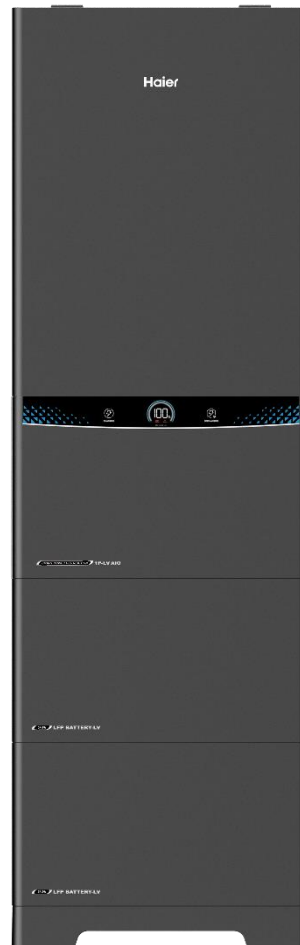


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HAIER E-TOWER QUICK INSTALLATION GUIDE



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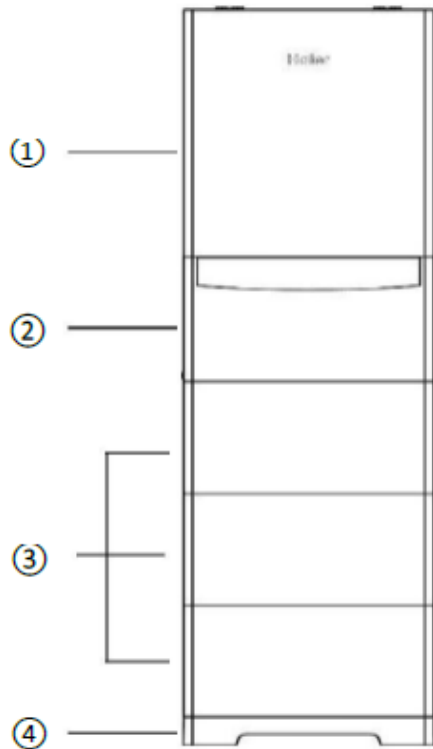
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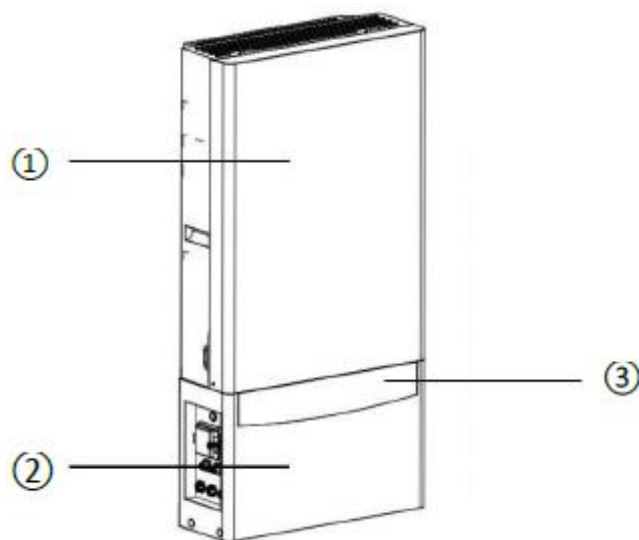
1.Module Introduction

Appearance description



Item	Description
1	PCS Module
2	Power distribution module
3	Battery module
4	Mounting base

Control module



Item	Description
1	PCS module shell
2	Power distribution module
3	Display

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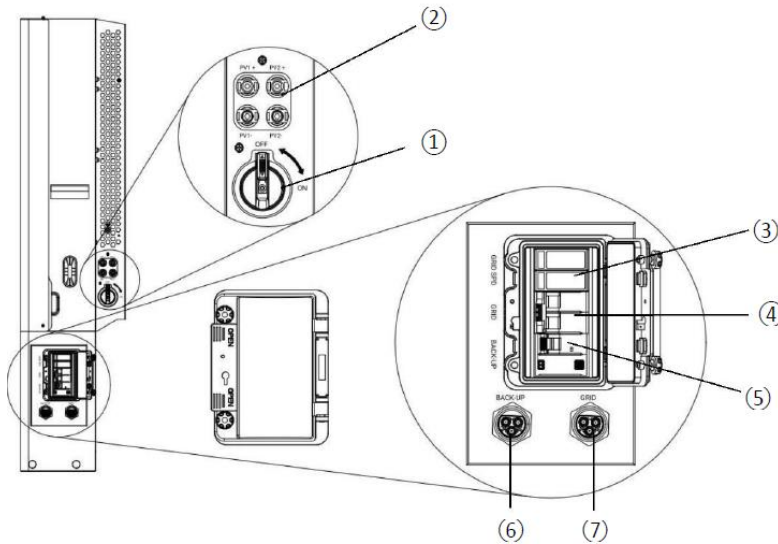
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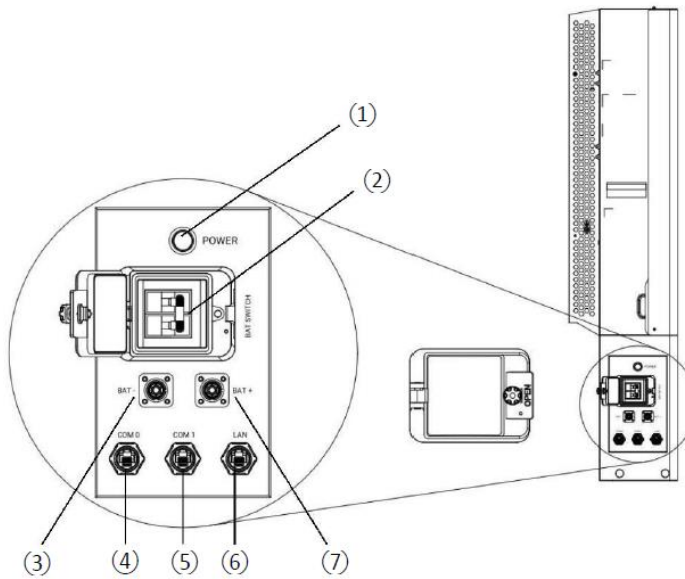
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Right side of the Power Distribution



