

FusionSolar App Quick Guide

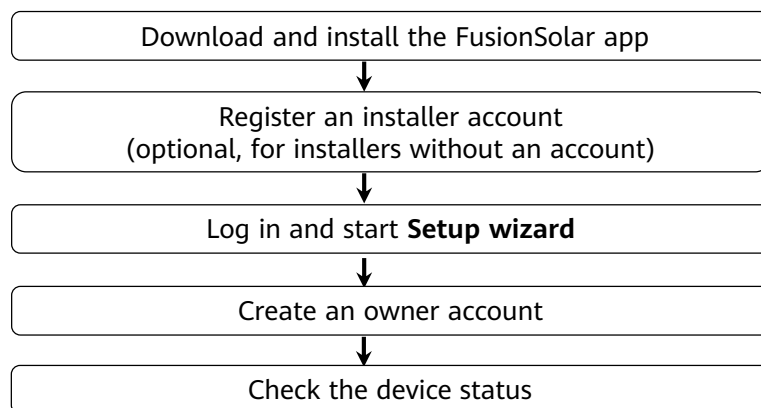
Issue: 09

Date: 2023-12-22



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FusionSolar App Quick Settings Operation Procedure



- The figures are for reference only.
- The initial password for connecting the inverter WLAN is **Changeme**.
- The initial password for connecting to the Smart USB-WLAN adapter is **Changeme**.
- The initial password for the **installer** account is **00000a**. If the system prompts you to change password, set a new password and then log in to the system.
- Some device do not support the initial password. You need to set the initial password upon the first connection. Set the password before log in to the system.
- To ensure account security, change the password periodically and keep the new password in mind. Not changing the initial password may cause password disclosure. A password left unchanged for a long period of time may be stolen or cracked. If a password is lost, devices cannot be accessed. In these cases, the user is liable for any loss caused to the PV plant.

This document applies to the following scenarios:

- Inverter with built-in WLAN for local commissioning
- Inverter with a Smart USB-WLAN Adapter for local commissioning
- In RS485 cascading networking.
- SDongleB-06+Commercial inverter (without WLAN module)
- Inverter with a SmartLogger for local commissioning

1. Downloading and Installing the FusionSolar App

Method 1: Download and install the app from the app store.

- Huawei phone users: Search for *FusionSolar* in Huawei AppGallery.
- iPhone users: Search for *FusionSolar* in the App Store.
- Other mobile phone users: Select method 2.

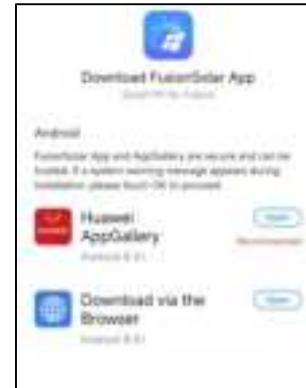


Method 2: Scan the QR code to download and install the app.



Users who select method 2 can select the download method based on the mobile phone type.

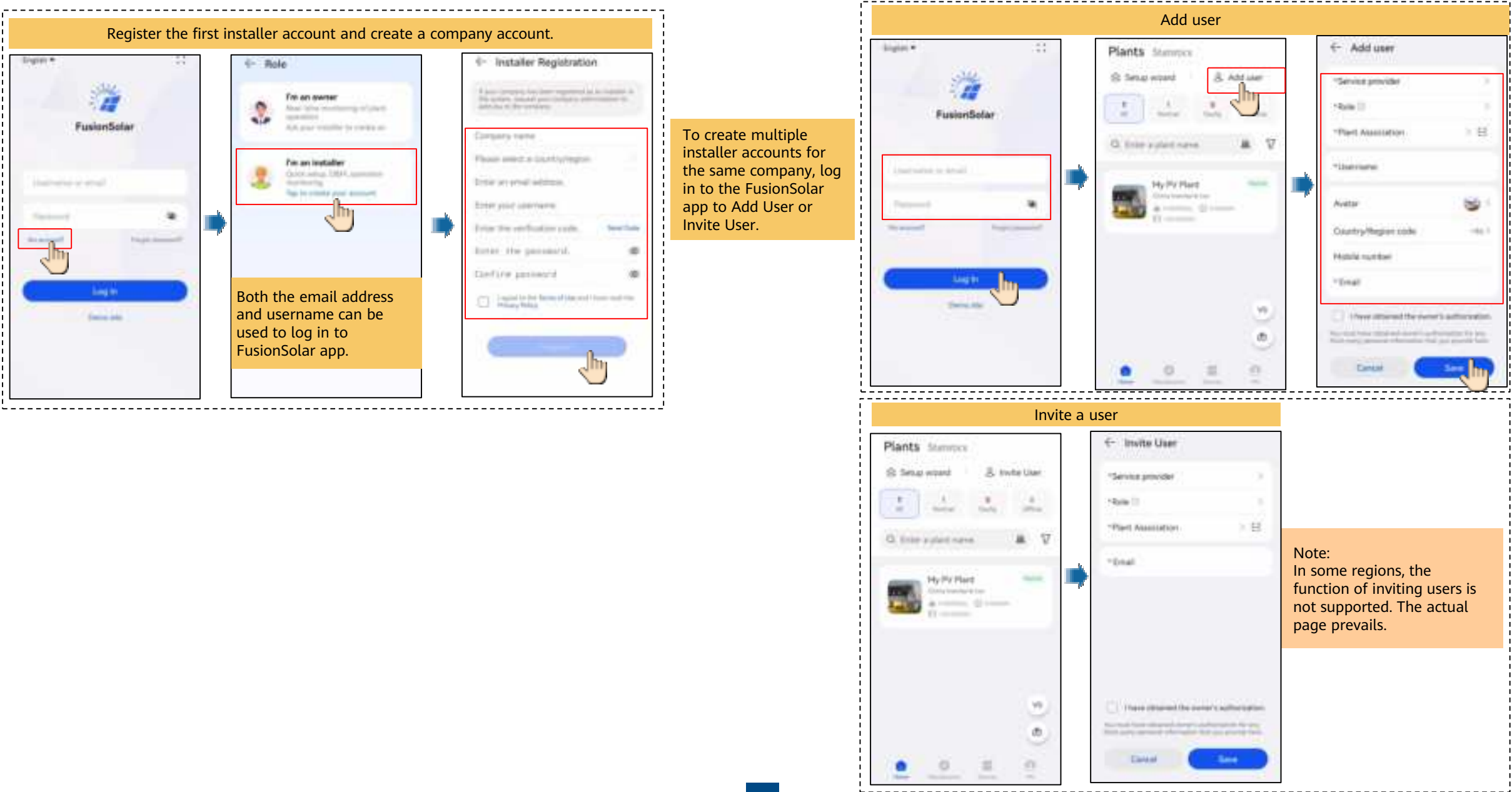
- Huawei mobile phone users: Download from Huawei AppGallery.
- Non-Huawei phone users: Download on a browser.



