HYXiPOWER
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Single Phase Hybrid Inverter Installation Guide HYX-H(3~8)K-HS -General

Delivery and Service Center

品质 创新 高效 共赢

V2.0 – 2025/06

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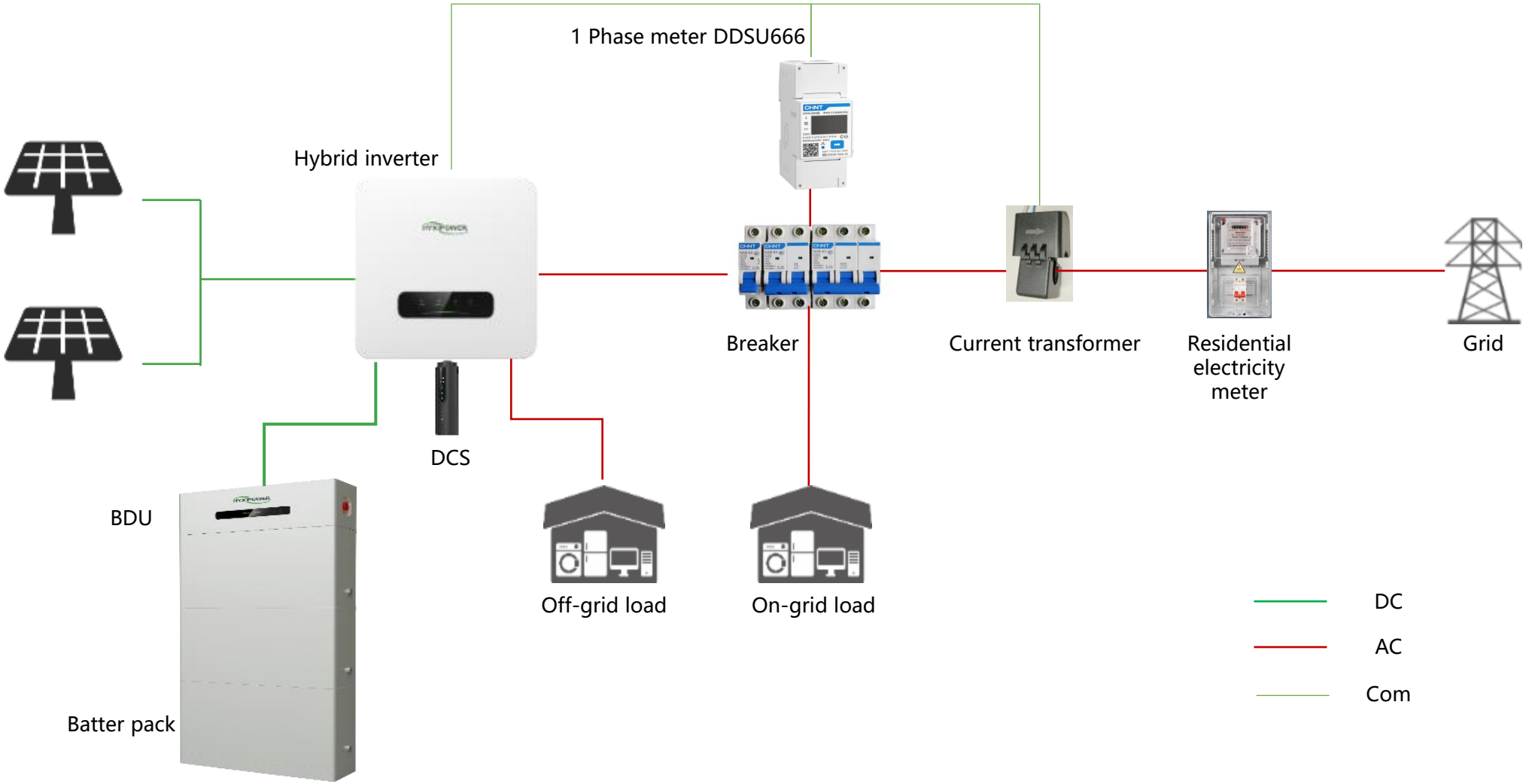
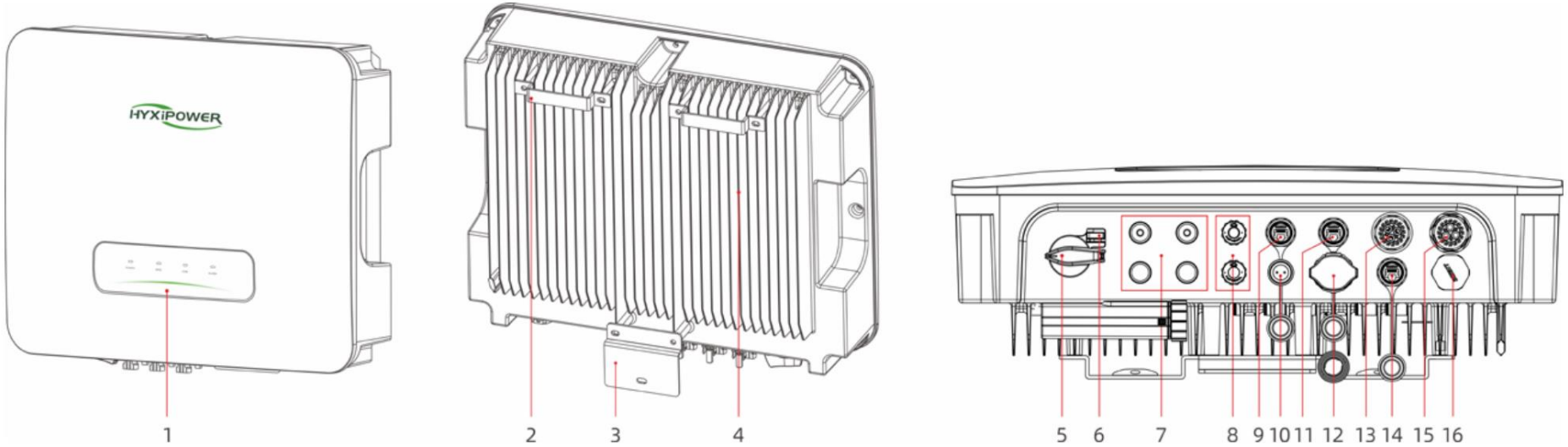
03 Device Installation

04 App Configuration

Program Overview-Topology Diagram



Program Overview-String Inverter Introduction



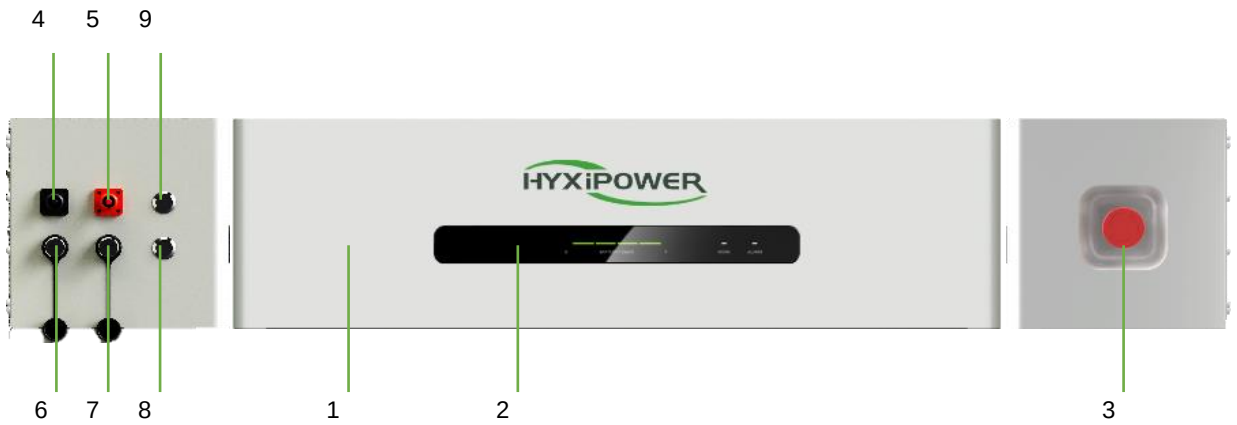
No.	Name	Description
1	LED Penal	Display the current operating status of the inverter
2	Mounting ear bracket	Fix the top of the inverter
3	Bottom bracket	Fix the bottom of the inverter
4	cooling fin	Inverter Heat Dissipation
5	AC Switch	DC Power Input Switch
6	DC switch lock	DC lock hole Reserved(Australia)
7	DC Input Terminal	Inverter-PV
8	Battery Power Cable Port	Power Terminal Port

No.	Name	Description
9	Battery Communication Port	Inverter-Battery Communication Terminal (Standard RJ45 Port)
10	Meter Communication Port	Inverter-Smart Meter Communication Port
11	DRM Port	DRM Reserved Port (Australia Only)
12	DCS Port	DCS Connection Port
13	Emergency Load Port	Emergency Load AC Output Port
14	Reserved Port	Reserved for Future Use
15	AC Port	Inverter Connection Port
16	Pressure Relief Valve	Pressure Relief Valve

Program Overview-BDU Introduction

Number	Explanation
1	Battery Distribution Unit (BDU)
2	BDU Display Panel
3	BDU Emergency Stop
4	High-voltage negative terminal
5	High-voltage positive terminal
6	Debug port
7	Inverter com port
8	High-voltage power button
9	12V low-voltage power button

BDU exploded view diagram



Program Overview- DCS Introduction

RESET button:

1. Press 2 times to restart
2. Press 3 times to enable local configuration (AP mode);
3. Press 4 times to restore factory settings
(Within 1 second between pressing)

Indicator	Status	Description
Power	On	Power ON
	OFF	Power OFF
NET.	Solid Green	Connected to server
	Flashing	Connecting to server
	OFF	Disconnected from server
COM.	Solid Green	Normal communication with inverter
	Flashing	Communicating with inverter
	OFF	Communication with inverter failed

Program Overview-Meter Introduction

The DTSU666 single-phase energy meter

The DTSU666 single-phase energy meter is an advanced device integrating high-precision metering, remote communication, and intelligent management. Equipped with a high-performance metering chip, this meter ensures accurate power measurement and supports real-time energy monitoring, enabling users to track electricity consumption effectively. Additionally, the DTSU666 features an RS485 communication interface and wireless modules, facilitating remote data exchange and centralized monitoring, thereby significantly enhancing operational efficiency.

Current Transformer

The CT (Current Transformer), as a critical component of the DTSU666 energy meter, employs a non-contact measurement method, enhancing safety and reliability. It enables accurate high-current measurement and adapts to varying current and voltage levels, significantly expanding the meter's application scope.

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Installation Preparation-Common Product List

The following product list is NOT included in the pre-sales configuration and must be purchased separately. Before system installation, ensure all devices and tools are fully prepared.

Number	Name	Explanation	Specifications
1	PV Cable	Cable for connecting photovoltaic panels to the inverter, compliant with outdoor multi-core copper cable standards (1000V, 18A).	4~10mm²
2	Communication Cable	485 communication cable for connecting the inverter and electricity meter.	RVVP two-core shielded cable，0.5mm²
3	AC Output Cable	For AC-side wiring of the inverter, using a five-core outdoor copper cable.	4~10mm²
4	Backup Output Cable	For Backup-side wiring of the inverter, using a five-core outdoor copper cable.	4~10mm²
5	Ethernet Cable	For communication between the inverter and battery, a standard Ethernet cable is used. (Includes one 2-meter-long Ethernet cable; if the length is insufficient, purchase separately.)	Standard
6	Ground Wire	For equipment grounding purposes.	4~10mm²
7	Battery Power Cable	Power cable for connecting the battery and inverter, must comply with 600V and 35A standards. (Optional battery power cable can be selected when placing future product orders.)	6mm²

Installation Preparation-Common Product List

The following product list is included in the pre-sales configuration.
Before system installation, verify that all devices and tools are fully prepared.