Item	Description
1	PV Switch
2	PC MC4 port
3	GRID surge protection device
4	GRID breaker
5	BACK-UP breaker
6	BACK-UP connecting port
7	GRID connecting port

Left side of the Power Distribution



Item	Description	Item	Description
1	POWER button	5	Parallel communication 1 (COM1)
2	BAT switch	6	Maintenance (LAN)
3	BAT - connecting port	7	BAT + connecting port
4	Parallel communication 0 (COM0)		

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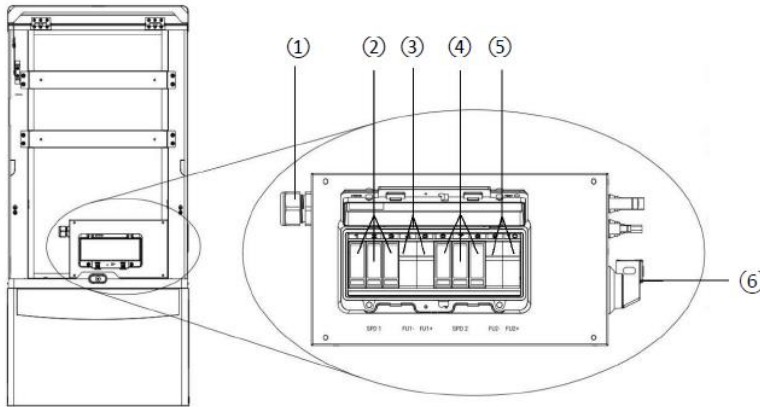
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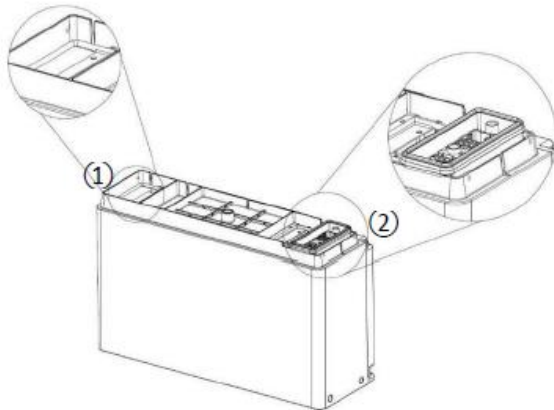
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Front side of the PV box



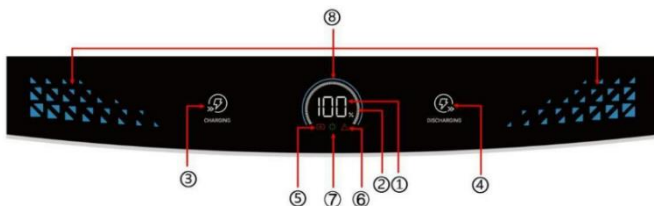
Item	Description	Item	Description
1	PV interface (to PCS)	4	Surge protection Device (PV2)
2	Surge protection Device (PV1)	5	Fuse protector (PV2)
3	Fuse protector (PV1)	6	PV Switch

Battery module



Item	Description
1	Handle
2	Power/Communication connector

Display description



Item	Description	Item	Description
1	SOC value	5	Low SOC status
2	SOC power bar	6	Fault status
3	Charging status	7	System operation normally
4	Discharging status	8	Decorative lamp

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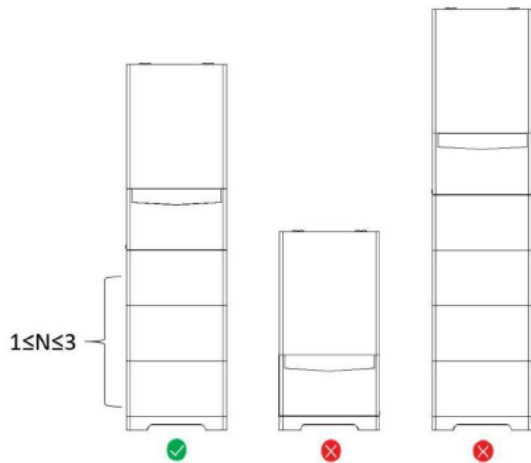
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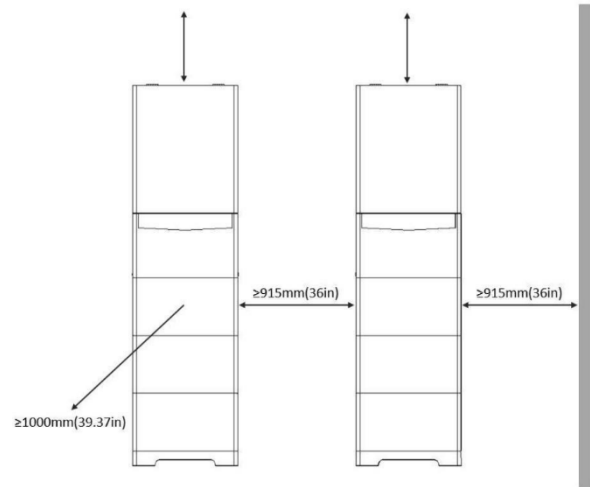
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2. Installation physical requirements