Note:

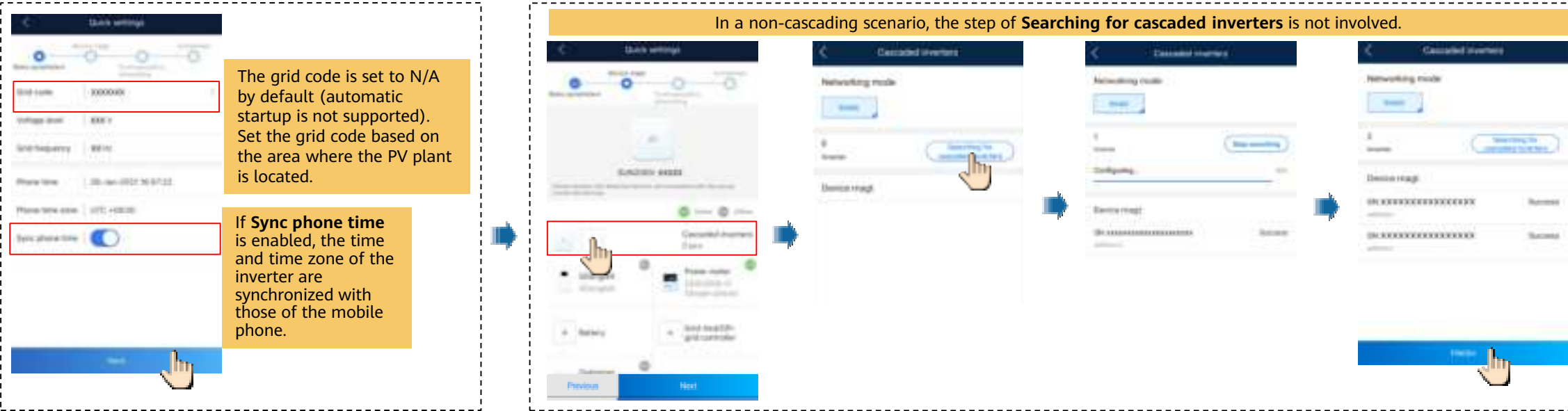
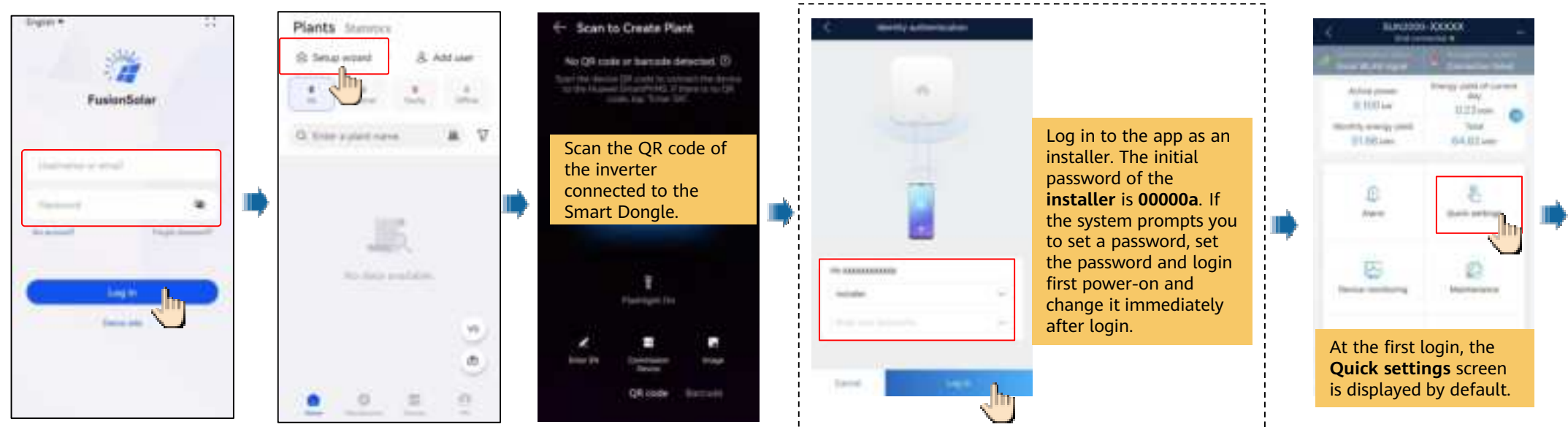
When you select **Download via the Browser**, if a security warning message is displayed indicating that the app is from an external source, tap **ALLOW**.

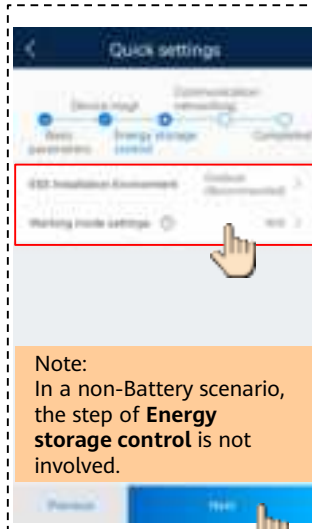
2. Register an Installer Account (Optional, for Installers Without an Account)



3. Log in and Start Setup Wizard

- WLAN/FE SDongle+Built-in WLAN of the Inverter





Select the **ESS Installation Environment** and **working mode settings** of the battery

Note:
In a non-Battery scenario,
the step of **Energy storage control** is not involved.



WLAN communication

Enabled **Monitor the PV plant through the management system**.

Set the **Domain name** to **intl.fusionsolar.huawei.com** and **Port number** to **27250**.

Select a router that can connect to the Internet and enter the router password.

Add a plant.

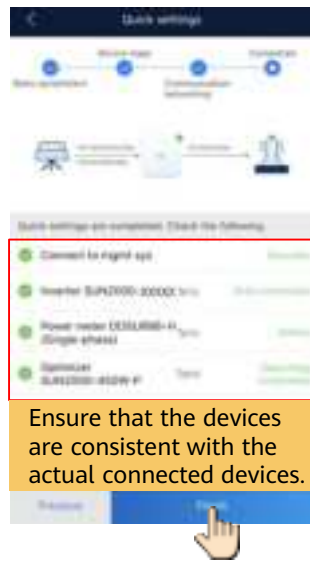


FE communication

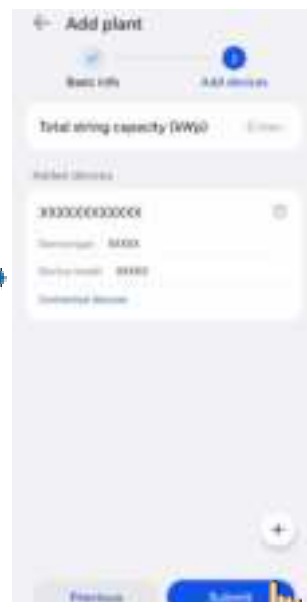
Enabled **Monitor the PV plant through the management system**.

Set the **Domain name** to **intl.fusionsolar.huawei.com** and **Port number** to **27250**.

If **Ethernet** is disabled, the network cable is not connected. Reconnect the network cable.

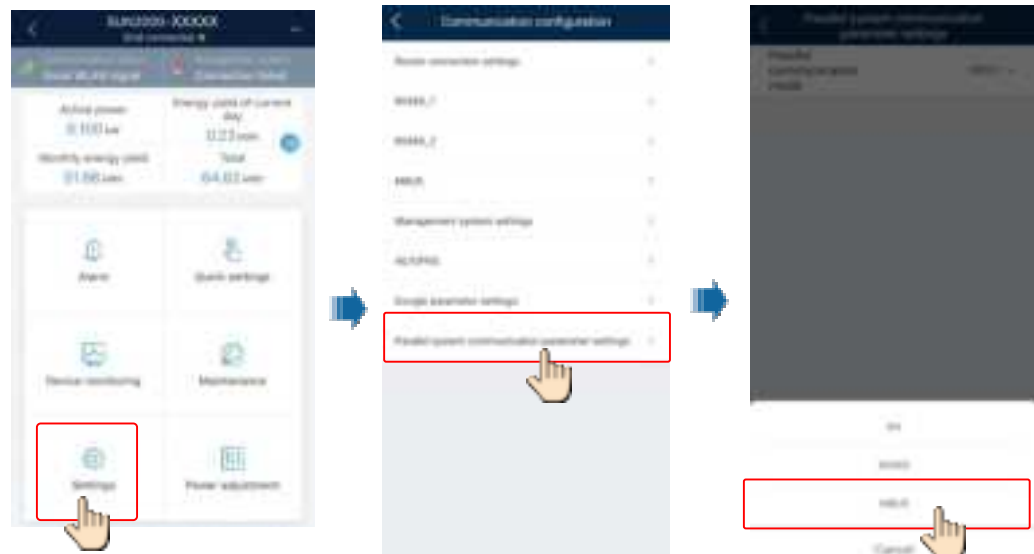


Ensure that the devices are consistent with the actual connected devices.

