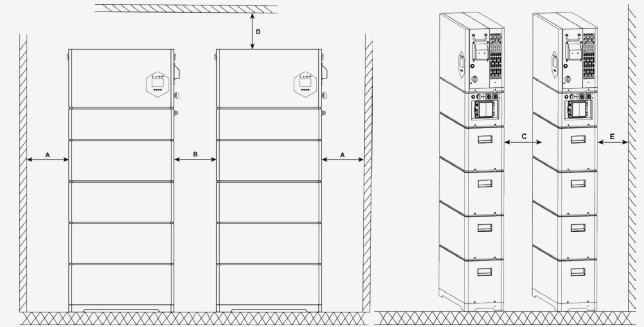
If your installation site is limited and the space is relatively narrow, refer to the following layout for installation.



## Clearance

### ⚠ Caution

Batteries should be installed in a clean flat place away from water and fire sources, and at a suitable temperature. If your installation site is limited and the space is relatively narrow, you can refer to the following layout for installation.



### Item Distance (mm)

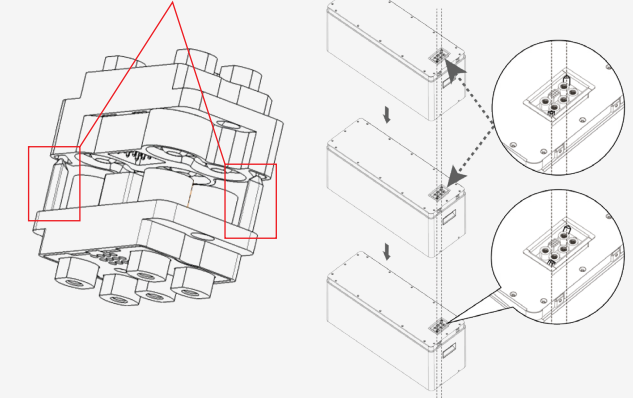
Item	Distance (mm)
A	≥600
B	≥300
C	≥20
D	≥600
E	10-35

## Assembly

### ⓘ Note

Because the assembly tolerances present in the overall vertical stacking of the product and the lower quick-connector is locked and fixed to the enclosure, the upper quick-connector is designed to be guided and floating to ensure reliable connection between the upper and lower quick-connectors.

### Upper and lower quick-connectors



## ! Note

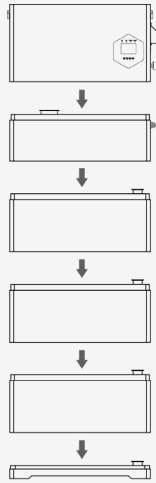
- **Drilling Dust:** When drilling holes, take care to prevent dust from entering the battery, as this may affect battery performance and function.
- **Floor Level:** Ensure that the floor is level enough to avoid affecting hole drilling accuracy (height or location).
- **Cleanup:** After drilling, clean up the floor immediately.

There are two installation methods for you to make a decision. Precede as follows:

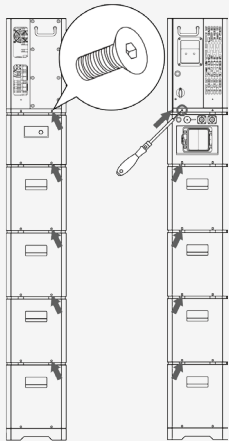
### Method 1

Follow these sequential steps for installation:

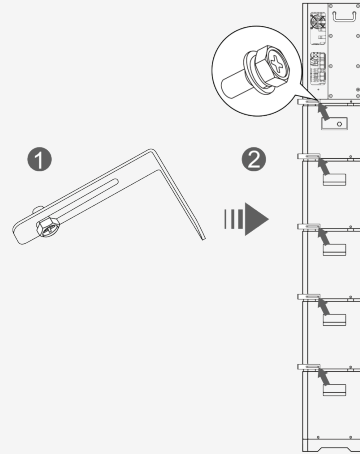
- Step 1** | Take out the base and then put it onto the designated foundation. Stack batteries onto the base in turn. Place the PDU over the battery and the inverter over the PDU finally. Importantly, the quantity of stacked batteries that are regarded as one cluster, is no more than 5.



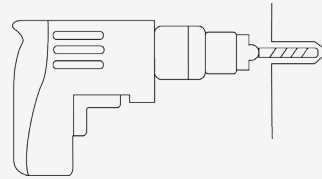
- Step 2** | Secure the stacked components with screws by a screwdriver.



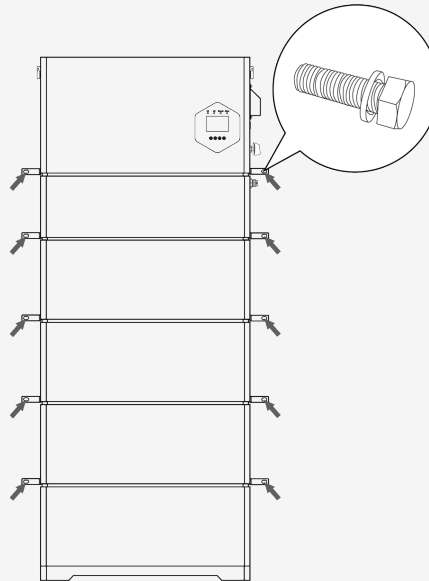
- Step 3** | Use 10 screws to secure 10 fixed supports to the left and right side of the batteries and the PDU. Note: Two fixed supports on the PDU are used to secure the PDU and your inverter.