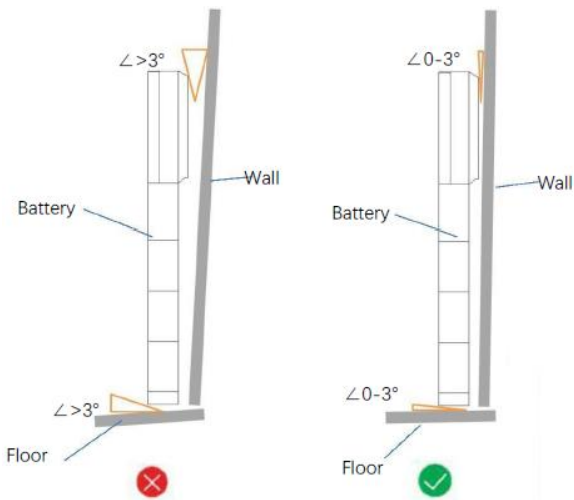
Item inspection



Installation clearance



Level control



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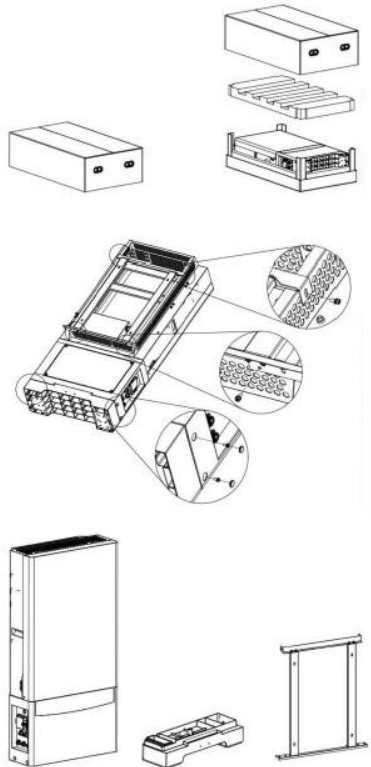
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3. Battery Installation

1. **Place the base:** Put the Power distribution module out of the carton. Loosen screws secured to base and Power distribution module, bracket and Power distribution module. Then place them side by side.

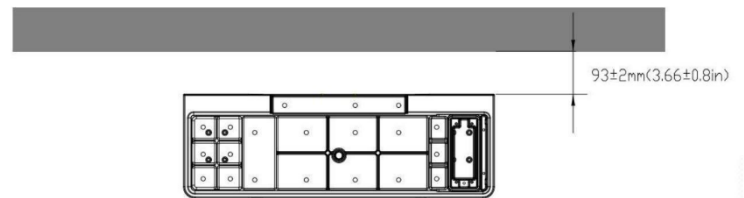
The base module should be placed on a level ground, parallel to the wall. The clearance to the wall should be 93mm (3.66 inches). Use a level rule to check the horizontal angle of the base. Ensure that the tilt angle is less than 3° .

Unboxing HQBK-00-1P

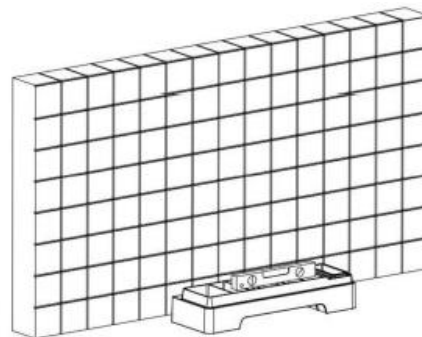


Upper view

(difference from the wall: $93 \pm 2\text{mm}$ ($3.66 \pm 0.8\text{in}$))