Number	Porduct	Picture	Explanation
1	Hybrid inverter		Includes one inverter and related inverter accessories.
2	Battery		Includes a Battery Distribution Unit (BDU) and battery modules for electrical energy storage.
3	1 Phase Meter		Measure circuit voltage, current, power, etc.
4	Current Transformer		Used to measure the grid-side AC current, enabling the inverter to control power output and prevent backflow. Note: During installation, the arrow must point toward the grid.
5	DCS Communication Stick		After registering the device to the cloud server, it can be centrally managed via the cloud platform.
6	Ethernet Cable		The device comes with a 2-meter-long Ethernet cable. If the length is insufficient, you will need to procure one separately.
7	Wall-mounted bracket		Wall-mounted bracket for securing the inverter.

Installation Preparation–Tool Installation

Installation Tool


Electric Drill


Heat Gun


Hex Key


Wire Stripper


Hydraulic Pliers


Crimping Tool


Screwdriver


Marker Pen

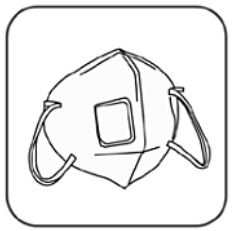

Utility Knife


Multimeter


Tape Measure


Hammer

Protect Tool


Protective Mask


Safety Glasses


Insulated Safety Shoes


Insulating Gloves

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Device Installation- Product Unboxing Inspection

Inverter Unboxing Inspection:

- Check whether the device hardware and ports are intact.
- Check whether the device accessories are intact.

Device Installation-Terminal Introduction

PV Connectors

Battery Connectors

Meter Connector

Battery COM Connector

DRM Connector (Australia)

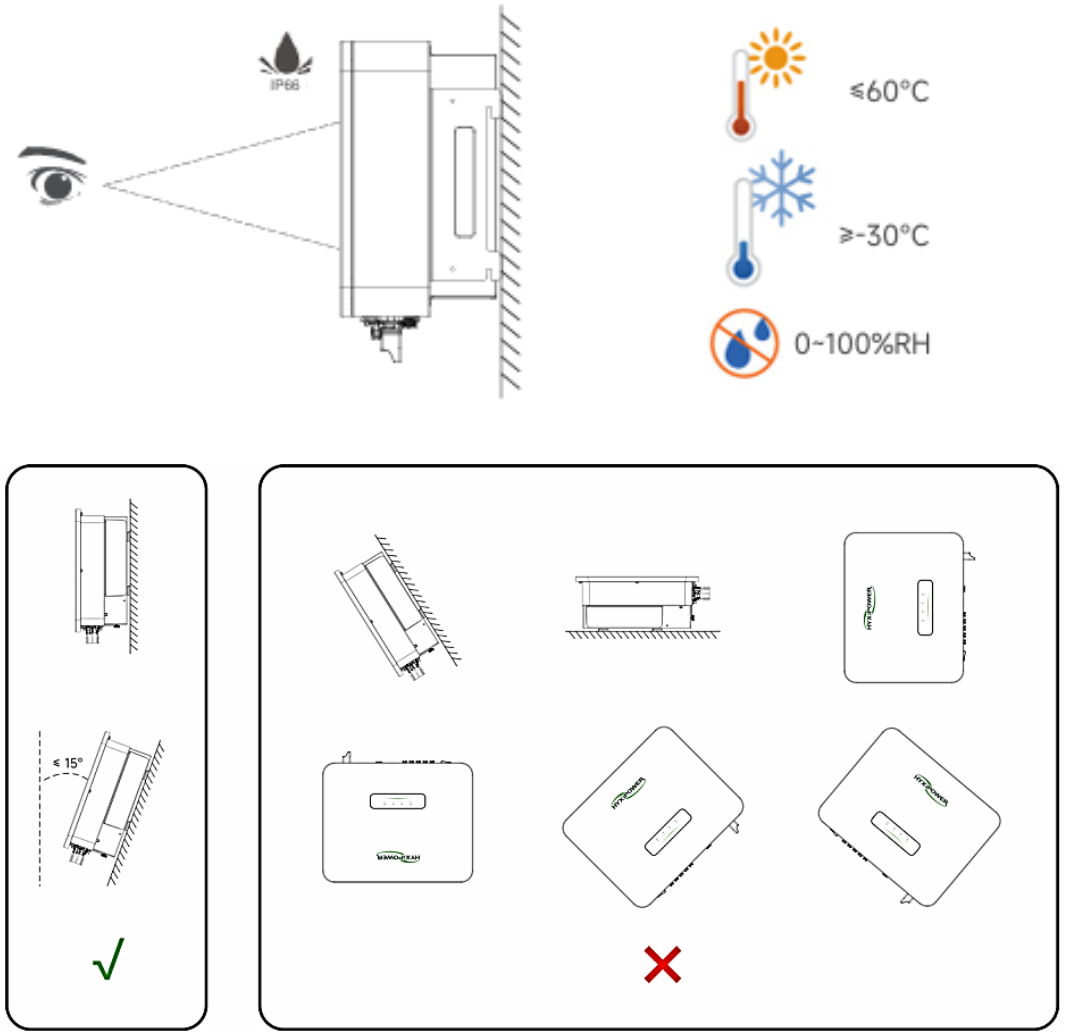
Spare Connectors

BACK UP Connector

GRID Connector

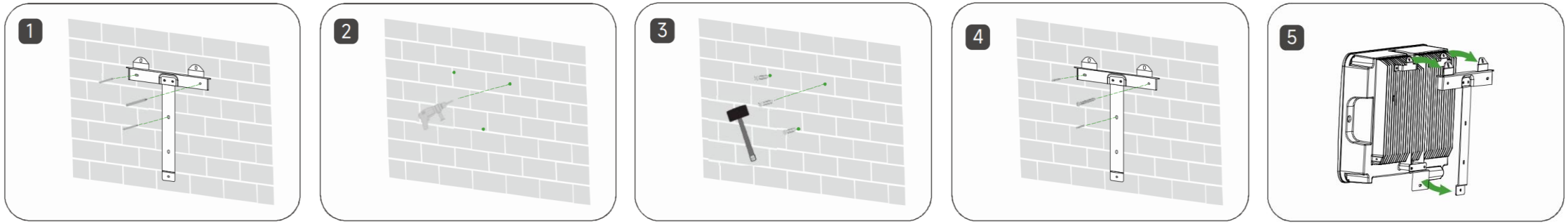
Device Installation–Environment Requirements

1. Suitable for both indoor and outdoor installation.
2. -30°C to +60°C, 0~100% relative humidity (RH).
3. Select a shaded location to avoid direct sunlight and protect against rain/snow.
4. Ensure proper ventilation for heat dissipation.
5. The mounting structure must support at least 4 times the inverter’ s weight.,
6. Mount vertically or tilted backward ≤15° to optimize thermal performance.
7. Do NOT install forward-facing, backward-facing, upside-down, horizontally, or sideways.
8. For multi-unit installations, maintain ≥300mm clearance between inverters.

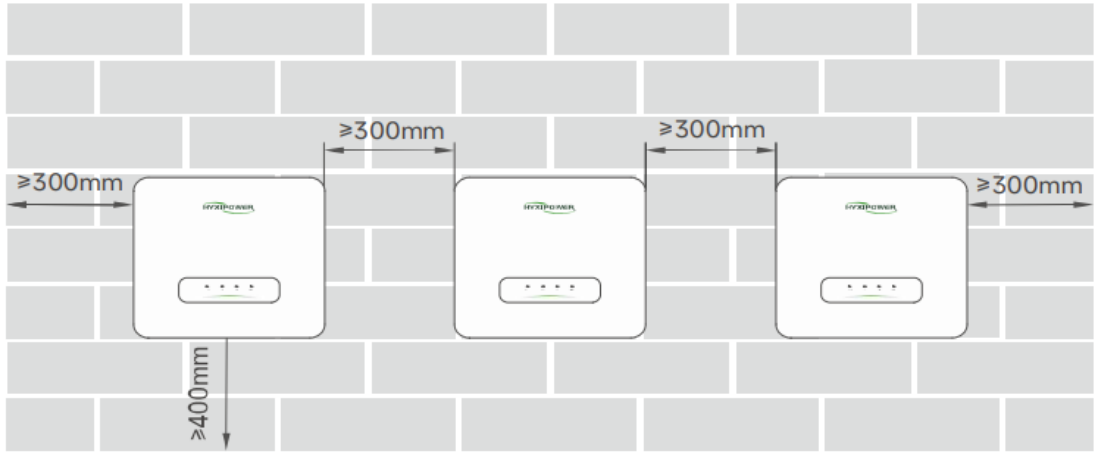


Device Installation-Wall Plate

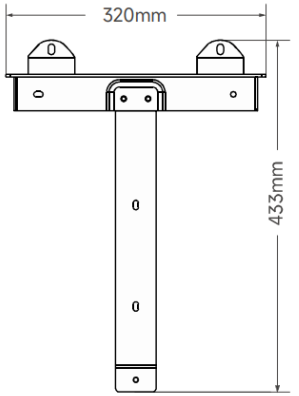
The mounting bracket and inverter can be fixed in the following manner:



When installing multiple inverters, a minimum spacing of 300mm (30cm) should be maintained between two adjacent inverters.

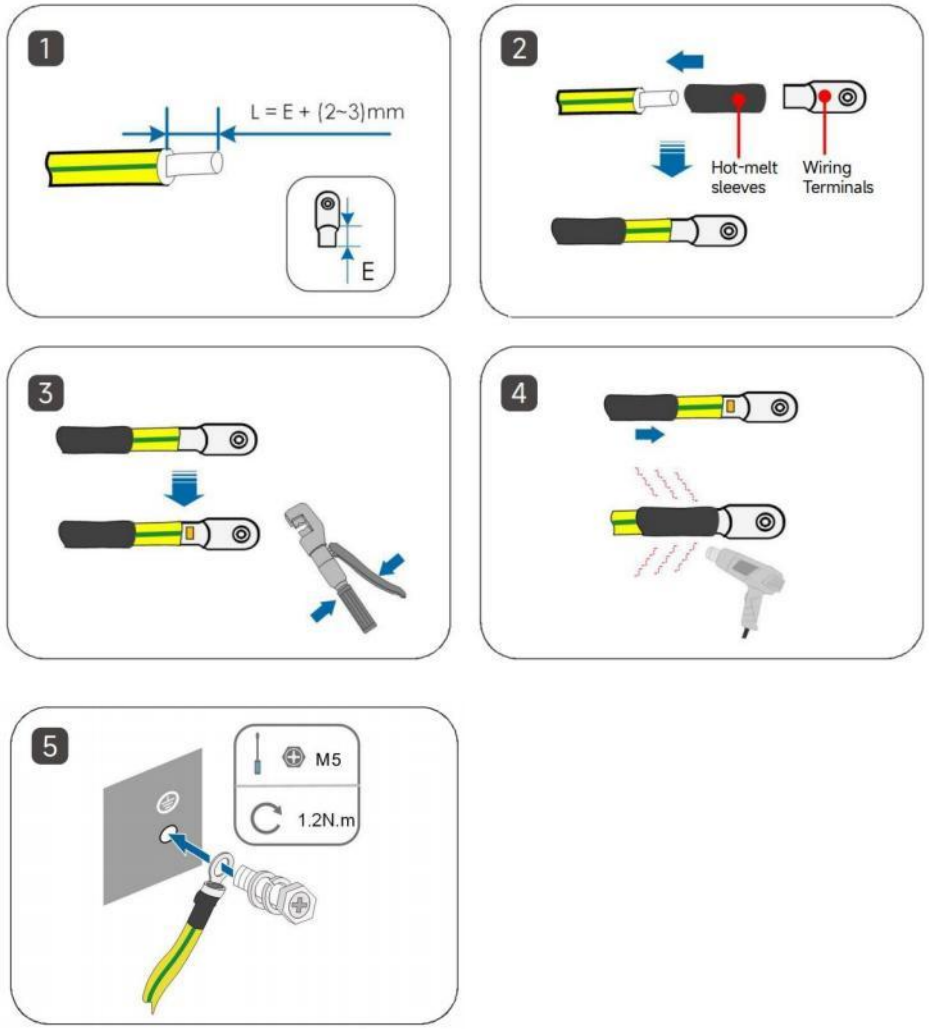


Mounting Bracket Specifications:



Note: Before installing the equipment, ensure the solar panels are properly installed and all cables are laid in place.

Device Installation-Grounding



Step 1 : Strip off a certain length of insulation L=E+(2-3)mm .