- Step 4** | Choose appropriate locations on the wall for drilling assembly holes (aperture: 6mm, depth: 50mm).



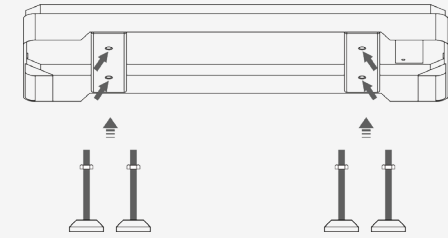
- Step 5** | Secure the whole system to the wall using 10 washers and hex bolts.



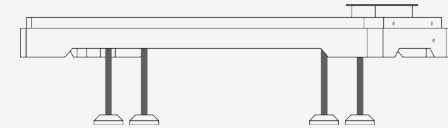
### Method 2

Follow these sequential steps for installation:

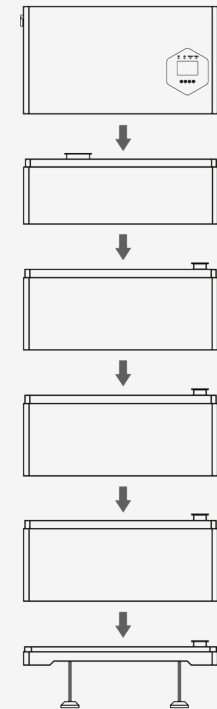
- Step 1** | By rotating clockwise, the adjusting block is combined with the base 1, and the length can be adjusted to 40mm.



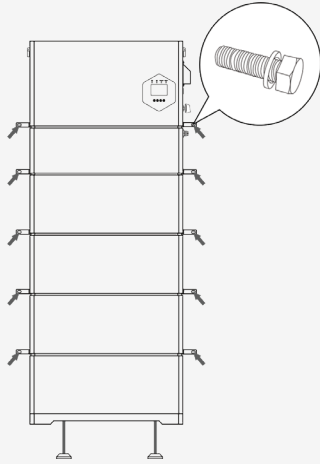
- Step 2** | Adjust the height of the adjusting block by turning it.



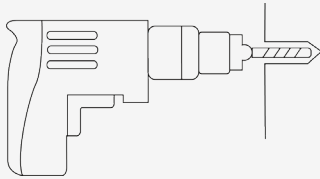
- Step 3** | Stack the base, batteries, the PDU and the inverter, and then secure with screws as mentioned in Method 1. Importantly, the quantity of stacked batteries that are regarded as one cluster, is no more than 5.



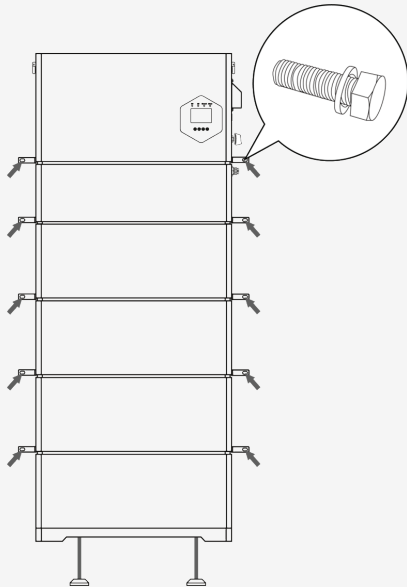
**Step 4** | Use 10 screws to secure 10 fixed supports to the left and right side of the batteries and the PDU. Note: Two fixed supports on the PDU are used to secure the PDU and your inverter.



**Step 5** | Choose appropriate locations on the wall for drilling assembly holes (aperture: 6mm, depth: 50mm).



**Step 6** | Secure the whole system to the wall using 10 washers and hex bolts.



## Wire Connection

### Safety Precautions

#### ⚠ Caution

- The power rating of the inverter matched with a single battery system shall not exceed 12 kW.
- Exceeding 12 kW will cause heating of the connectors and cable, and in severe cases, it will cause a fire accident.
- If the inverter power exceeds 12 kW, the connection mode must be used Multiple Battery Systems!

### Connection between Battery System and Inverter

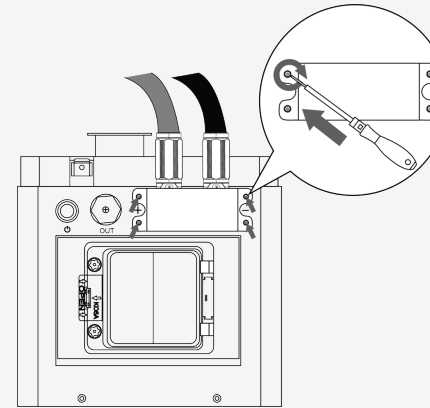
Inverter Power (kW)	Cable Size (AWG)	Cable Section (mm <sup>2</sup> )
5/6/8/10/12	1/0	50

### System Earthing Position

The grounding point of this product is located on the inverter. If required, please refer to the inverter manual.

#### ! Note

After wiring is completed, please secure the quick-release anti-tamper bracket with 4 bolts (M4×10).



## Contact Us

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### Sunsynk Elite

Scan the QR code for more product information or use the link below:

[www.sunsynk.com/stackable-all-in-one](http://www.sunsynk.com/stackable-all-in-one)



### Warranty Registration

Scan the QR code to sign up for the manufacturer's warranty, or use the link below:

[www.sunsynk.org/warranty](http://www.sunsynk.org/warranty)