Frontal view



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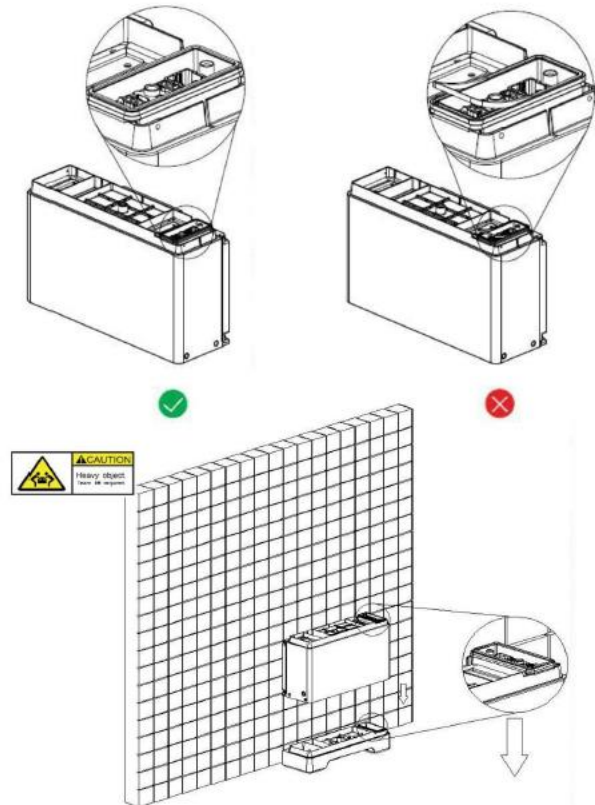
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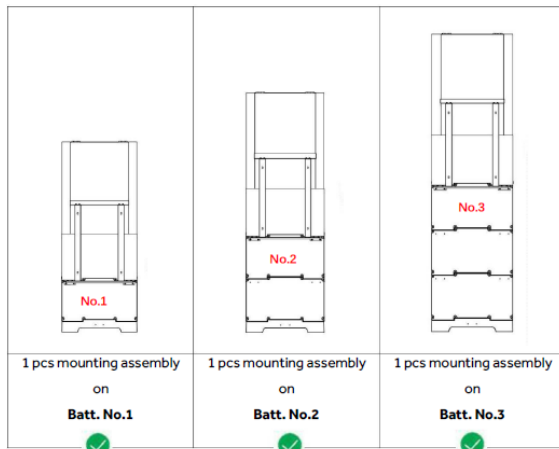
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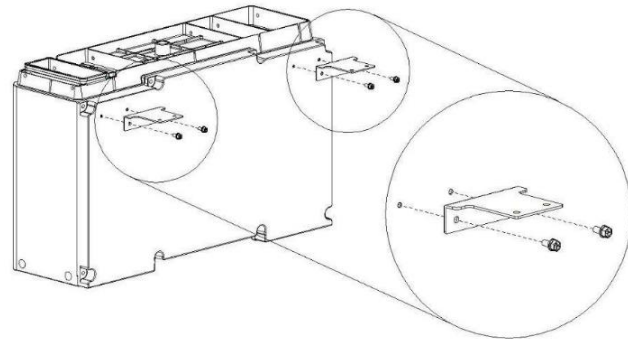
2. **Stack battery module (if we want to stall more than one):** Before stack battery module, please check that the terminal sealing ring is well fixed. Unit weights 50 kg (110.2lbs). Two or more people are necessary. Align the connector side first; then stack gently to avoid damaging the connector.



3. **Install the angle bracket if it's the final module before the control box.**



Refer to the following for the recommended the wall mounting assembly (angle bracket + bracket) installation: only the top battery pack that Power distribution module directly stack need the angle bracket.



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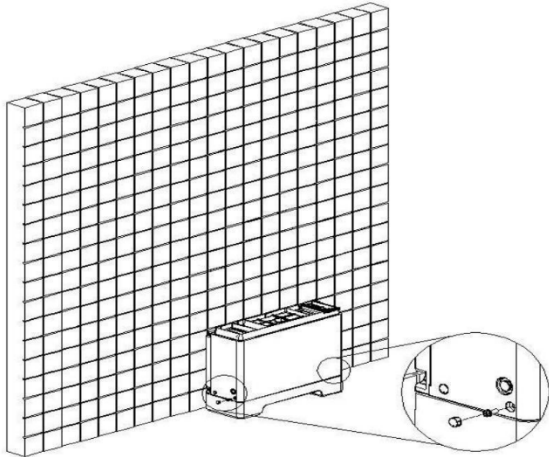
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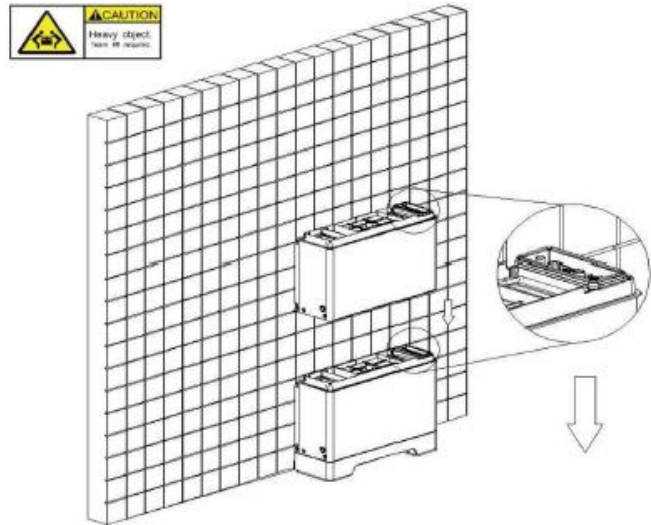
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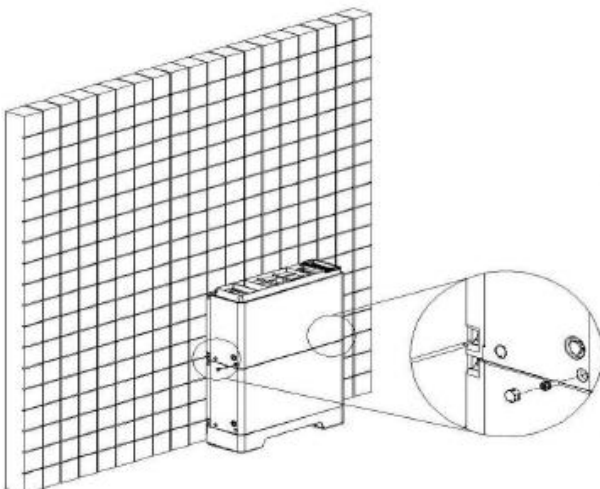
A. Fasten the installed battery module



