

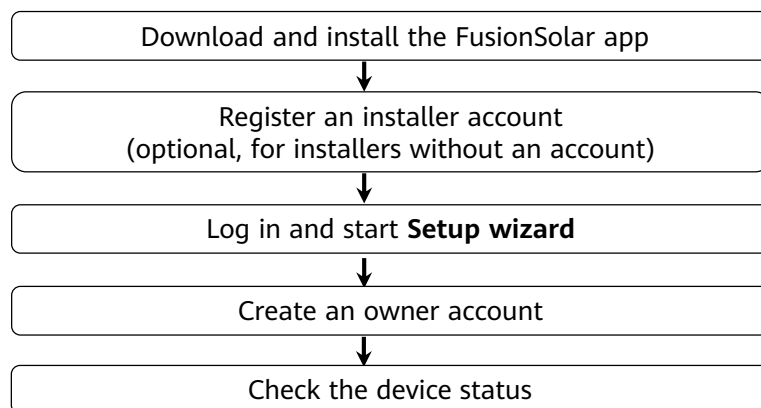
FusionSolar App Quick Guide

Issue: 08
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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.

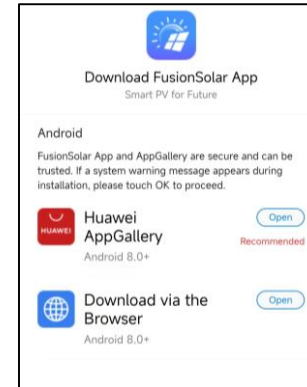


Method 2: Scan the QR code to download and install the app.



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)

Register the first installer account and create a company account.

English

FusionSolar

Username or email

Password

No account?

Forgot password?

Log In

Demo site

Role

I'm an owner

Real-time monitoring of plant operation

Ask your installer to create an

I'm an installer

Quick setup, O&M, operation monitoring

Tap to create your account

Installer Registration

If your company has been registered as an installer in the system, request your company administrator to add you to the company.

Company name

Please select a country/region

Enter an email address.

Enter your username.

Enter the verification code.

Send Code

Enter the password.

Confirm password

I agree to the Terms of Use and I have read the Privacy Policy.

Register

Both the email address and username can be used to log in to FusionSolar app.

To create multiple installer accounts for the same company, log in to the FusionSolar app to Add User or Invite User.

Add user

English

FusionSolar

Username or email

Password

No account?

Forgot password?

Log In

Demo site

Plants Statistics

Setup wizard

Add user

1 All

1 Normal

0 Faulty

0 Offline

Enter a plant name.

My PV Plant

China mainland xxx

0.00kWp

0.00kWh

100.00kWh

Normal

VS

Home

Maintenance

Devices

Me

Add user

*Service provider

*Role

*Plant Association

*Username

Avatar

Country/Region code

+86

Mobile number

*Email

I have obtained the owner's authorization.

You must have obtained owner's authorization for any third-party personal information that you provide here.

Cancel

Save

Invite a user

Plants Statistics

Setup wizard

Invite User

1 All

1 Normal

0 Faulty

0 Offline

Enter a plant name.

My PV Plant

China mainland xxx

0.00kWp

0.00kWh

100.00kWh

Normal

VS

Home

Maintenance

Devices

Me

Invite User

*Service provider

*Role

*Plant Association

*Email

I have obtained the owner's authorization.

You must have obtained owner's authorization for any third-party personal information that you provide here.