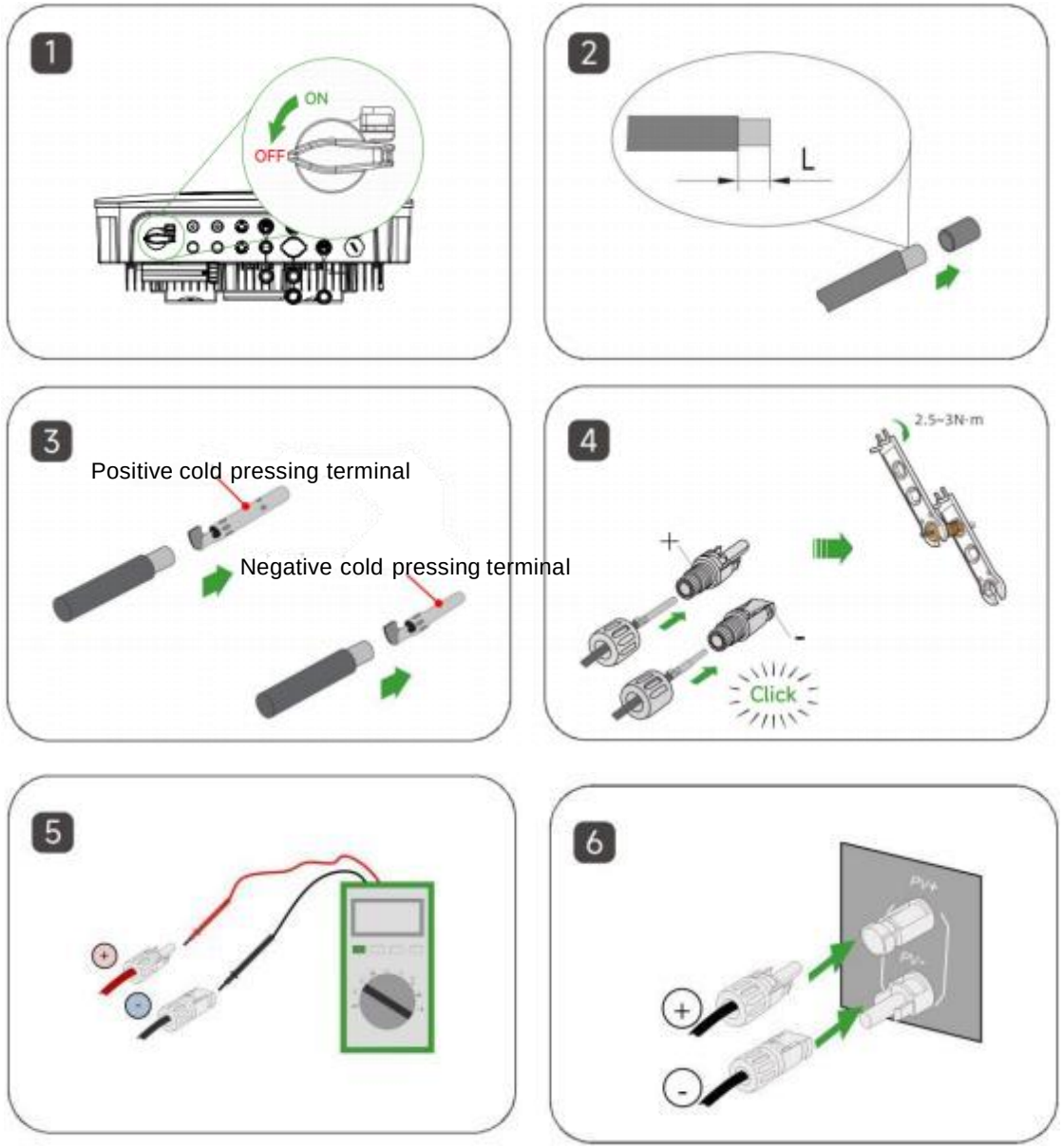
Step 2 : Pass the cable through the hot melt sleeve and insert it into the terminal block.

Step 3 : Use crimping pliers to tightly connect the terminal blocks and cables .

Step 4 : Adjust the hot melt sleeve to cover the end of the terminal block and the power cord, and use a hot air gun to blow the hot melt sleeve to cover the end of the power cord and terminal block.

Step 5 : Use a screwdriver to fix the ground wire to the inverter ground position.

Device Installation-PV Side Connection



Step 1: Keep the switch on the inverter turned off.

Step 2: Strip all DC cables insulation by approximately 7 mm.

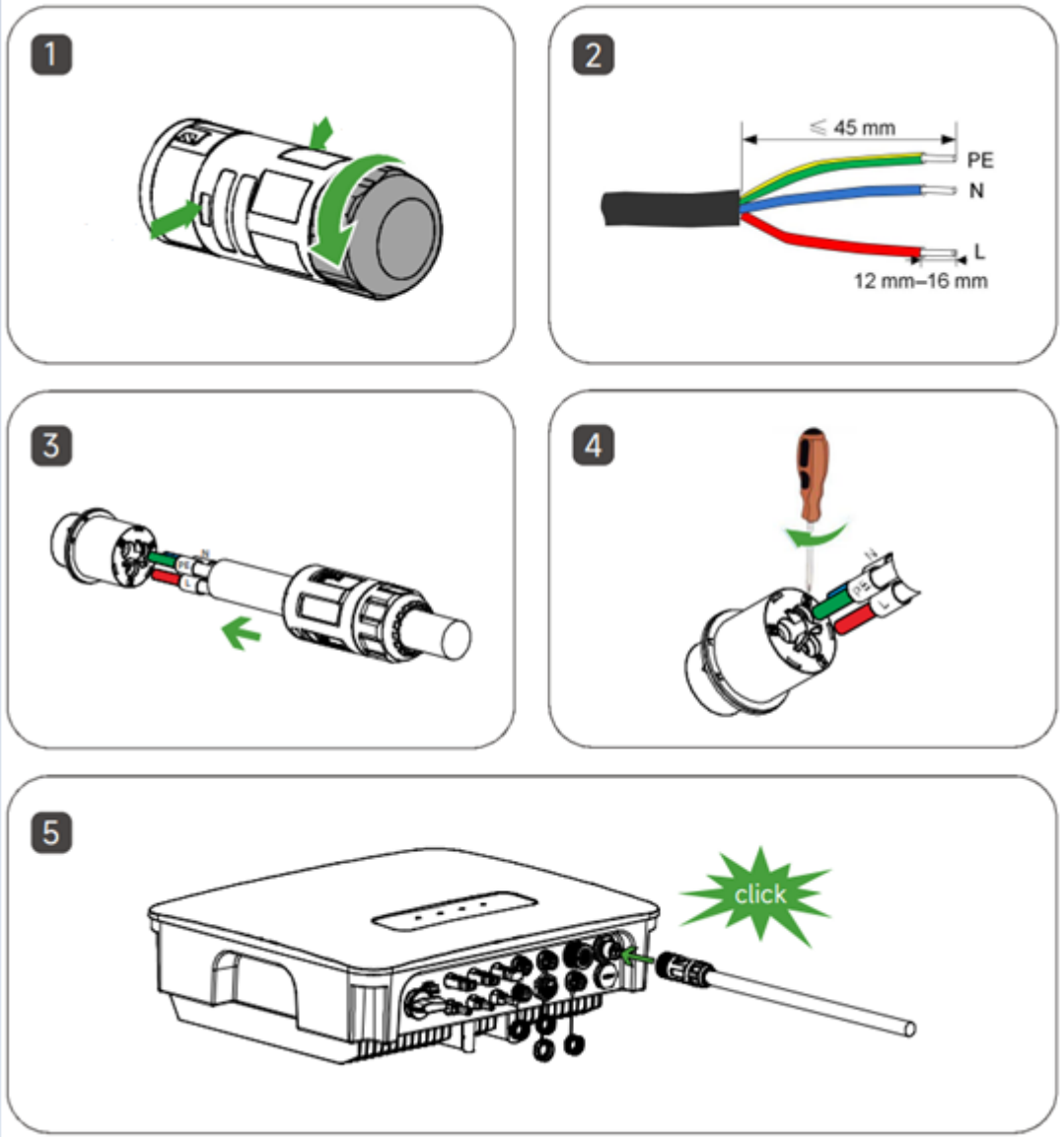
Step 3: Use crimping pliers to bundle the cold-pressed terminals to the cables. Note that the positive and negative terminals are different and need to be distinguished.

Step 4: Insert the cable through the cable sealing sleeve, insert it into the insulating sleeve and fasten it, and pull the cable gently to make sure it is tightly connected. Use 2.5 ~ 3N-m force to tighten the sealing sleeve and insulation sleeve.

Step 5: Use a multimeter to check whether the polarity of the photovoltaic string connecting cable is correct.

Step 6: Connect the PV connector to the corresponding terminal on the inverter until you hear a "click" sound.

Device Installation-AC Connection



Step 1: Unscrew and detach the AC-side connector.

Step 2: Strip a section of the power cable’ s protective and insulation layers as shown, then crimp the cold-press terminals tightly onto the wires using a crimping tool.

Step 3: Loosen (but do not fully remove) the three hex screws. Insert the three prepared wires from Step 2 into their corresponding screw holes.

Step 4: Secure all wires by tightening the three hex screws.

Step 5: Reassemble the connector. Attach the AC connector to its corresponding terminal until you hear a "click" sound.

Note: The AC side uses a **female connector**, while the emergency load side uses a **male connector**.