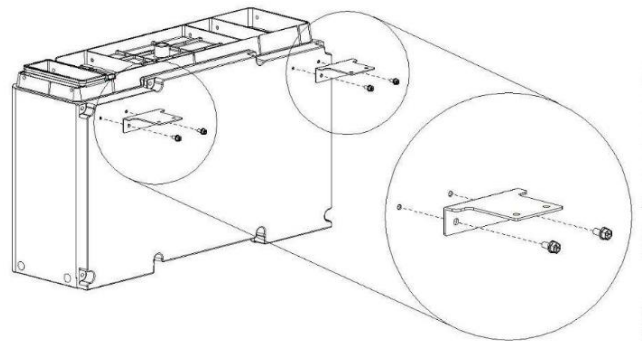
B. Adding an additional battery module



C. Fasten the stacked battery module



D. Install the angle brackets in the upper module



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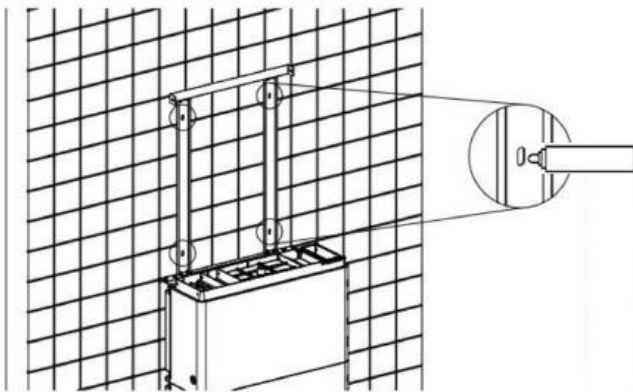
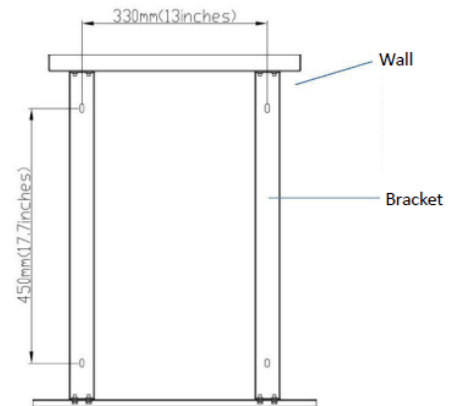
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4. Bracket fixing bolt positioning

Take into account the actual surface condition before fixing the bracket. The bolt horizontal spacing of the two vertical beams is **330mm (13 inches)** and the upper and lower bolt spacing of the same vertical beam is **450mm (17.7 inches)**.



5. Install bracket

5.1. Mark the screw position: Place the bracket against the wall on the angle bracket **(Ensure the screw holes of bracket are aligned)** and mark the drilling point.

5.2. Drilling (for concrete or brick wall) and fixing the bracket on the wall. Covering on the battery connector to prevent falling debris (such as the PE bag of product packaging). This case is useful for concrete or wooden walls.

Note: the self-tapping screw must penetrate the wall 38mm at least.

1. Use ST6.3*40 4pcs self-tapping screws to drill directly into the wooden wall to fix the bracket.
2. Use a 13/64 bit to pre-drill the holes if there is concrete wall. Insert expansion tubes into the holes, then use the ST6.3*40 4pcs self-tapping screws to fix the bracket.