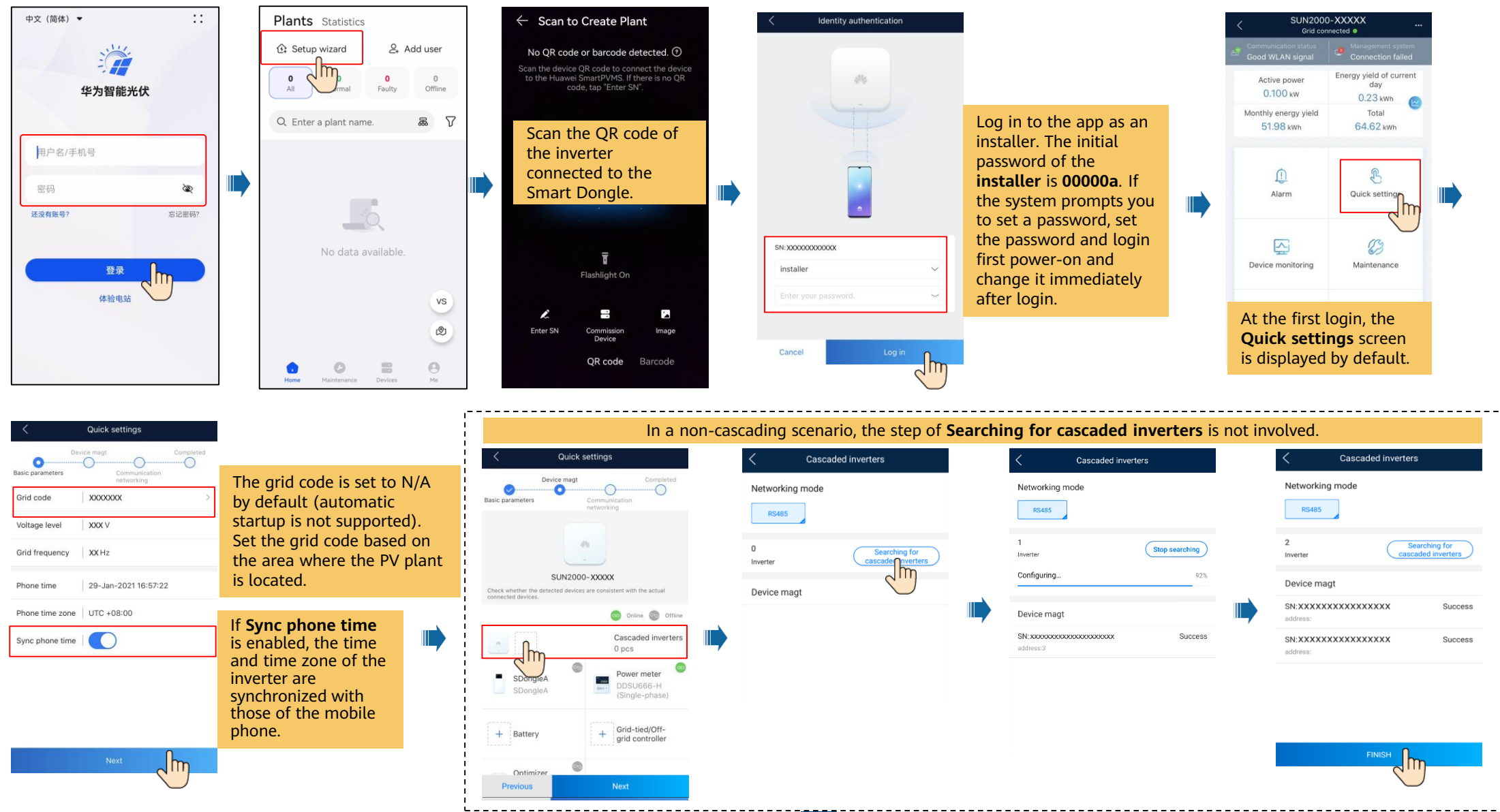
Cancel

Save

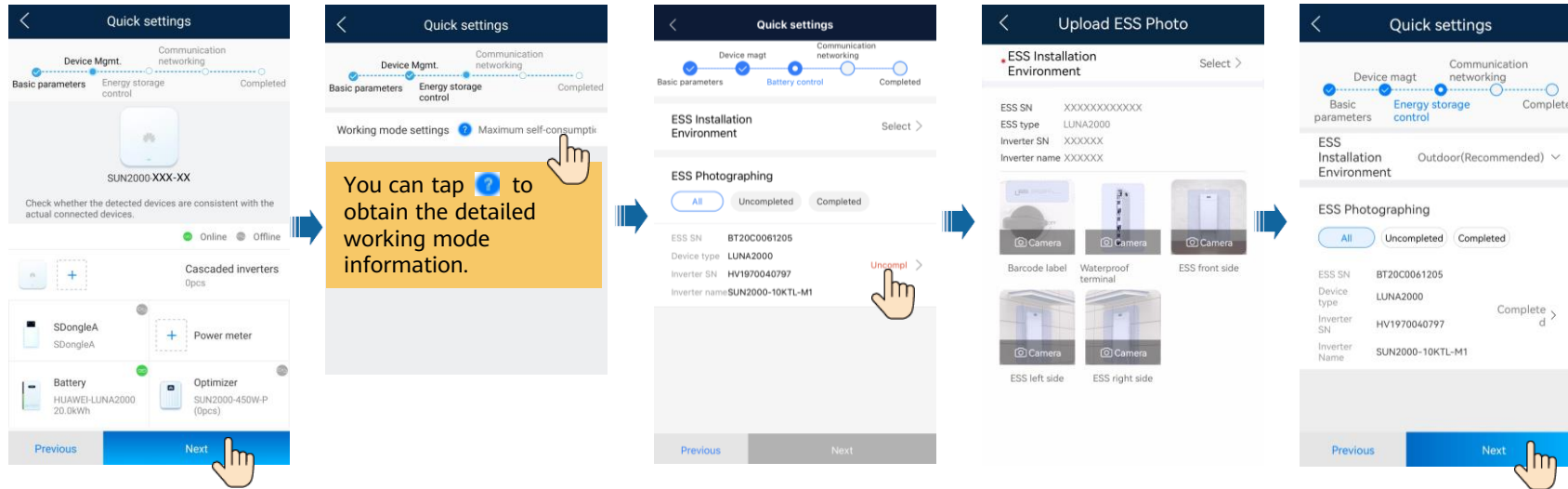
Note:
In some regions, the function of inviting users is not supported. The actual page prevails.

3. Log in and Start Setup Wizard