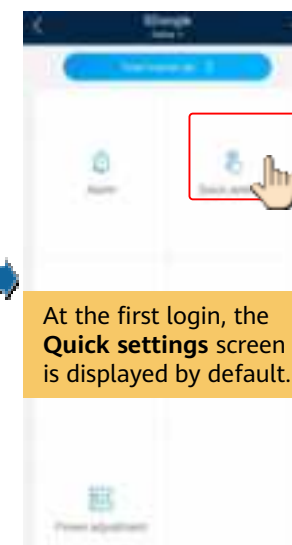
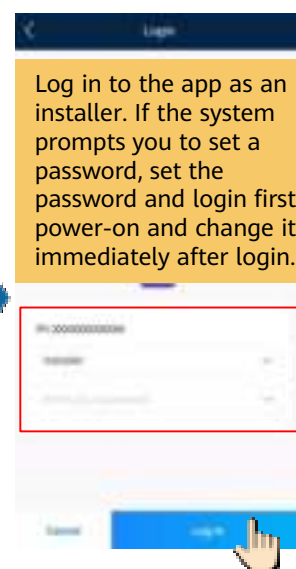
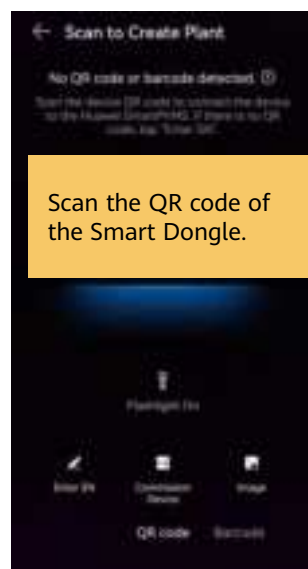
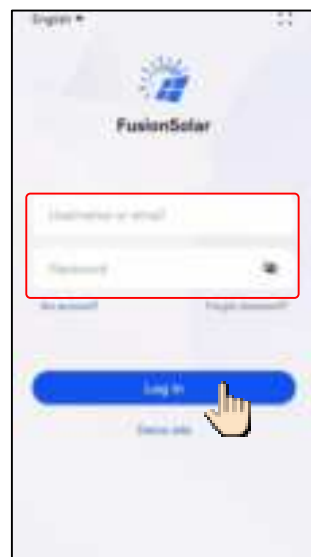


- **SDongleA-05+Distributed inverter/SDongleB-06+Commercial inverter (without WLAN module)**

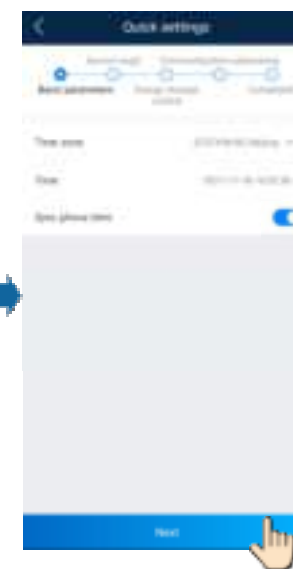
In the MBUS cascading scenario, use the USB-WLAN module to connect to the inverter, and then log in to the commissioning page of inverter to set the parallel parameter.



Remove the USB-WLAN module, install the SDongleB-06.



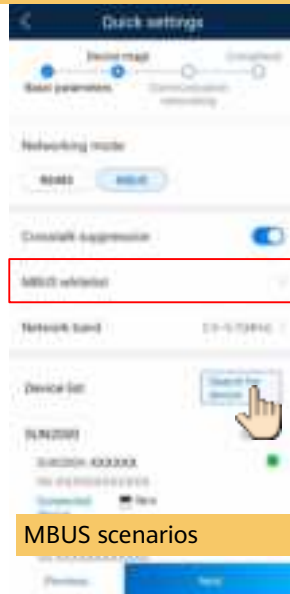
At the first login, the **Quick settings** screen is displayed by default.



In cascading scenarios, you need to manually search for cascaded inverters.

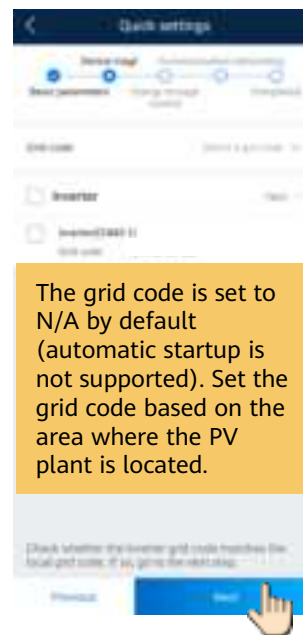


RS485 scenarios

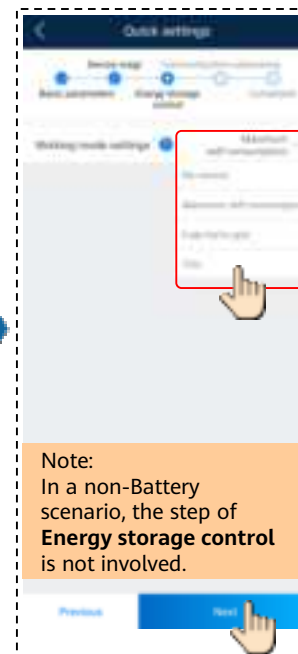


MBUS scenarios

Upload the SN file to search for cascaded inverters. (On the app connection page, click MBUS whitelist to generate an SN file.)

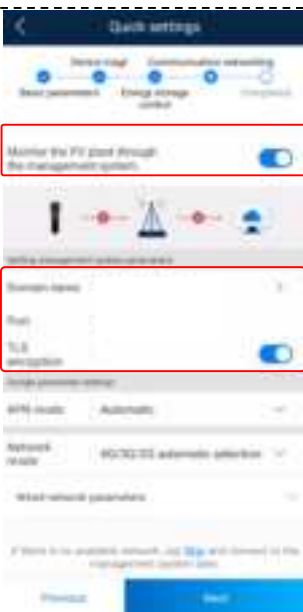


The grid code is set to N/A by default (automatic startup is not supported). Set the grid code based on the area where the PV plant is located.



Select the **working mode settings** of the battery

Note:
In a non-Battery scenario, the step of **Energy storage control** is not involved.



Set communication parameters based on the actual networking scenario.

Networking	Parameters
FE communication	DHCP is enabled by default. If the router does not support DHCP, disable DHCP and manually assign an IP address.
WLAN communication	Select the router you want to connect to, enter the password, and tap Connect Router.
4G communication	By default, APN mode is set to Automatic. When this mode cannot be used to access the Internet, set the parameter to Manual. In this case, set the parameters related to the SIM card based on the information obtained from the carrier.