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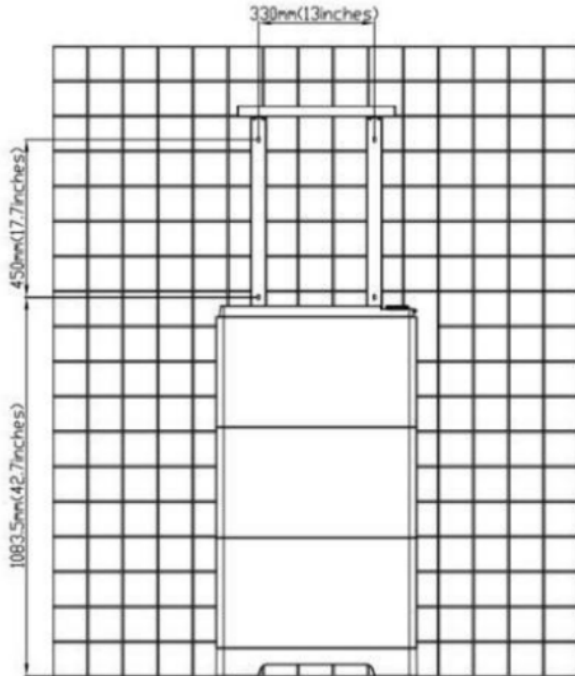
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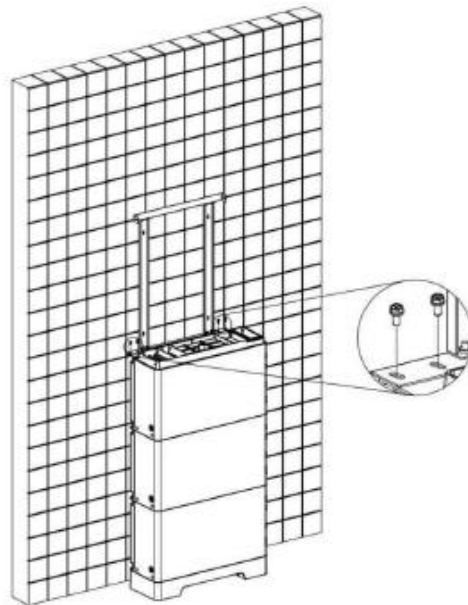
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Dimensions	Size
Width	330mm (13 inches)
Bracket height	450mm (17.7 inches)
Three battery module height	1083.5mm (42.7 inches)
Two battery module height	736,5 mm (29.1 inches)
One battery module height	389,5mm (15.5 inches)
Single battery height	347mm (13.6 inches)

6. **Bracket assembly:** Reinforce the bracket by fixing the screws with angle bracket.



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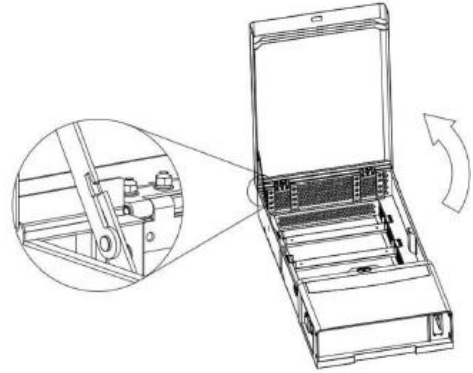
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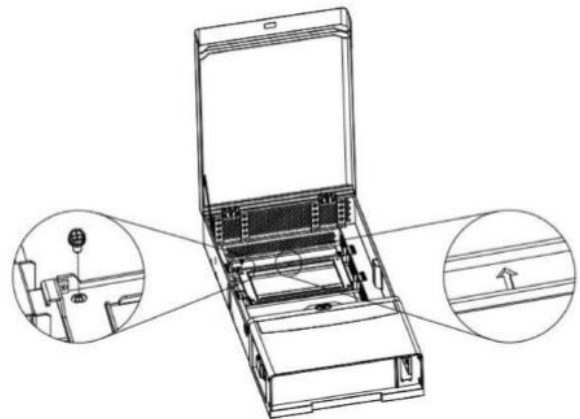
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4. Installation of Power Distribution Module and Inverter

1. Place the Power distribution module horizontally on level ground and loosen the screws on both sides.
2. Open the inverter shell upwards to 90° and clamp the bracing piece into the slot. Make sure the bracing piece clamp is in place.



3. Fix the mounting beam with inverter bracket to the shell interior. The inverter bracket should be mounted with the arrow facing upward.



4. Close the cover. Stack the Power distribution module on top of battery modules stack. Fasten the battery module and Power distribution module.
5. **Install the inverter:**
 - a. Fasten the ground cable on the inverter side with screw (M5*12).