Device Installation-Meter Connection

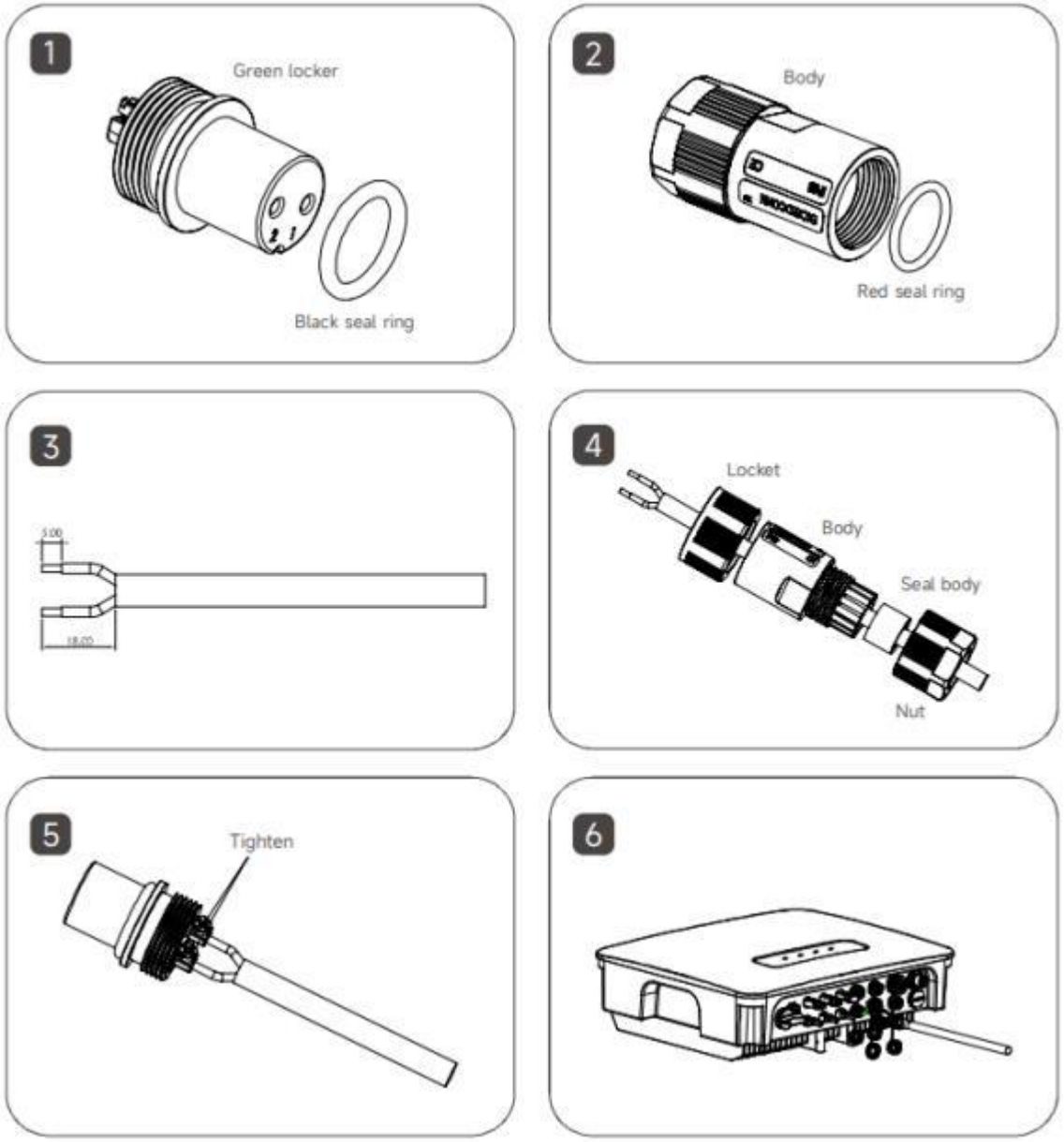


Figure 7

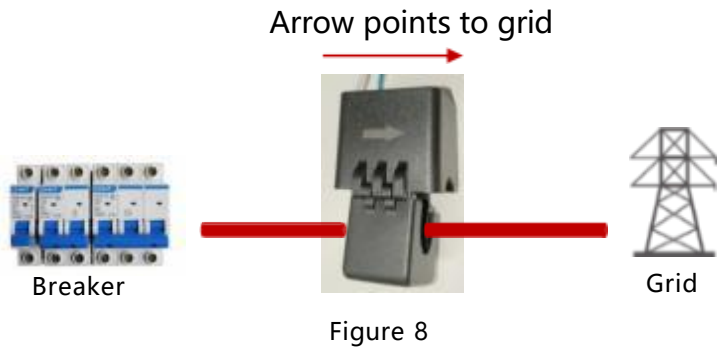


Figure 8

Step 1: Place black seal ring on the green Locker.

Step 2: Put red seal ring into the bottle of body inside.

Step 3: Wire striping.

Step 4: Pass all parts through the wire in the following order.

Step 5: Crimp the 2pin copper core on the green locker and tighten it. 1 on the connector corresponds to A on the electric meter , and 2 corresponds to B on the electric meter (Figure 7).

Step 6: Screw all parts together and connect the water-proof 2pin connecter to inverter meter port.

Step 7: Connect the meter in parallel to the power grid, connect 3 to the live wire and 4 to the neutral wire.

Step 8: Pass the magnetic ring of the current transformer through the live wire of the grid. Note that the arrow points to grid (Figure 8).

Device Installation-DCS Installation

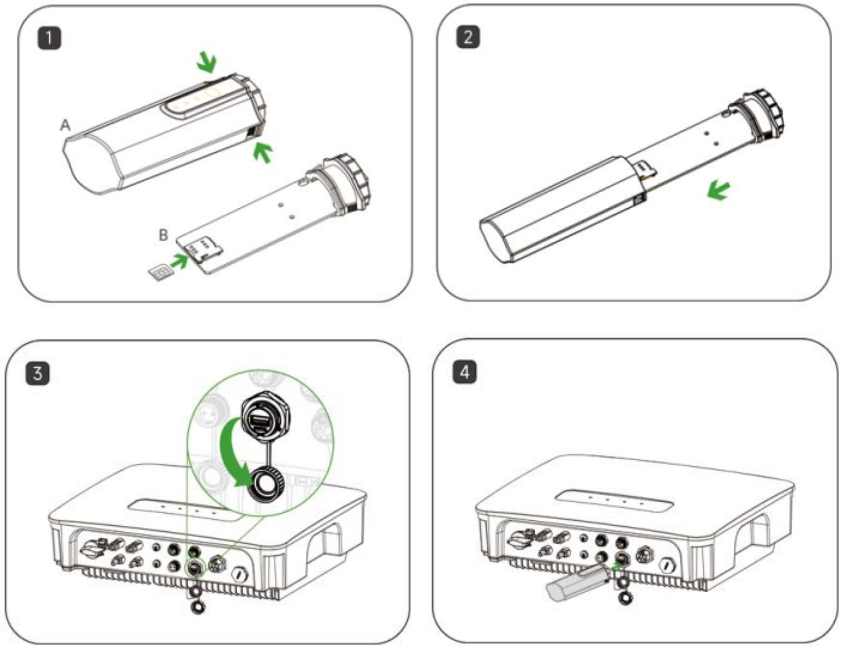
1、DCS Installation(4G Version)

Step1： Remove the DCS protective cover and insert the SIM card.

Step2： Install the DCS waterproof cover

Step3： Remove the waterproof cover from the inverter communication interface.

Step4： Insert the DCS into the corresponding communication terminal at the bottom of the inverter and tighten it to ensure a secure connection.

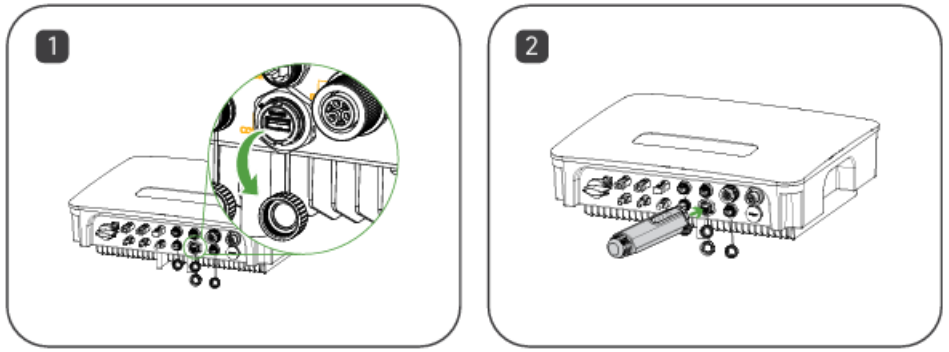


2、DCS Installation (The WiFi version does not require SIM card installation or removal.)

Step1： Remove the waterproof cover from the inverter's communication interface.

Step2： Insert the DCS into the corresponding communication terminal at the bottom of the inverter, tighten it, and ensure it is securely connected.

Note: For the WiFi version, if the on-site signal is weak (below -60 dBm), it is recommended to add a WiFi repeater to enhance the network signal. Otherwise, there is a risk that device data may fail to upload to the platform.



Device Installation-Installation of Battery

Step 1: Place the battery base on a flat surface.

Step 2: Carefully place the battery module on the battery base, ensuring that the interface connection is accurate (the process needs to be careful and slow). If there are multiple battery modules, stack them one by one.

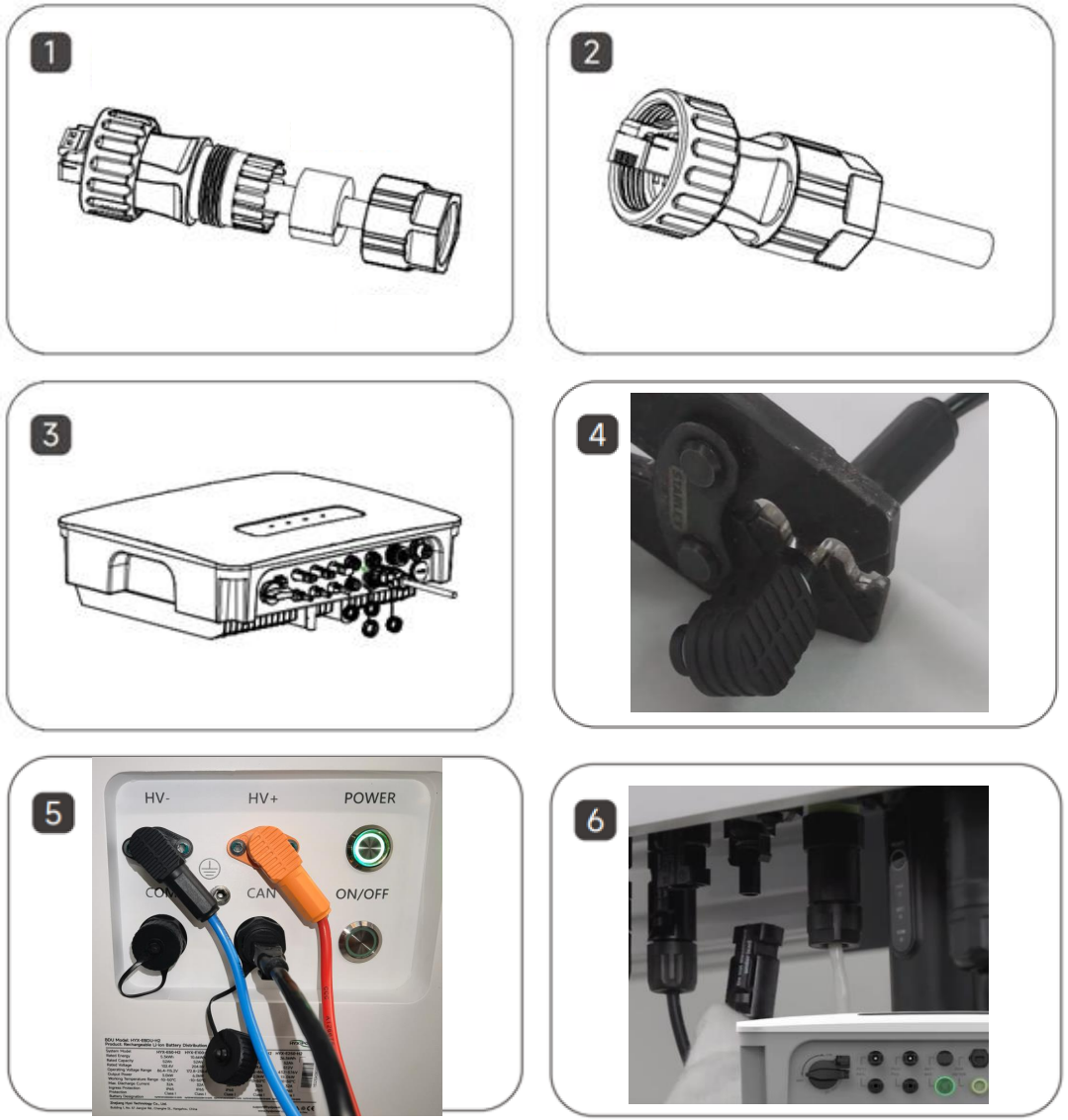
Step 3: Shake gently repeatedly to ensure that the installation is firm.

Step 4: Carefully assemble the battery management unit from the top, ensuring that the interface connection is accurate (the process needs to be careful and slow).

Step 5: Shake gently repeatedly to ensure that the installation is firm.

Note: When there are 3-5 battery modules stacked in the battery system, the stability of the equipment needs to be considered, and the installation bracket needs to be considered if necessary.

Device Installation-Installation of Battery



Step 1: Put the three accessories (socket, sealing ring, nut) of the two sets of waterproof terminals on the standard network cable.

Step 2: Assemble the connector.

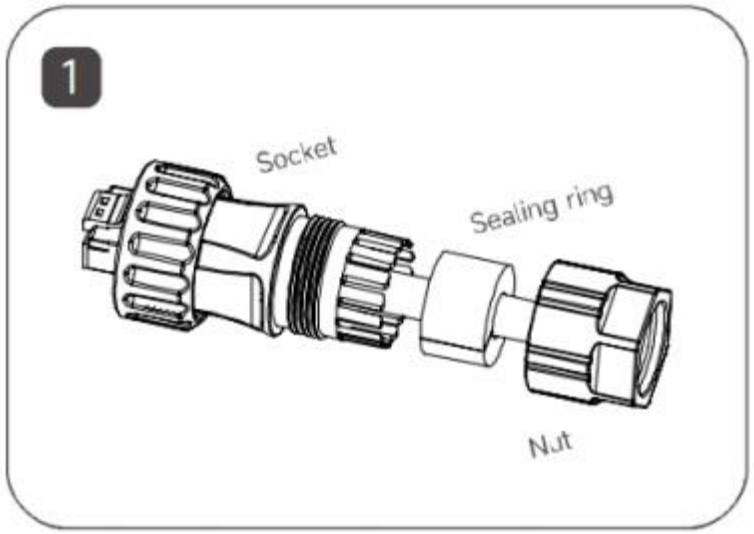
Step 3: Plug the two ends of the network cable into the corresponding network ports of the inverter and battery BDU respectively, and tighten the nuts.