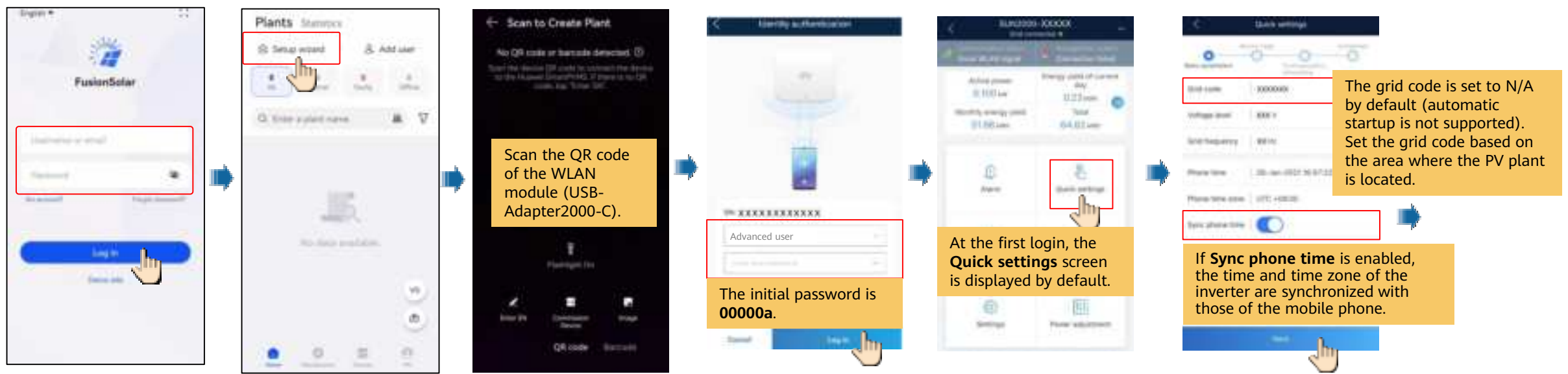
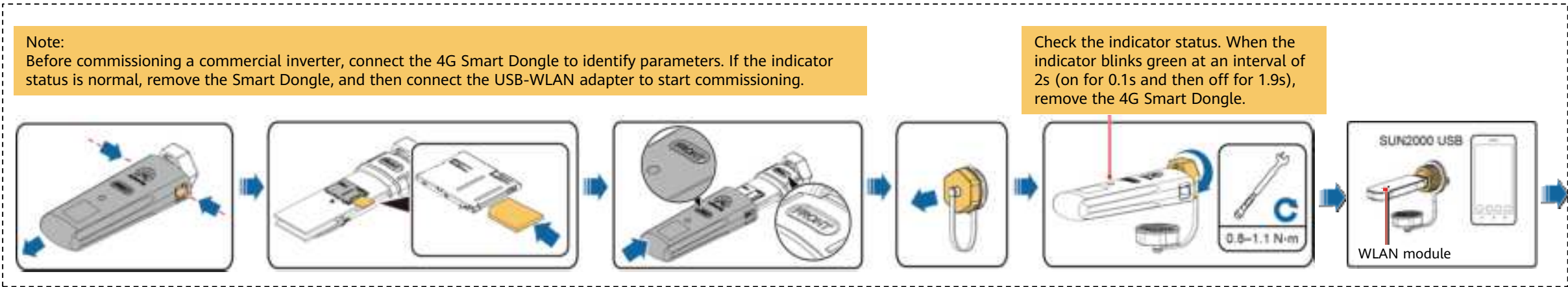
Set the **Domain name** to **intl.fusionsolar.huawei.com** and **Port** number to **27250**.



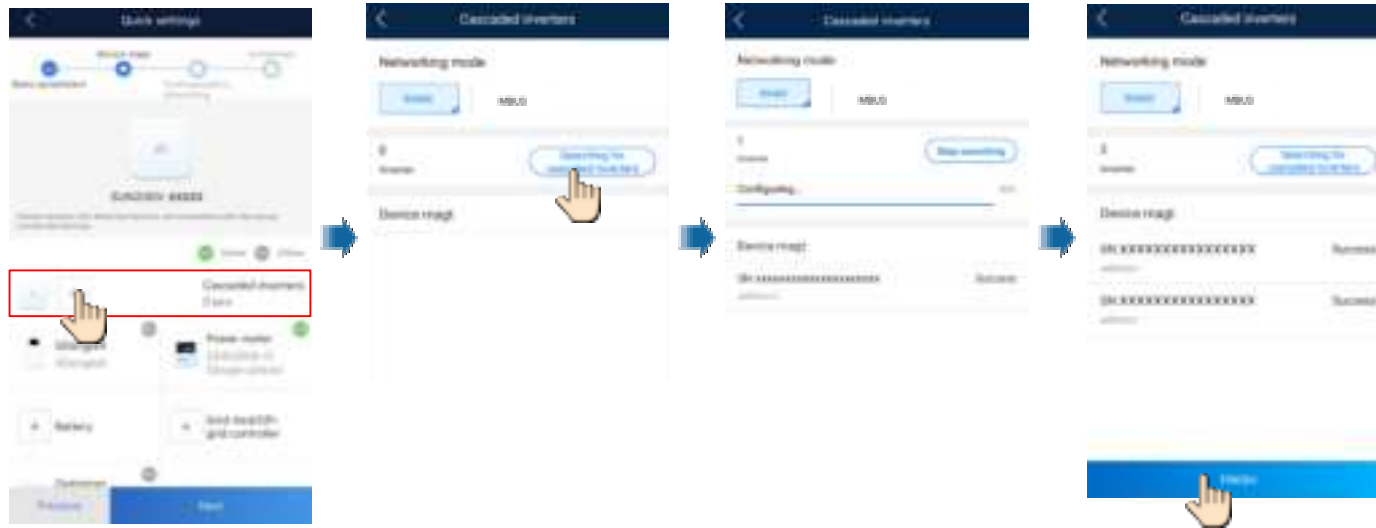
The figure consists of three sequential screenshots of a mobile application interface, connected by blue arrows indicating the flow of the process.

- First Screenshot:** The screen is titled "Create plant". It features a red rectangular box around the "Add plant" button, with a hand icon pointing at it. Below this is a "Connect to existing plant" button. At the bottom, there is a "Cancel" button.
- Second Screenshot:** The screen is titled "Add plant". It contains several input fields: "Country/Region" (with a search icon), "Service provider" (with a dropdown arrow), "Plant type" (with a dropdown arrow), "TV-charger-only plant" (with a dropdown arrow), "Plant name" (with a dropdown arrow), "Grid connection date" (with a date picker icon), and "Start date of safe running" (with a date picker icon). Below these is a "Plant address" field with a location pin icon. At the bottom, there is a "Next" button with a hand icon pointing at it.
- Third Screenshot:** The screen is titled "Add plant". It shows a "Total string capacity (kWp)" field with a dropdown arrow. Below this is a section for "Added strings" containing a table with columns for "Description", "Size (kWp)", "Start year", and "End year". The table has one row with the value "3333333333333333". At the bottom, there are "Feedback" and "Submit" buttons, with a hand icon pointing at the "Submit" button.

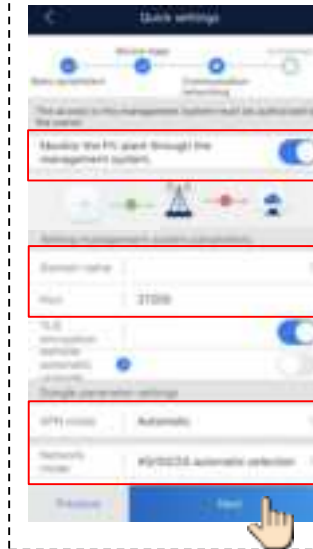
• Local Commissioning Using a Smart USB-WLAN Adapter



In a non-cascading scenario, the step of **searching for cascaded inverters** is not involved.