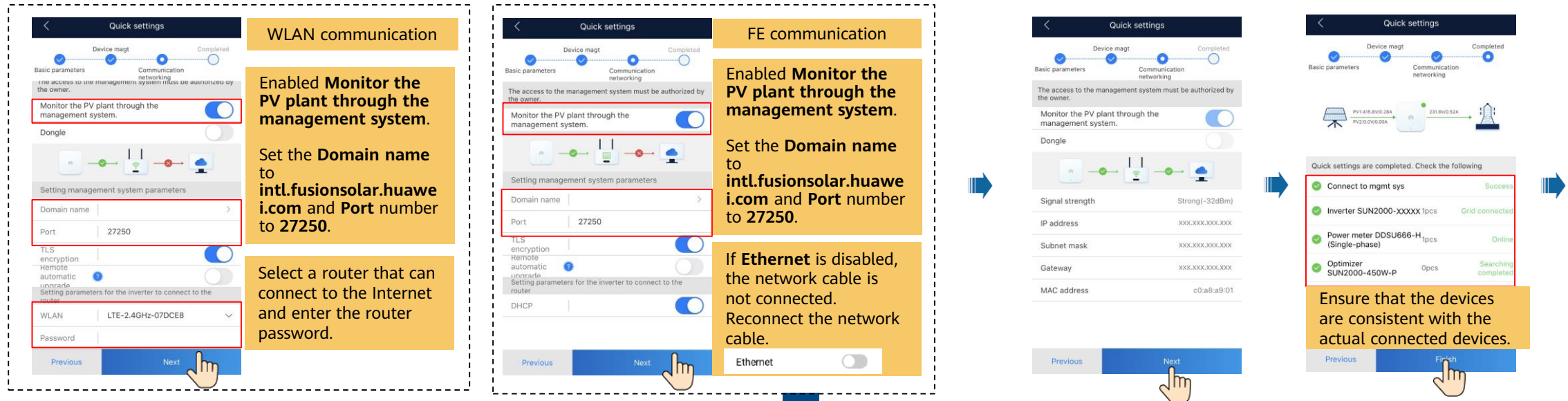
• **WLAN/FE SDongle+Built-in WLAN of the Inverter**



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



Set network parameters and domain name.