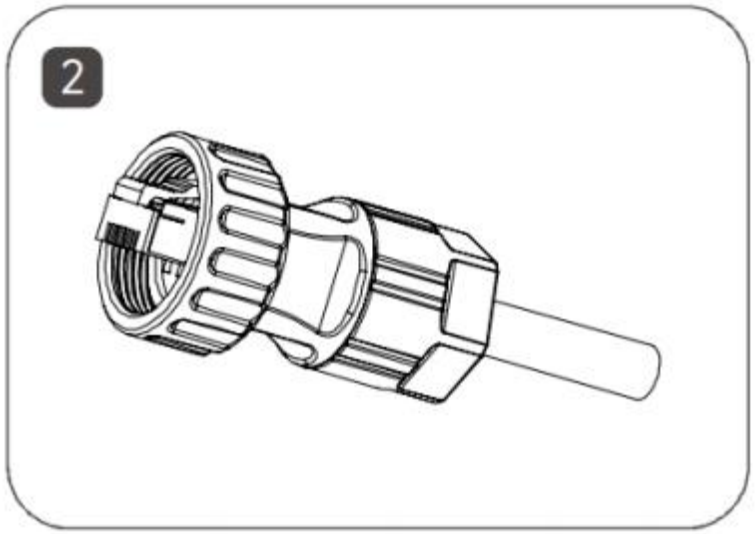
Step 4: Use a crimping pliers to press and connect the battery power line and the connector. Pay attention to distinguish the positive and negative poles, orange is positive, and black is negative.

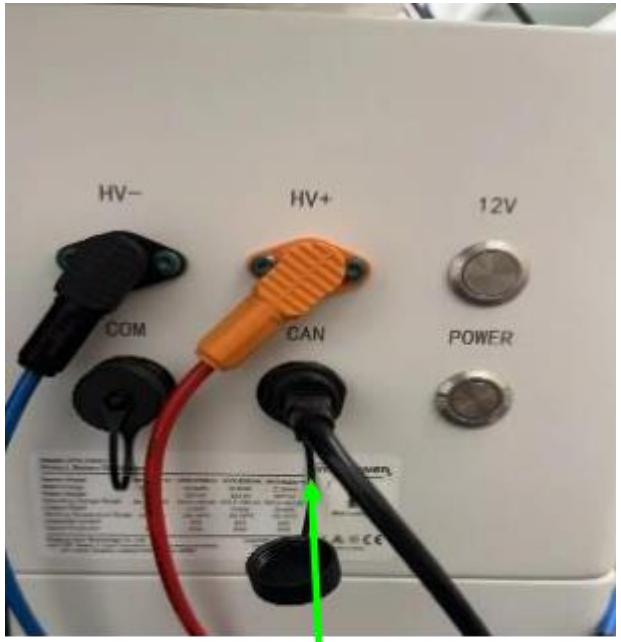
Step 5: Plug the battery power line terminal into the battery BDU until you hear a "click".

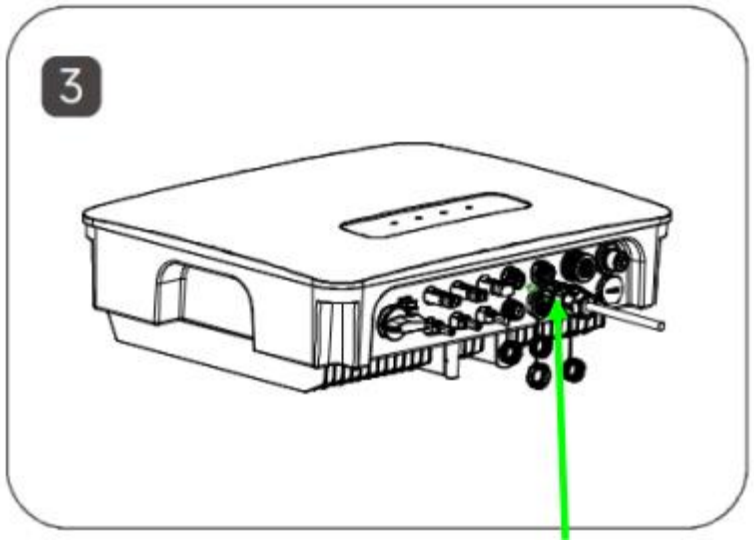
Step 6: Refer to the PV side connector production method to make the connector at the other end of the battery power line. After completion, insert it into the battery power input terminal of the inverter until you hear a "click".

Device Installation-Installation of Battery







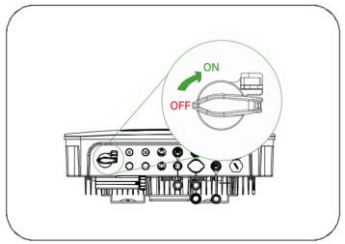


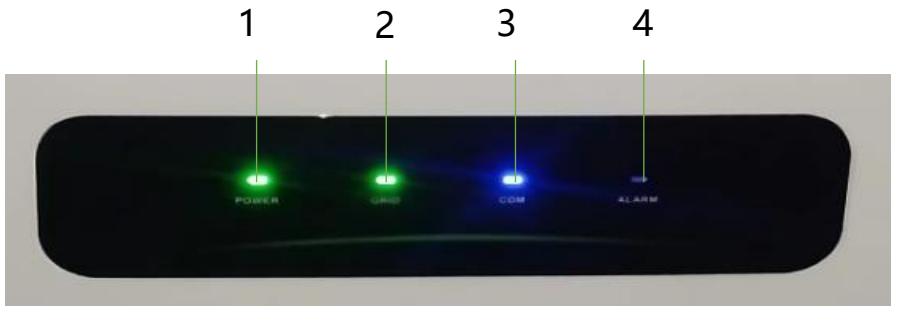
BMS port

CAN port.

Device Installation -System Startup

1. Plug in the AC-side connector and turn on the circuit breaker. After closing, the meter will light up and the bulb will illuminate.
2. Turn on the DC switch on the inverter.
3. Connect the PV panel connectors on the DC side and insert the plug.
4. Verify the inverter's indicator light status. The light status shown below indicates normal operation.

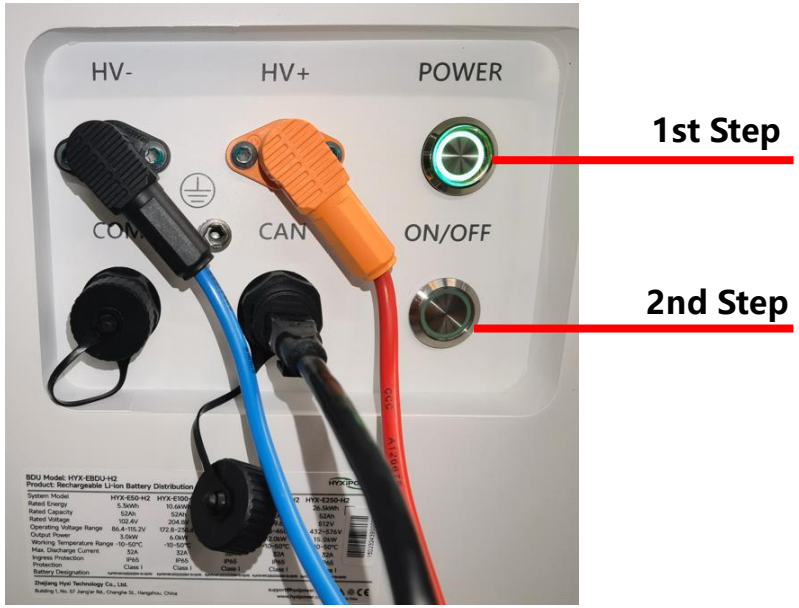




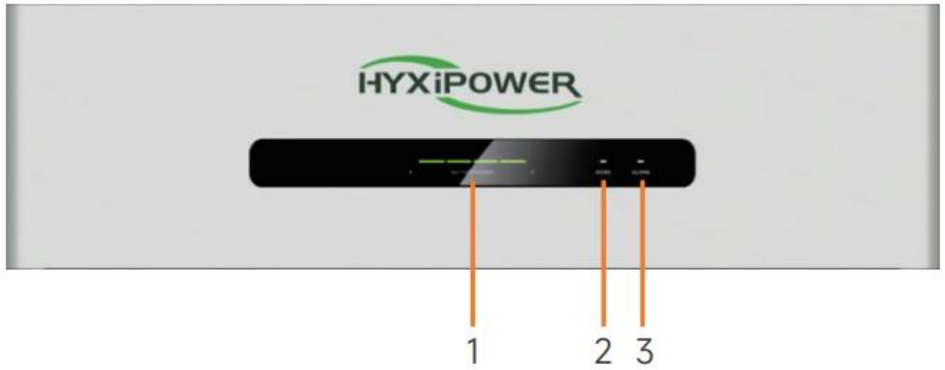
- Normal sign: Three lights on, one light off.
- Note: Before starting the inverter in the training room, ensure the switch is in the ON position.

NO.	Indicator	Status	Explanation
1	POWER	Solid	Inverter Power on
		Off	Inverter Power off
2	GRID	Solid	Grid Side normal
		Average blinking	Grid Side abnormal
		Double blinking	Not connected with grid
3	COM	Solid	Communication normal
		Average blinking	Communication failure between inverter and meter
		Double blinking	Communication failure between inverter and battery
		Off	Inverter communication failure with both meter and battery
4	ALARM	Off	No alarm from inverter
		Average blinking	Alarm from inverter
		Double blinking	Other alarms

Device Installation-System Startup



1. Press the 12V button briefly.
2. Press and hold the POWER button for 5 seconds until you hear a relay's "click" sound.
3. Verify the battery indicator status: Power level displays normally, WORK light stays steadily lit.



System Status	1 Battery indicator				2 Work Status Light	3 Alarm Status Light
	●	●	●	●	●	●
Switch Off	off				off	off
Idle	Display according to actual power				on for 0.5s, off for 1.5s	off
Normal	Display according to actual power				on	off
Level 1 Alarm	Display according to actual power				on	on for 0.5s, off for 0.5s
Level 2 Alarm	Display according to actual power				off	on for 0.5s, off for 1.5s
Level 3 Alarm	Display according to actual power				off	on

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APP Configuration - Registration

Registration

1. **Download HYXipower APP .**
2. **Register the account of the person in charge of the organization.**

Near-end Commissioning

Register the DCS communication stick to the cloud server through local debugging.

All Hyxipower equipment is managed using the cloud platform. After the equipment is registered to the cloud server, it can be managed uniformly through the cloud platform.

Create a Plant

Create a power station for users

You can manage the equipment through the power station and check the equipment status, system power generation and usage, etc.

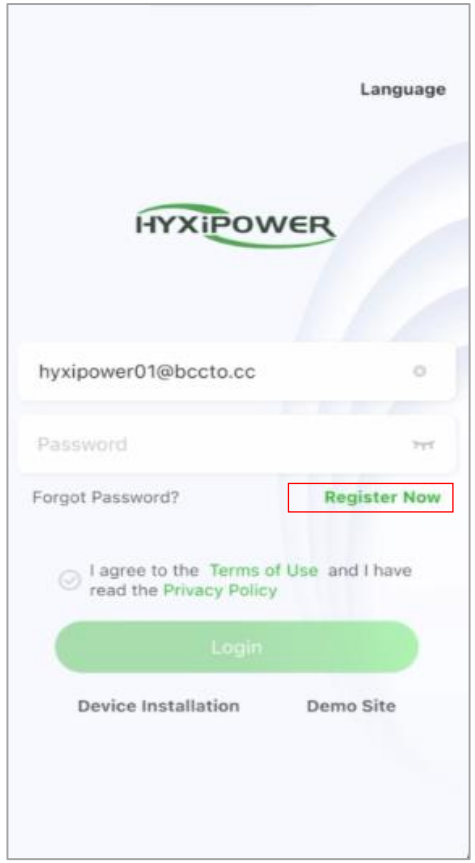
APP Configuration - Registration

The entire process requires 2 email accounts: Organization and Owner.