Set network parameters and domain name.



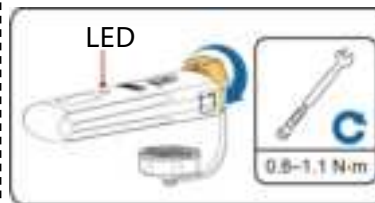
4G communication

Enabled **Monitor the PV plant through the management system**.

Set the **Domain name** to **intl.fusionsolar.huawei.com** and **Port** number to **27250**.

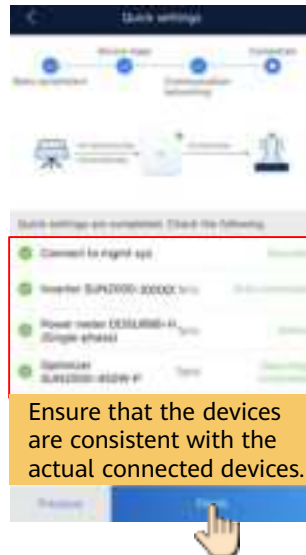
By default, **APN mode** is set to **Automatic**. When this mode cannot be used to access the Internet, set the parameter to **Manual**. In this case, set the parameters related to the SIM card based on the information obtained from the carrier.

Connect to the management system.



After the commissioning is complete, remove the USB-WLAN module, install the 4G module. Check the indicator status. After the indicator is steady green or blinks at short intervals (on for 0.2s and then off for 0.2s) add a PV plant.

Scan the QR code of the Smart Dongle or the inverter connected to the Smart Dongle.



Ensure that the devices are consistent with the actual connected devices.

Add a plant.

The image shows a three-step mobile app flow for adding a plant, enclosed in a dashed box. The steps are connected by blue arrows.

Step 1: Create plant
The screen has a title bar with a back arrow and "Create plant". Below the title bar, there is a red-bordered button labeled "Add plant" with a hand icon pointing to it. Below this button is a link labeled "Connect to existing plant". At the bottom of the screen is a "Cancel" button.

Step 2: Add plant
The screen has a title bar with a back arrow and "Add plant". Below the title bar, there are two tabs: "Basic info" (selected) and "Add devices". The "Basic info" tab contains the following fields:

- "Country/Region" with a dropdown menu.
- "Service provider" with a dropdown menu.
- "Plant type" with a dropdown menu.
- "EV-charger-only plant" with a dropdown menu.
- "Plant name" with a text input field.
- "Grid connection date" with a date picker.
- "Start date of safe running" with a date picker.
- "Plant address" with a text input field.

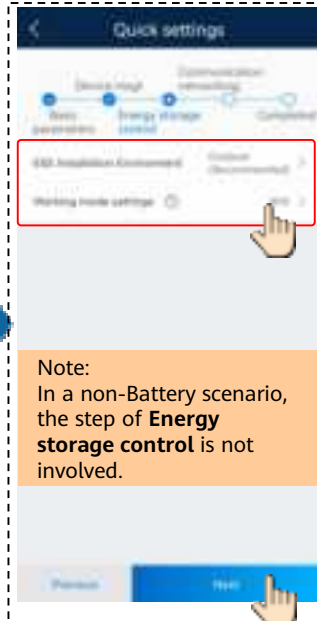
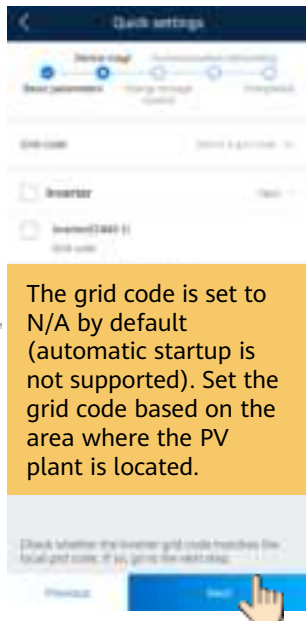
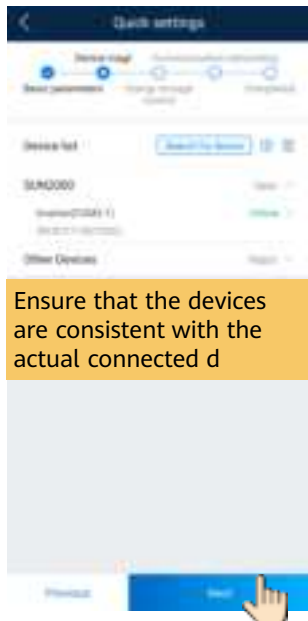
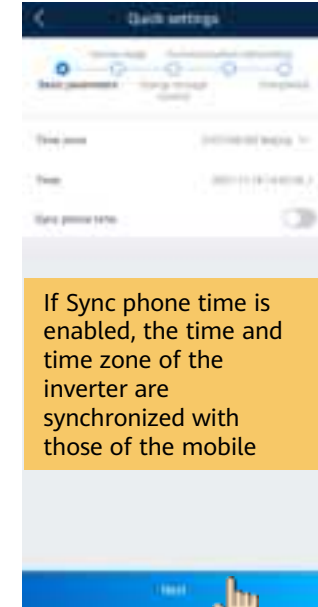
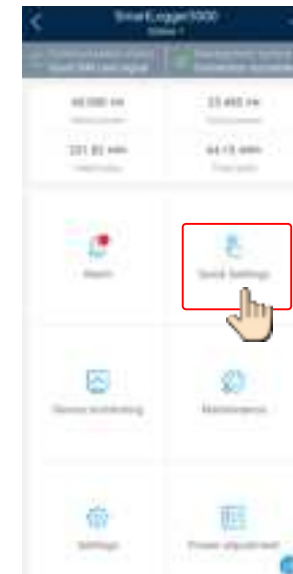
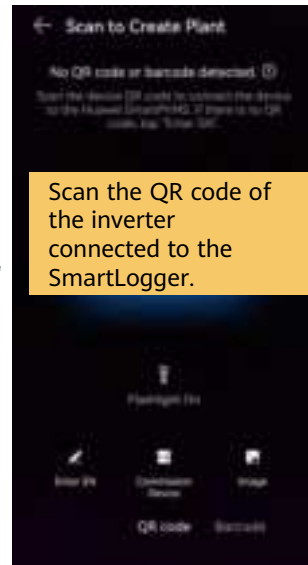
At the bottom of the screen is a "Next" button with a hand icon pointing to it.

Step 3: Add plant
The screen has a title bar with a back arrow and "Add plant". Below the title bar, there are two tabs: "Basic info" and "Add devices" (selected). The "Add devices" tab contains the following fields:

- "Total string capacity (kWp)" with a text input field.
- "Added devices" section with a list of devices, each with a "Remove" button.
- "Device type" with a dropdown menu.
- "Device model" with a dropdown menu.
- "Device power" with a dropdown menu.

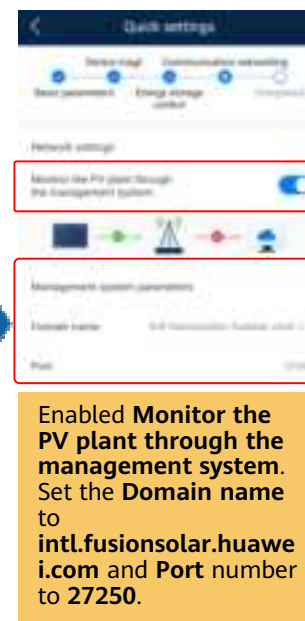
At the bottom of the screen are "Previous" and "Submit" buttons, with a hand icon pointing to the "Submit" button.