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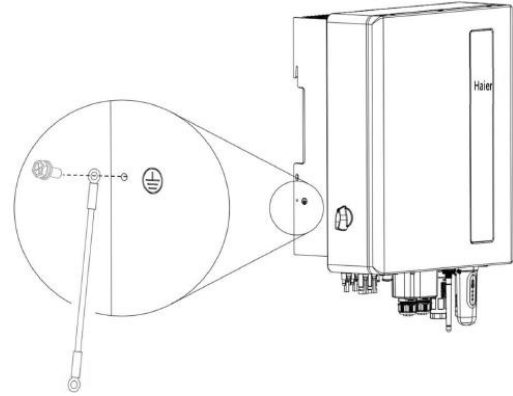
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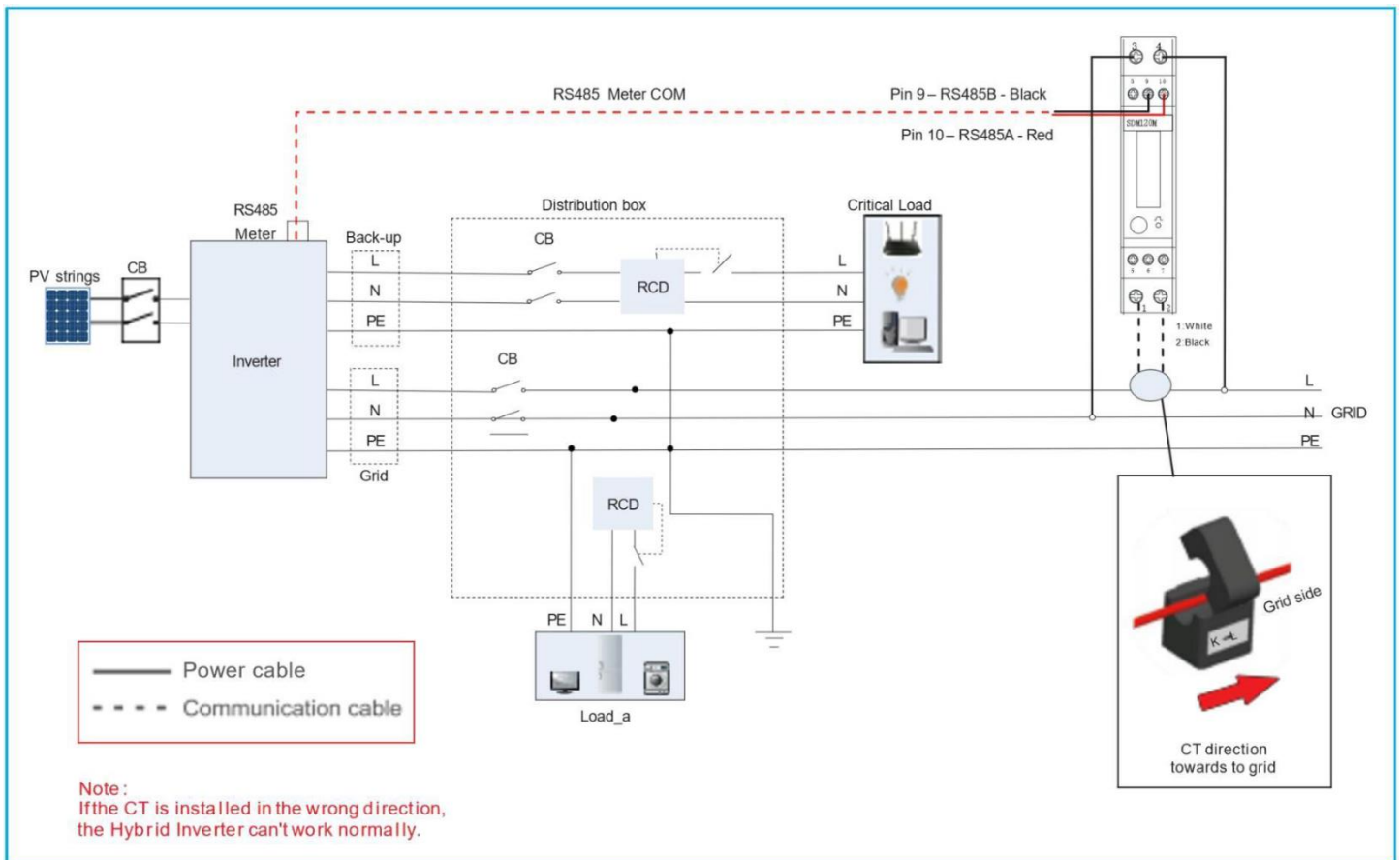
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- b. Open the cover according to step 3.
- c. Two men must lift the inverter and hang it into the shell. Align the inverter bracket with the convex section of the inverter.
- d. Fasten the ground cable on the PCS module shell with screw (MS*12).
- e. Fasten the screw (M4*40) between inverter and PCS module shell from outer sides of shell.



6. **Meter installation:** Before installing the inverter, use the screwdriver to take out the screws of protective cover assembled. Loosen the cable gland and remove the large watertight cap with screwdriver. For subsequent wiring, please refer to the inverter instruction manual.



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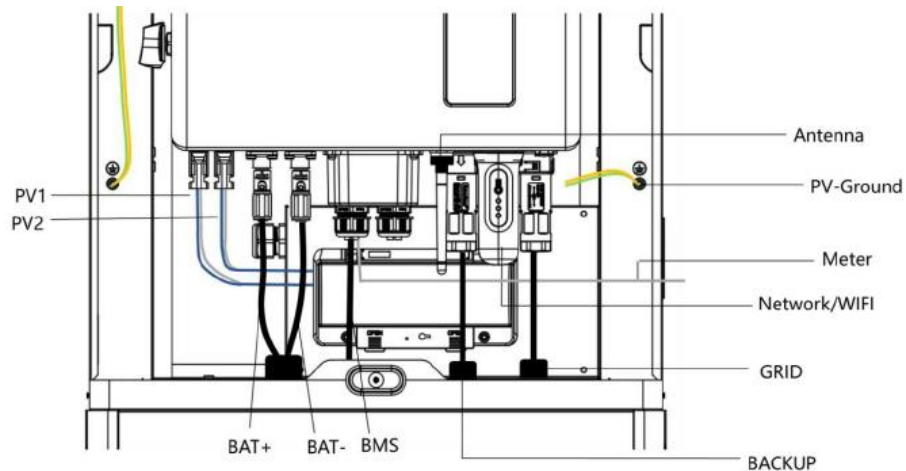
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The Haier H1PL Series Inverter is able to be connected to Eastron meters to fulfill the control logic of the self-consumption mode, export power control, monitoring etc.

Meter Type	Easton 1ph meter (with CT)
Model	SDM120CTM
Meter RS485 Pin Definition	Pin 9 – RS485B Pin 10 – RS485A

5. Electrical Connections

Warning: Do not power on the system during electrical connections.