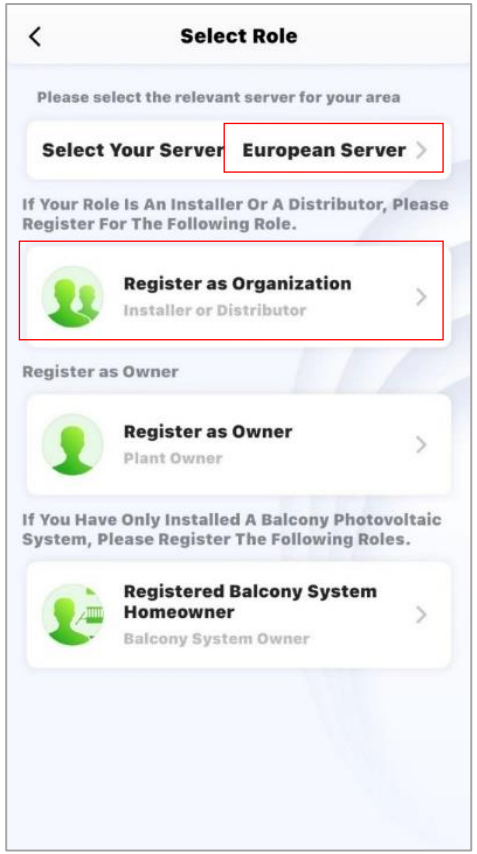
Step 2: Download the APP and **register**

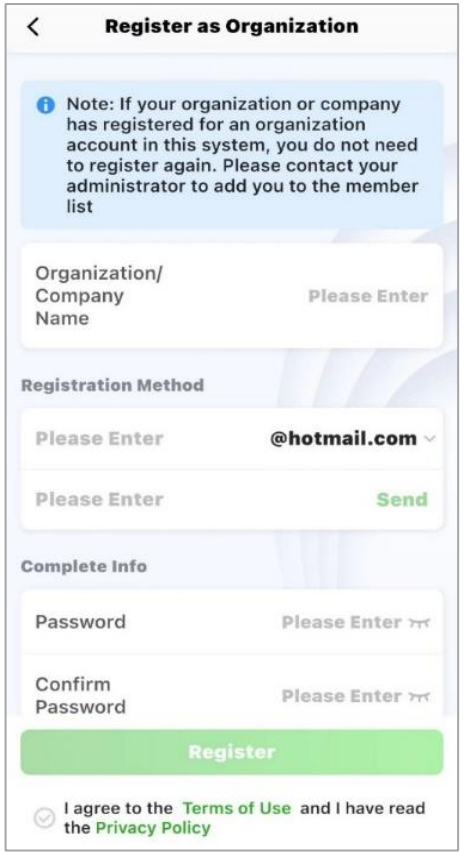
Method 1
Search “Hyxipower " in the Application Store
· APP store (IOS)
· Google play

Method 2
Scan the QR code download the APP



Step 3 : According to the country or region, select server, select organization , fill in the relevant information and register.





APP Configuration - Near-end Commissioning

1. Download HYXipower APP .

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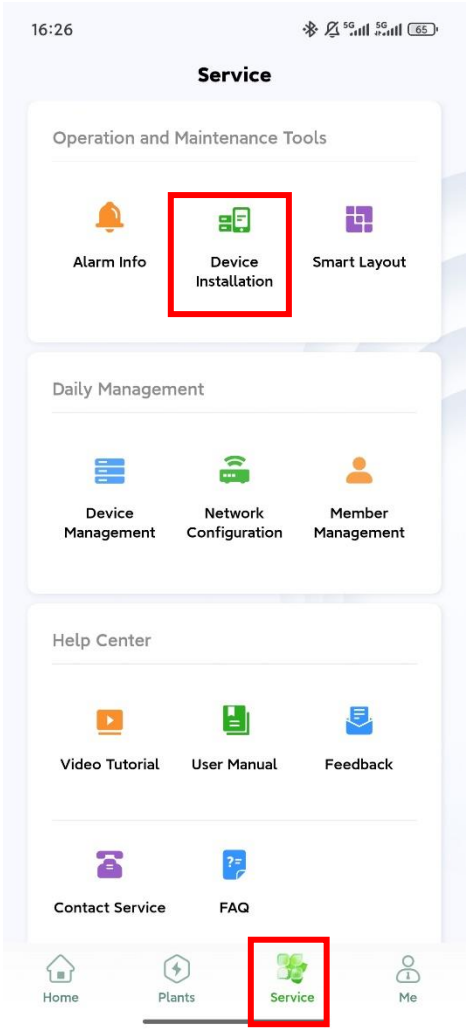
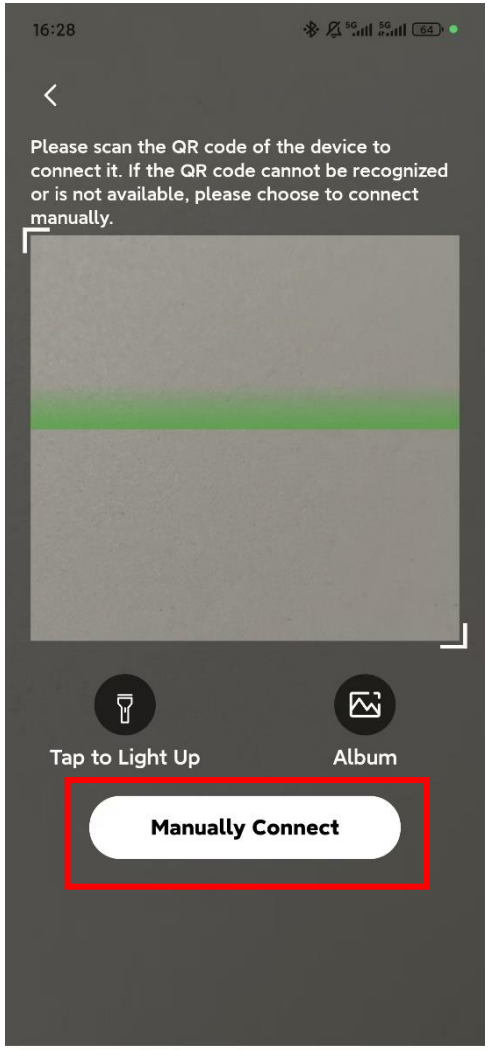
Create a power station for users

You can manage the equipment through the Plant and check the equipment status, system power generation and usage, etc.

APP Configuration-Near-end Commissioning

Step1: Click **Device Installation** in **Service** interface.
Then scan the QR code of the Data Communication Stick. If failed ,click the Manually Connect.





APP Configuration-Near-end Commissioning

Step2： Device login, initial password: hyxi0607. Log in and change the password, then save it.

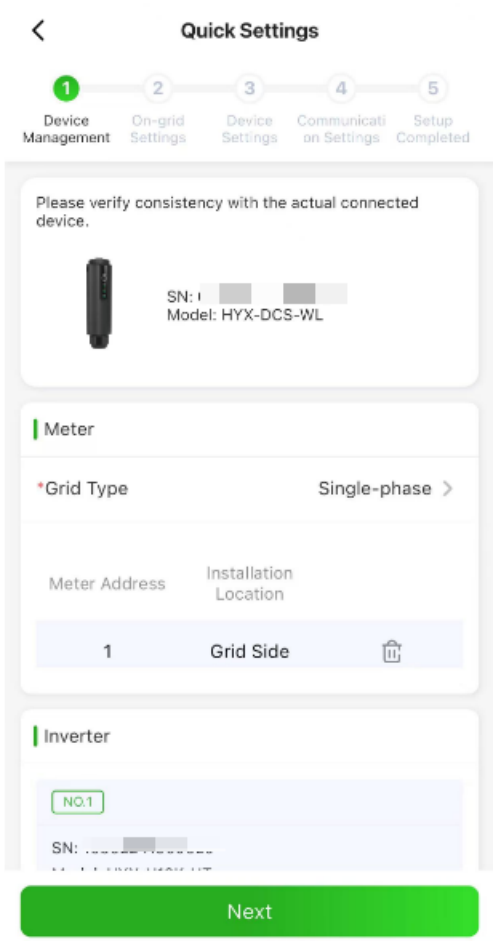
If you forgot the password, quickly press the RESET button on the DCS four times to restore factory settings

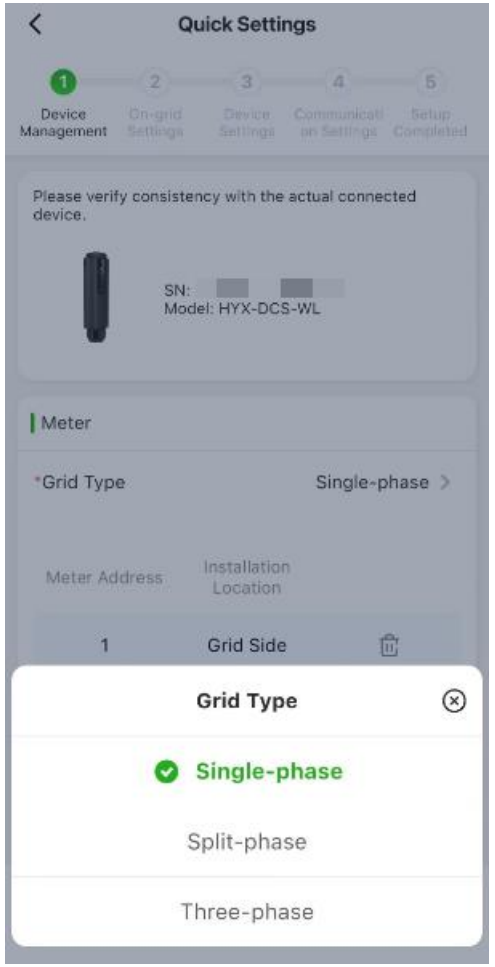
APP Configuration - Near-end Commissioning

Step3: Quick Settings

① Device Management: The DCS automatically reads the inverter's SN and model number.

Meter settings(if installed)**:** 1. Grid type—Single-phase; 2. Configure meter—default address 1, install on grid side.