• Local Commissioning Using the SmartLogger of the Inverter

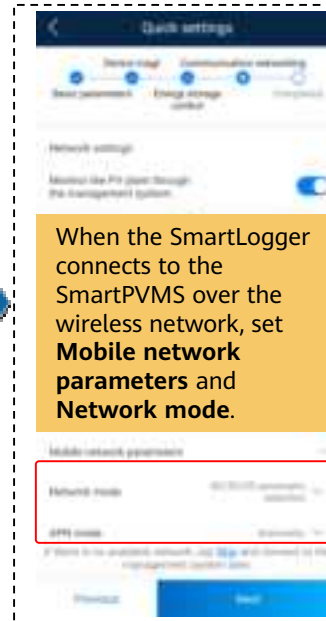


Select the ESS Installation Environment and working mode settings of the battery

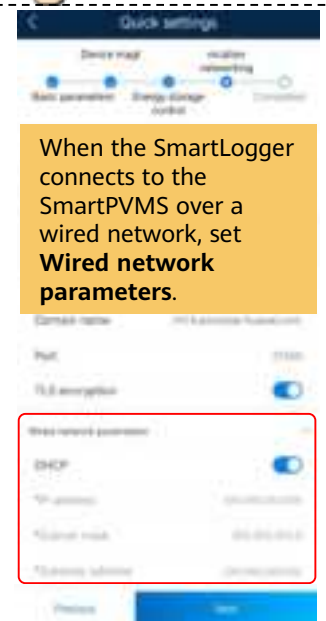
Note:
In a non-Battery scenario, the step of **Energy storage control** is not involved.



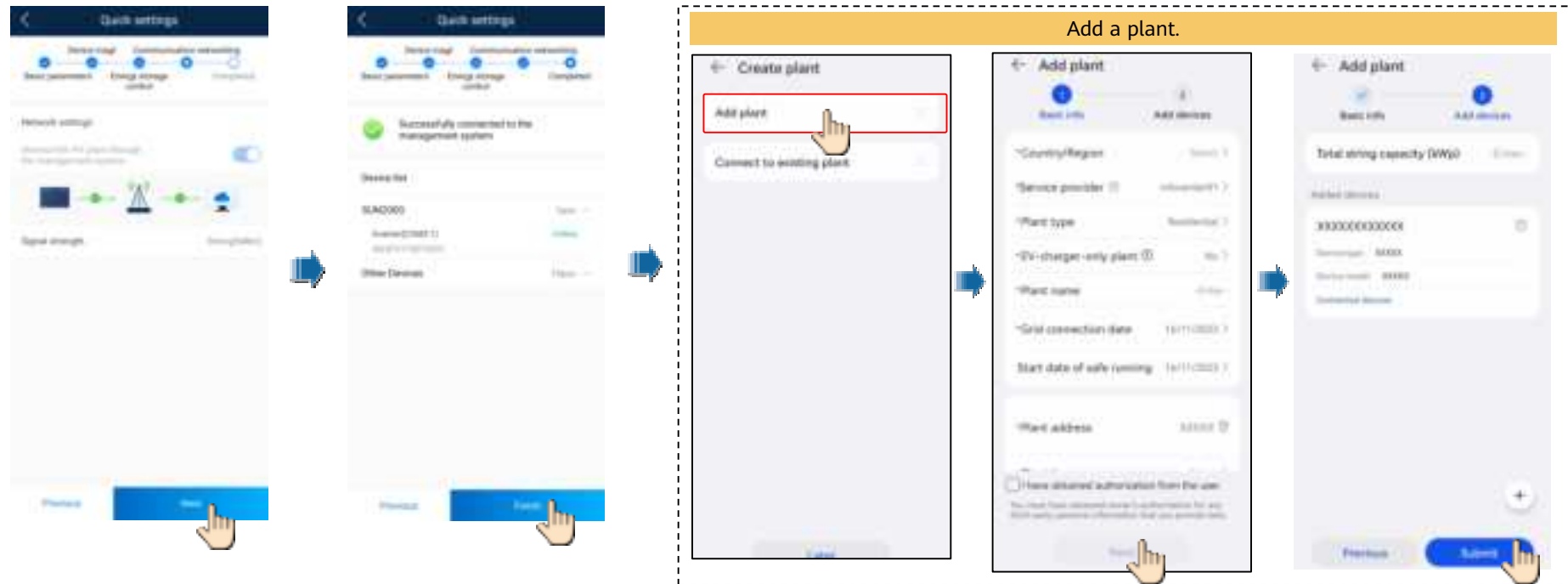
Enabled Monitor the PV plant through the management system. Set the Domain name to intl.fusionsolar.huawei.com and Port number to 27250.



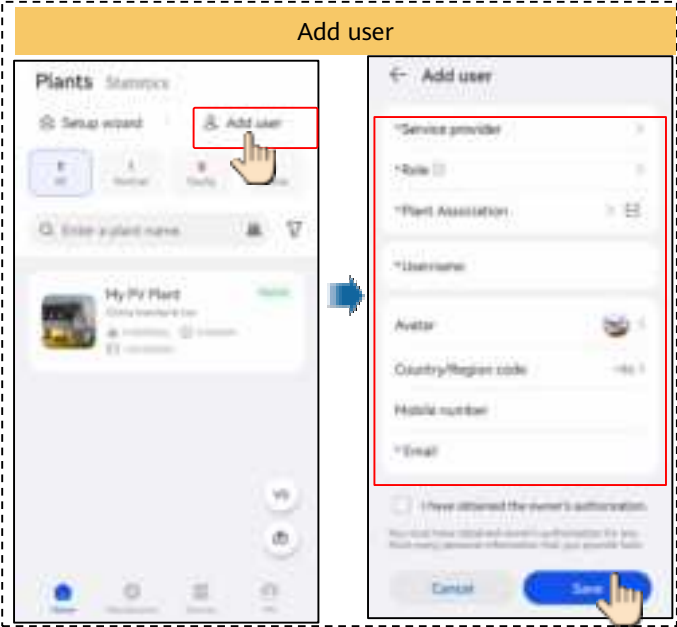
When the SmartLogger connects to the SmartPVMS over the wireless network, set **Mobile network parameters** and **Network mode**.



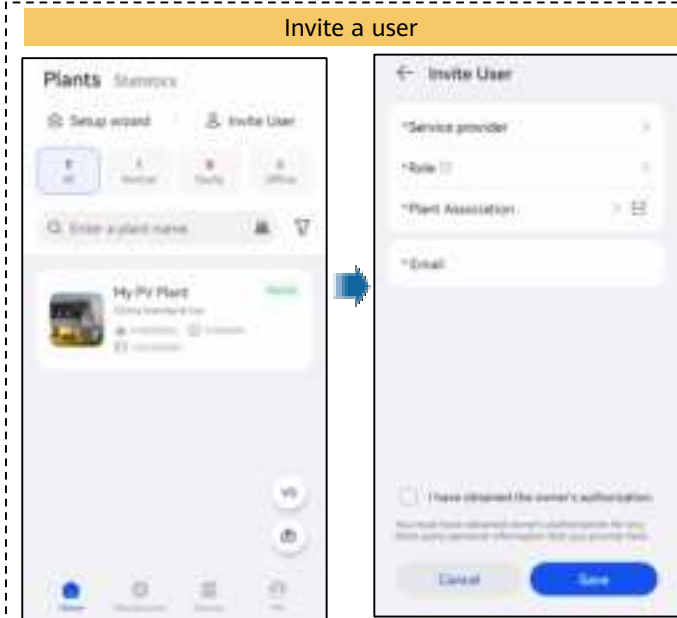
When the SmartLogger connects to the SmartPVMS over a wired network, set **Wired network parameters**.