Power/BACKUP/GRID/Antenna/BMS connection

1. Power cable connection: according to the colors, match the plug and socket
2. BACKUP/GRID cable connection: select the corresponding plug and socket and push the connectors to tight junction.
3. Antenna cable connection: align the ports of the cable and interface, rotate and tighten
4. BMS cable connection: select the corresponding interface and insert.

PV cable installation

1. Select a suitable DC cable and strip the wires out by $7 \pm 0.5\text{mm}$

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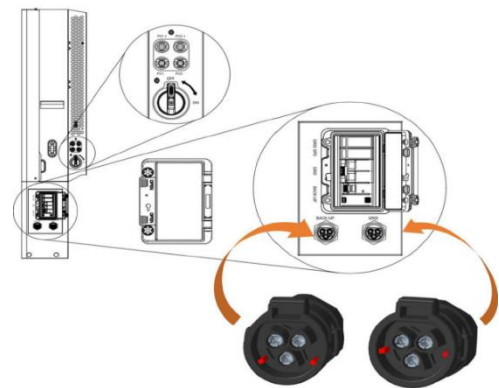
2. Take the DC terminal out of the accessory bag, turn the screw cap to disassemble it, and take out the waterproof rubber ring.
3. Pass the stripped DC cable through the nut and waterproof rubber ring.
4. Connect the wire part of the DC cable to the metal DC terminal and crimp it with a special DC terminal crimping tool.
5. Insert the crimped DC cable into the DC terminal firmly, then insert the waterproof rubber ring into the DC terminal and tighten the nut.
7. Measure PV voltage of DC input
8. Connect the wired DC terminal to the inverter

AC cable installation

Specifications on cables:

Describe	Numerical value
Cable diameter	10-14mm
Traverse cross sectional area	8-10mm ²
<u>Exposure Length</u>	9mm

1. Disassemble the AC connector. Strip the AC wires about 9mm.
2. Set the parts on the cable.
3. Crimp wires screw twisting torque
4. Push the Snap joint into Lock wire joint
5. The same installation for both cable end plug and socket connectors
6. Mating plug and socket:



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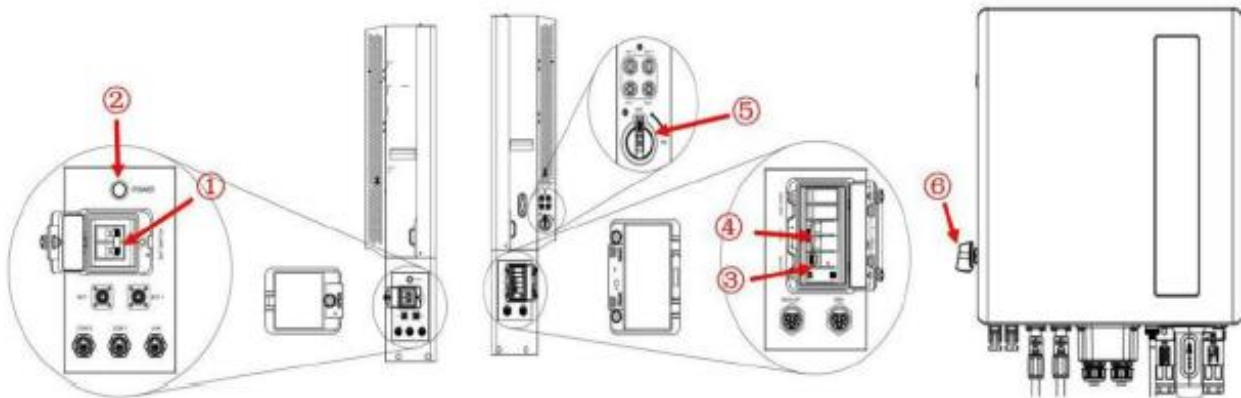
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6. System Initializing



Item	Description	Item	Description
1	BAT Switch	4	BACK UP Breaker
2	POWER Button	5	Power Distribution Module
3	GRID Breaker	6	DC Switch

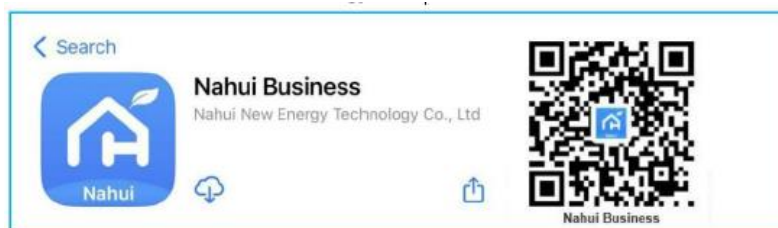
1. Close the BAT Switch and press and hold the POWER button for more than 3s.
2. Close the GRID Breaker and BACK UP Breaker
3. Close the PV switch of Power Distribution Module and DC Switch of the inverter.

7. Association to Cloud

Once you have completed the quick installation guide, perform the pairing procedure with the Nahui Business application, following the instructions on the “H1PH-1J & HA1L Quick Installation Guide for Cloud - Nahui Energy”

There are three ways to download and install the latest App:

1. Search the “Nahui Business” App in Google Play or App Store
2. Scan the QR code below to download.
3. Search at www.nahui-newenergy.com



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