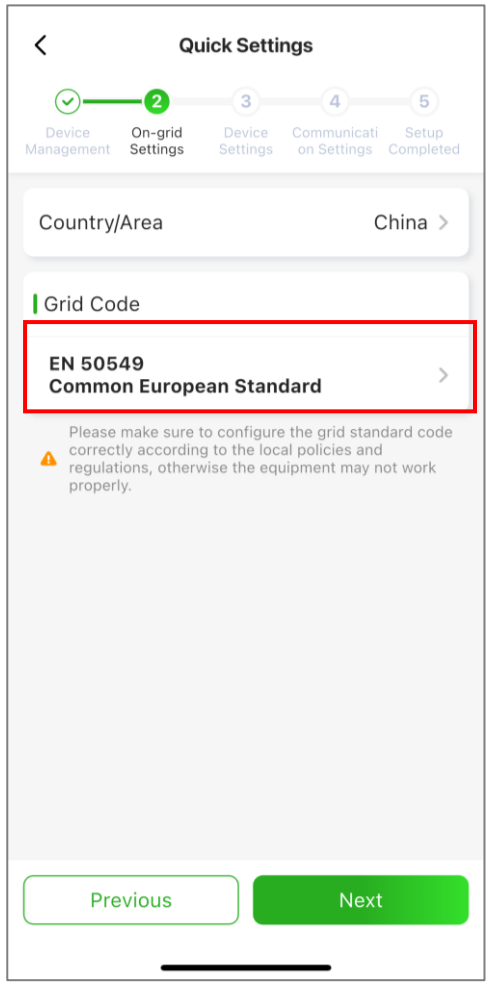


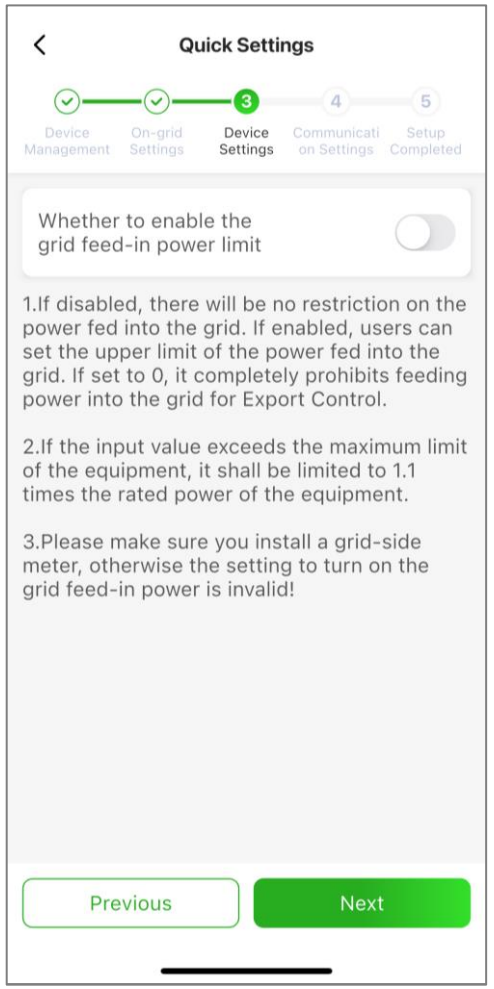


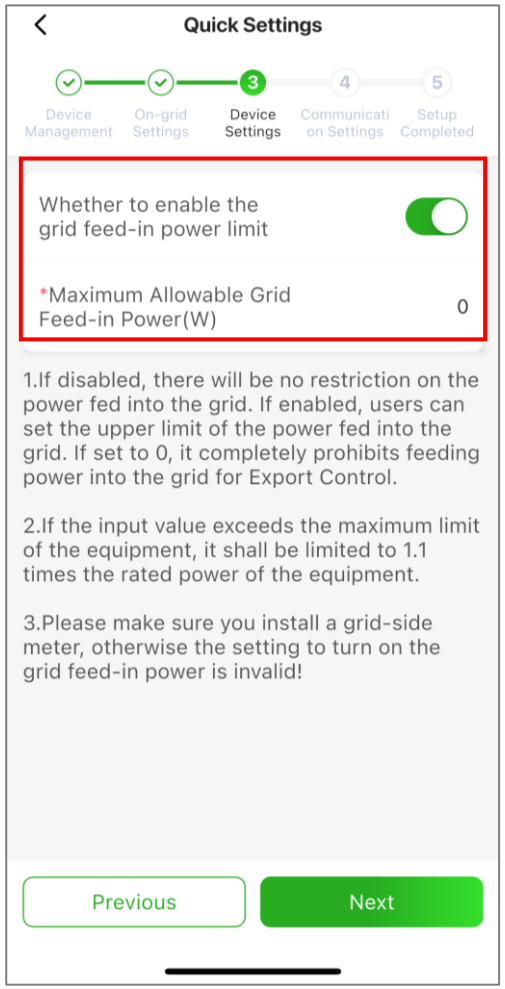
APP Configuration - Near-end Commissioning

Step4: ② On-grid Settings: Select the corresponding country's grid-code, then click Next.

Step 5: ③ Device Settings - Set feed-in power limit (enable and set to 0 to stop feeding grid).







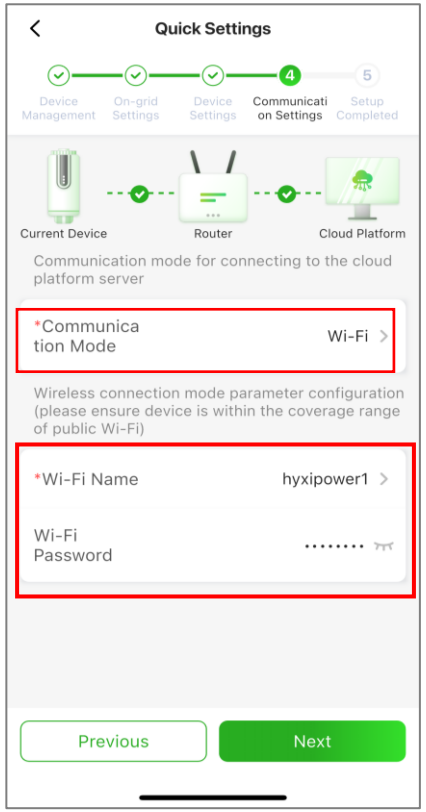
APP Configuration - Near-end Commissioning

Step6: ④ Communication Settings: Wi-Fi Mode: Enter Wi-Fi name and password.

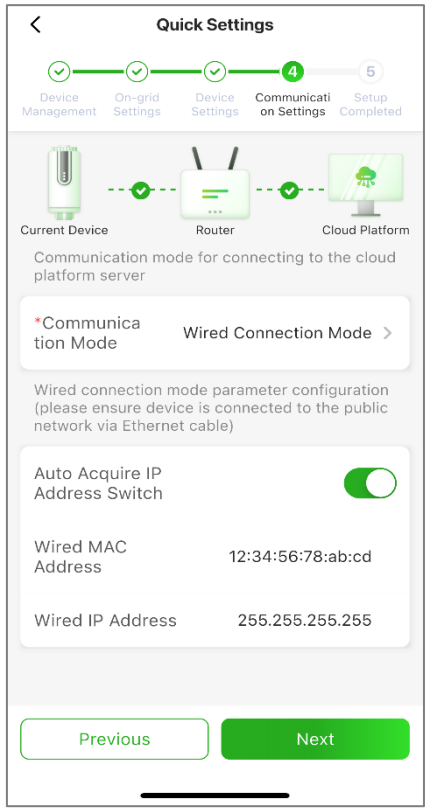
Wired Mode: Ensure automatic IP acquisition is enabled.

4G Mode: The APN, username and password will be recognized automatically, and proceed to next step after setup.

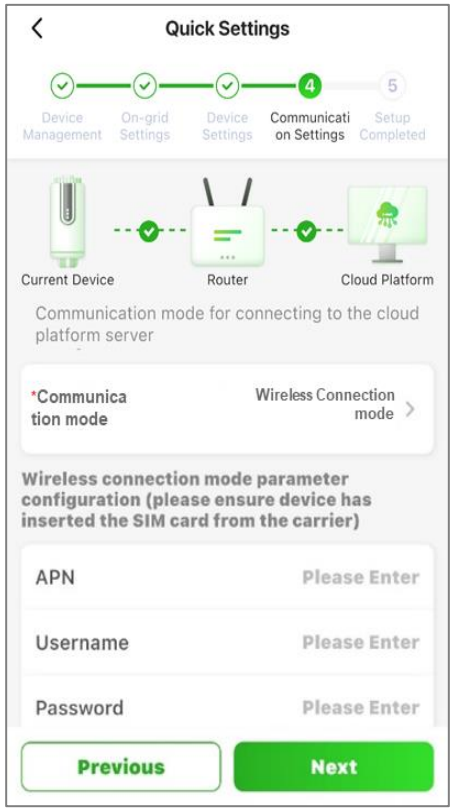
Wi-Fi

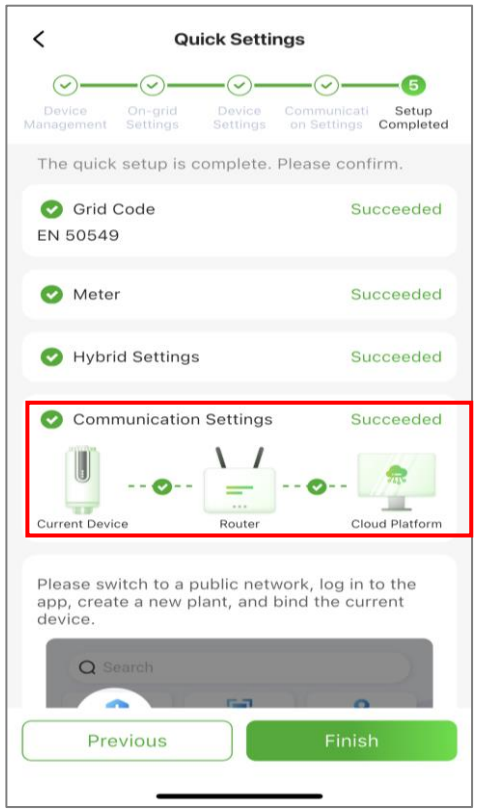


Wired



4G





- Completion sign: Green checkmarks show between Device - Router - Cloud platform DCS shows three steady LED lights

APP Configuration - Create a Plant

Registration

1. **Download HYXipower APP .**
2. **Register the account of the person in charge of the organization.**

Near-end Commissioning

Register the DCS communication stick to the cloud server through local debugging.

All Hyxipower equipment is managed using the cloud platform. After the equipment is registered to the cloud server, it can be managed uniformly through the cloud platform.

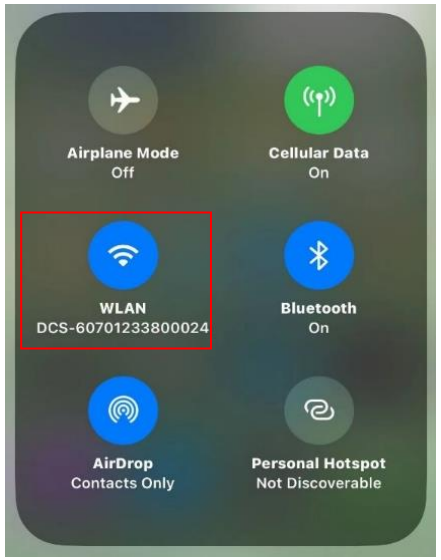
Create a Plant

Create a power station for users

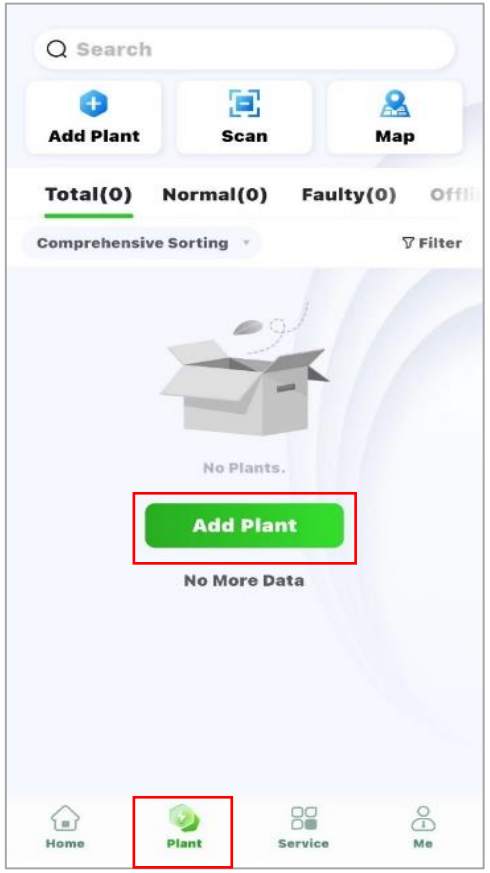
You can manage the equipment through the Plant and check the equipment status, system power generation and usage, etc.