4. Create an owner account

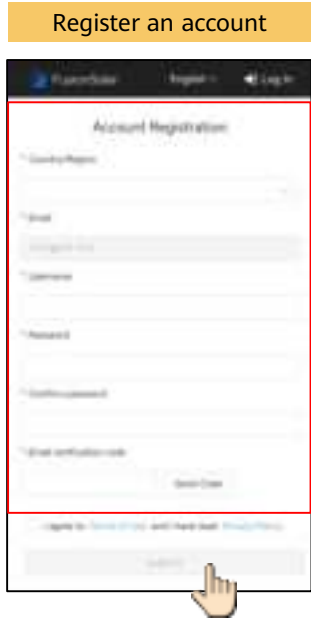


or



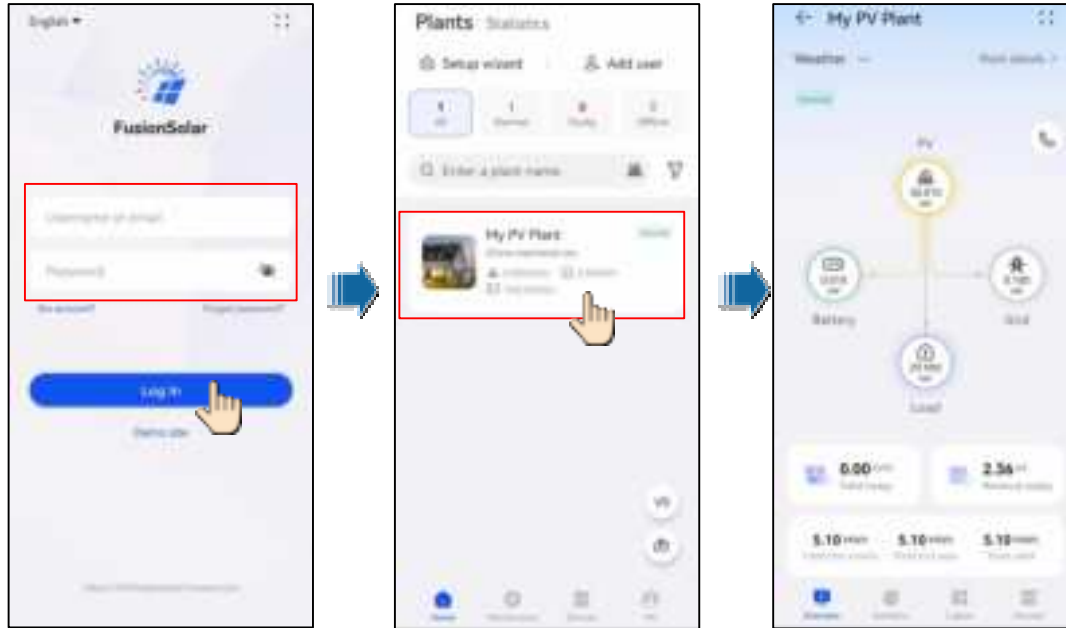
Note:
In some regions, the
function of inviting users
is not supported. The
actual page prevails.

After receiving the
invitation, the user
accesses the
registration page to
register an account.



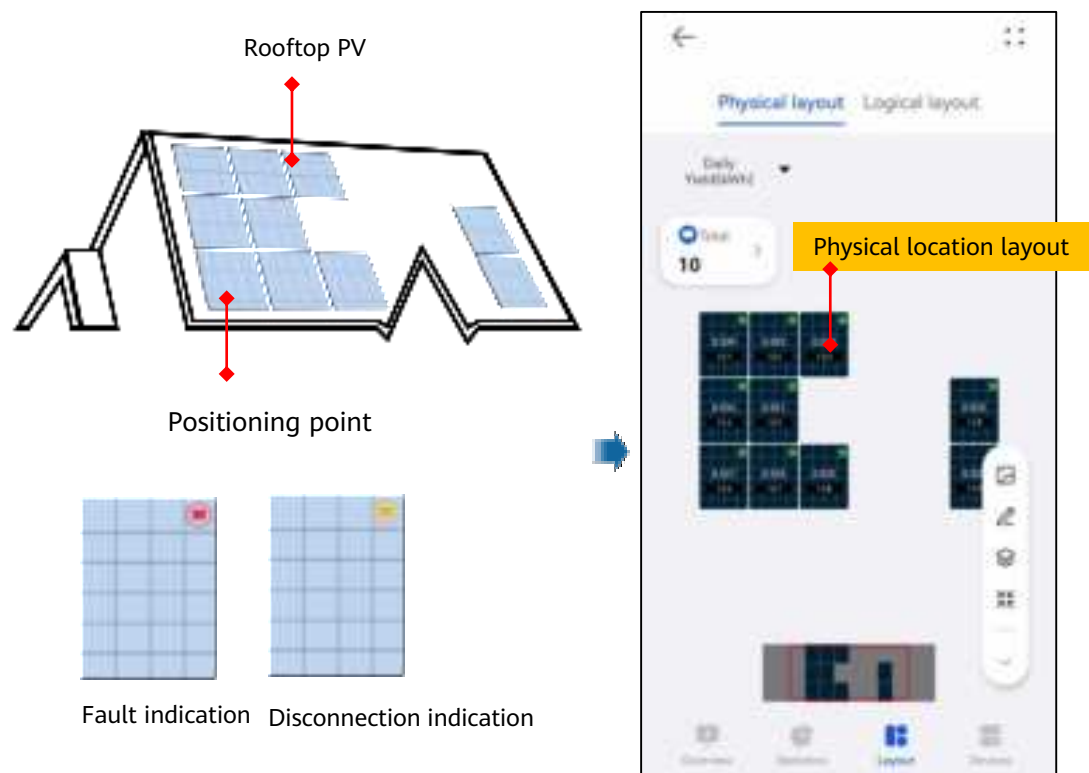
5. Checking the Device Status

- Checking the Device Status Using Device Commissioning

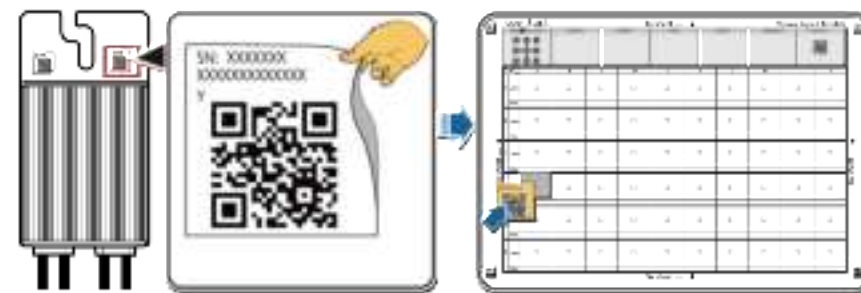


FAQ. Physical Layout Design (With Optimizers)

1. The physical layout must be configured for optimizers. When an optimizer is faulty, it can be quickly located and replaced based on the physical layout.
2. The optimizer disconnection detection is available only after the physical layout is complete. Perform optimizer disconnection detection and view the result on the **Optimizer layout** screen.

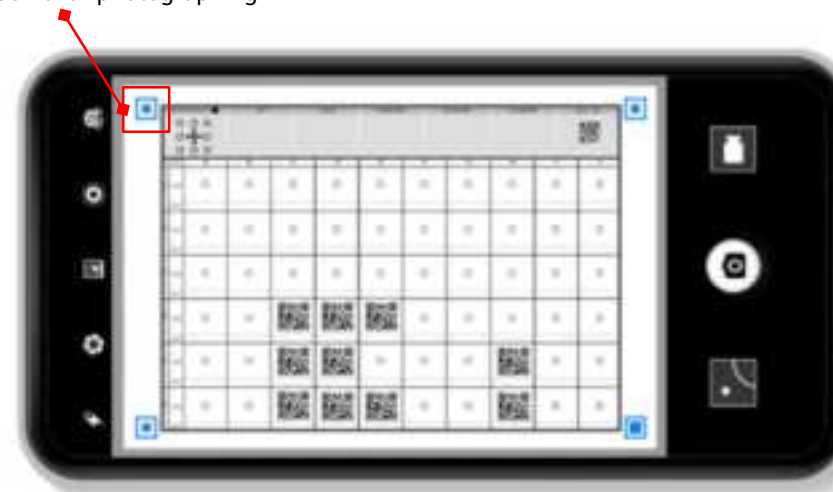


Step 1 After determining the installation position of an optimizer, remove the SN label from the optimizer and attach it to the physical layout template.



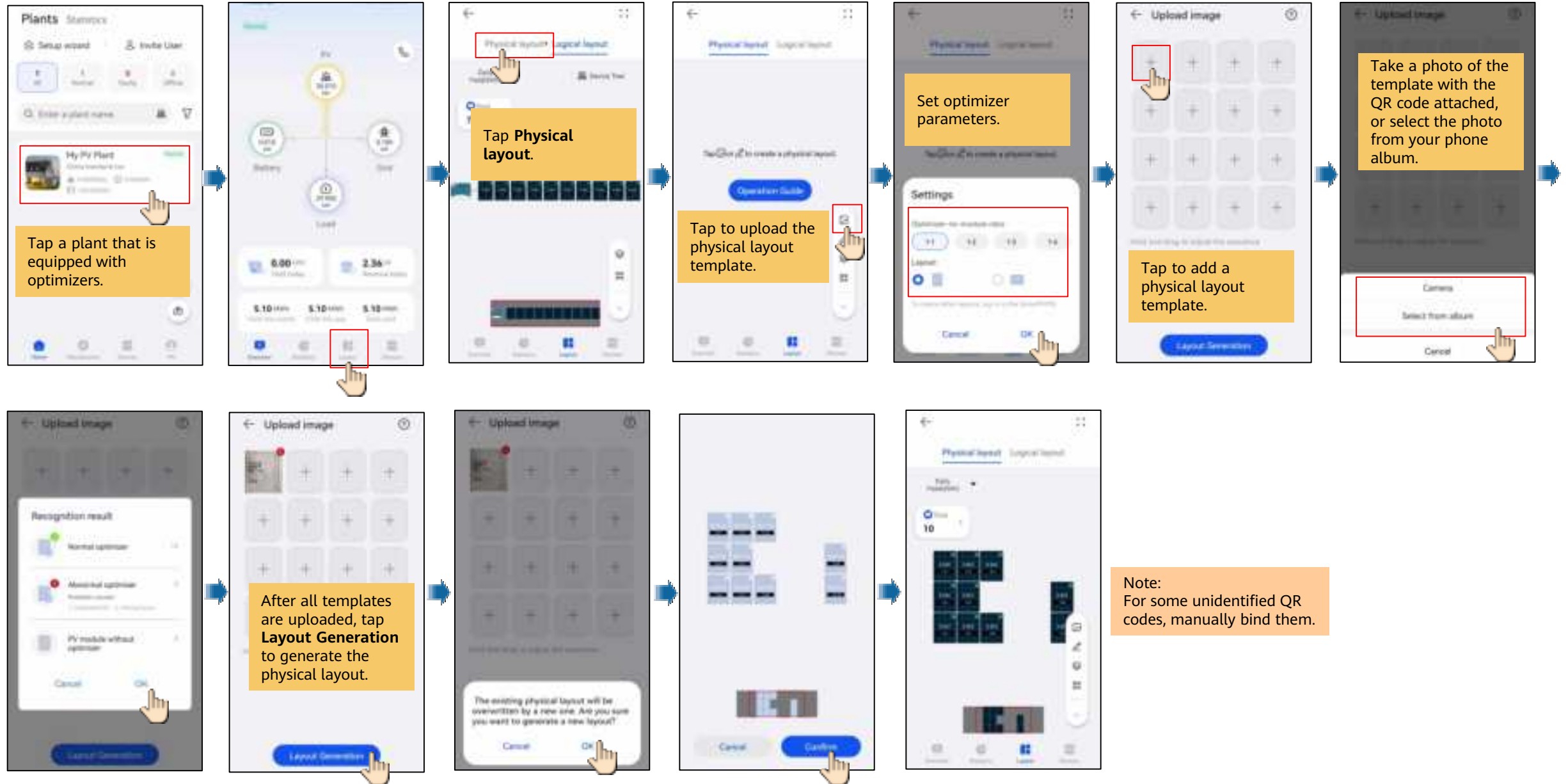
Step 2 Take a photo of the template with the QR code attached.

Positioning point for photographing



Note: Ensure that the four positioning points on the template are within the frame.

FAQ . Physical Layout Design



Indicators on the Smart Dongle

LED		Remarks	Description
Color	Status		
N/A	Off	Normal	The Dongle is not secured or is not powered on.
Yellow (blinking green and red simultaneously)	Steady on		The Dongle is secured and powered on.
Green	Blinking in a 2-second cycle (on for 0.1s and then off for 1.9s)	Normal	Dialing (duration < 1 min)
		Abnormal	If the duration is longer than 1 min, the 4G parameter settings are incorrect. Reset the parameters.
	Blinking at long intervals (on for 1s and then off for 1s)	Normal	The dial-up connection is set up successfully (duration < 30s).
		Abnormal	If the duration is longer than 30s, the settings of the management system parameters are incorrect. Reset the parameters.
	Steady on	Normal	Successfully connected to the management system.
	Blinking at short intervals (on for 0.2s and then off for 0.2s)		The inverter is communicating with the management system through the Dongle.
Red	Steady on	Abnormal	The Dongle is faulty. Replace Dongle.
	Blinking at short intervals (on for 0.2s and then off for 0.2s)		The Dongle has no SIM card or the SIM card is in poor contact. Check whether the SIM card has been installed or is in good contact. If not, install the SIM card or remove and insert the SIM card.
	Blinking at long intervals (on for 1s and then off for 1s)		The Dongle fails to connect to the management system because it has no signals, weak signal, or no traffic. If the Dongle is reliably connected, check the SIM card signal through the APP. If no signal is received or the signal strength is weak, contact the carrier. Check whether the tariff and traffic of the SIM card are normal. If not, recharge the SIM card or buy traffic.
Blinking red and green alternatively	Blinking at long intervals (red for 1s and green for 1s)		No communication with the inverter <ul style="list-style-type: none"> Remove and insert the Dongle. Check whether inverters match the Dongle. Connect the Dongle to other inverters. Check whether the Dongle or the USB port of the inverter is faulty.
	Blinking at short intervals (red for 0.2s and green for 0.2s)	Normal	The Dongle is being upgraded locally.