APP Configuration - Create a Plant

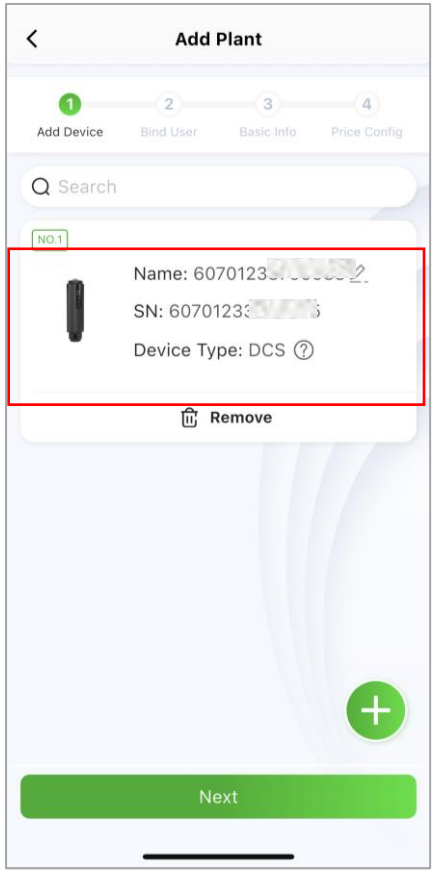
Step 1: Disconnect the phone from the DCS’ s WiFi. Make sure your phone has Internet access



Step 2: Log in to the organization account, click “Add Plant”

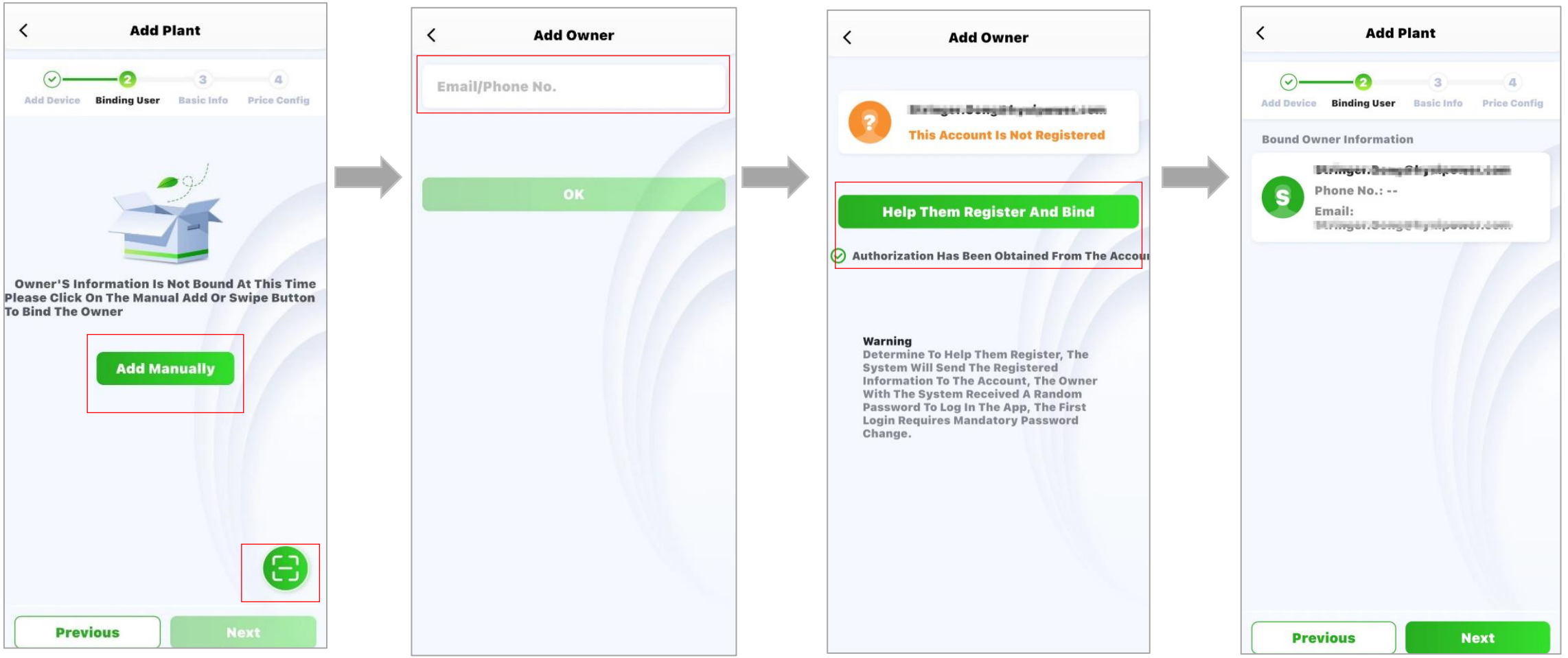


Step 3: Scan the QR code of the DCS or add it through Recently Debugged Device



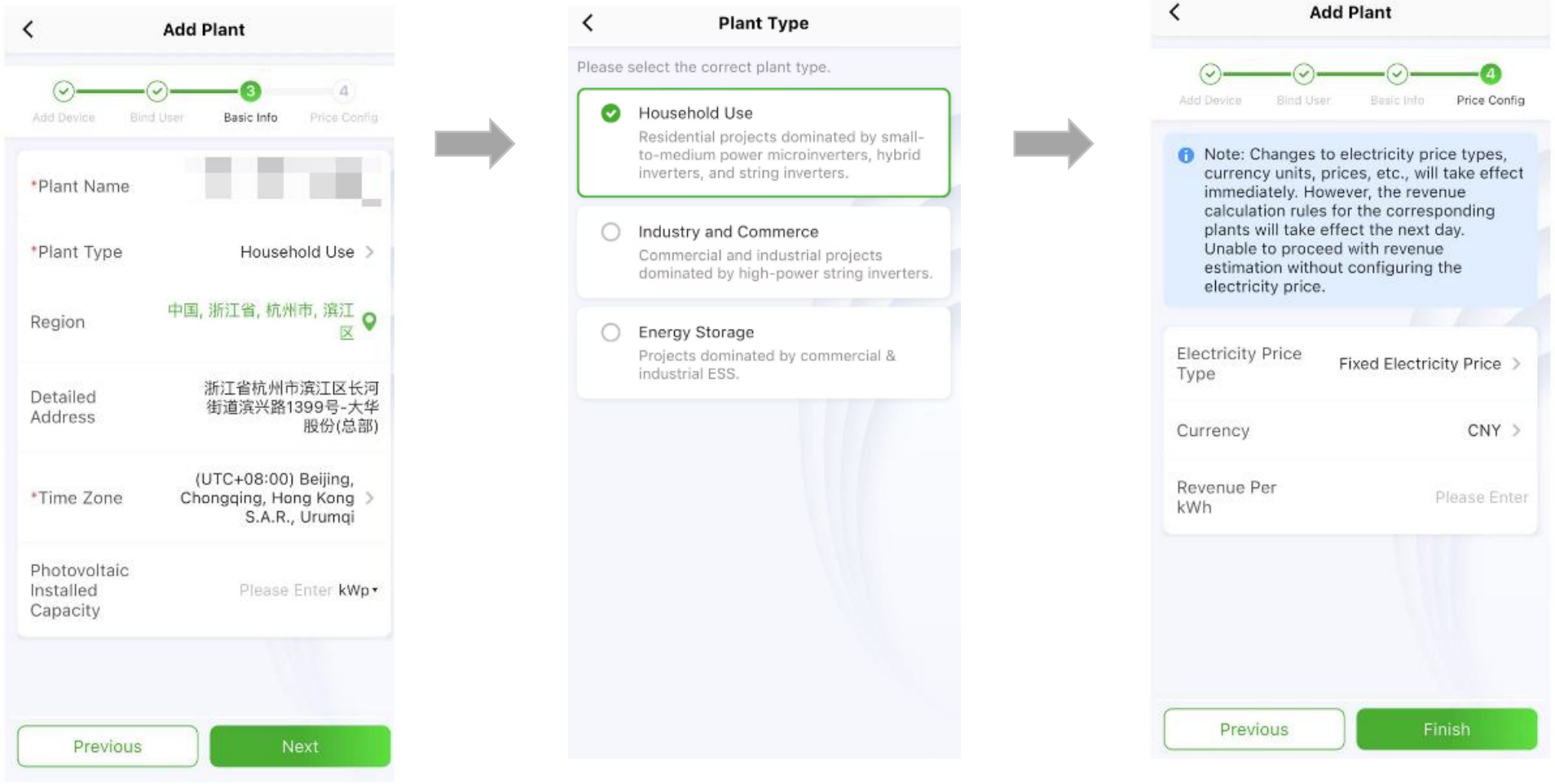
APP Configuration – Create a Plant

Step 4: Add owner - manually add or scan the owner's QR code to bind. Manually add - enter the email address or mobile phone number of the Plant owner. If the owner is not registered, click to help him register and bind. The system will generate a random password and send a text message or email to the registered account

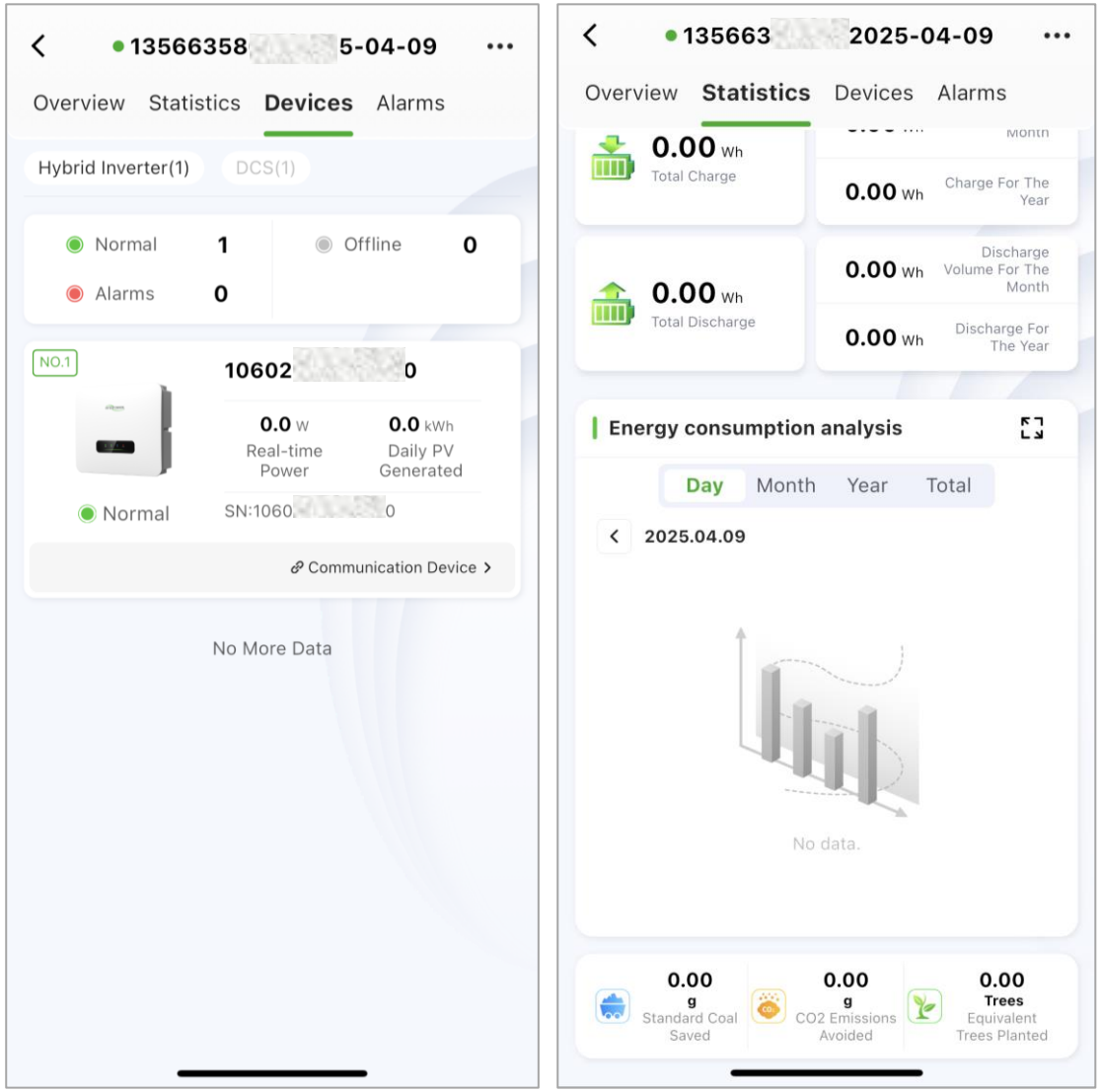


APP Configuration – Create a Plant

Step 5: Fill in basic information including Plant name, Plant type**(Household Use**), Region, Time Zone, and More information including Photovoltaic Installed Capacity, etc.



APP Configuration – Create a Plant



Step1: Select the plant, enter the user's plant interface, go to the device interface, and ensure the devices are online and functioning normally.

Step2: After installation, continuously monitor for at least 30 minutes. Select Statistics, go to the Energy consumption analysis interface, check the real-time power generation curve to confirm the plant has started normal electricity production.

After all the above checks are confirmed normal, it indicates successful installation and commissioning of the equipment!

HYXiPOWER
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THANKS

Delivery and Service Center

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