Add a plant.

← Create plant

Add plant >

Connect to existing plant >

← Add plant

1 Basic info 2 Add devices 3 Plant Profile

*Country/Region >

*Service provider >

*Plant type Select >

*Plant name

Total string capacity (kWp) -Enter-

*Grid connection date 18/04/2023 >

Start date of safe running 18/04/2023 >

*Plant address -Enter- >

☐ I have obtained the owner's authorization.
You must have obtained owner's authorization for any third-party personal information that you provide here.

Next

← Add plant

✓ 1 Basic info 2 Add devices 3 Plant Profile

Added devices

Device type *****

Device model *****

Connected devices

Previous Next

← Add plant

✓ 1 Basic info 2 Add devices 3 Plant Profile

Upload Plant Photo

Plant Photo Upload >

*Upload ESS Photo

SN *****

Device type *****

Device model *****

ESS Quantity 1

Upload

Note:
In scenarios without
energy storage, no ESS
photos are required.

← Upload ESS Photo

*ESS Installation Environment Sele >

ESS (DCDC) SN *****

ESS type *****

Inverter SN *****

Inverter name *****

Camera

Camera

Camera

Barcode label

Waterproof terminal

ESS front side

Camera

Camera

ESS left side

ESS right side

Upload

← Add plant

✓ 1 Basic info 2 Add devices 3 Plant Profile

Upload Plant Photo

Plant Photo Upload >

*Upload ESS Photo

SN *****

Device type *****

Device model *****

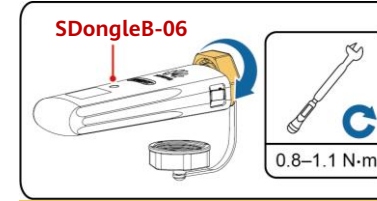
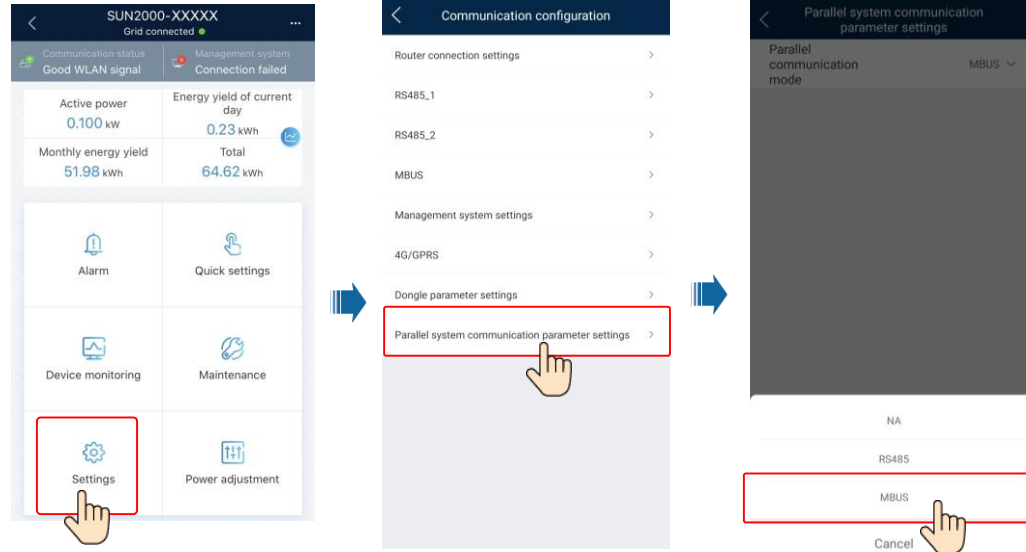
ESS Quantity 1

Change Photos

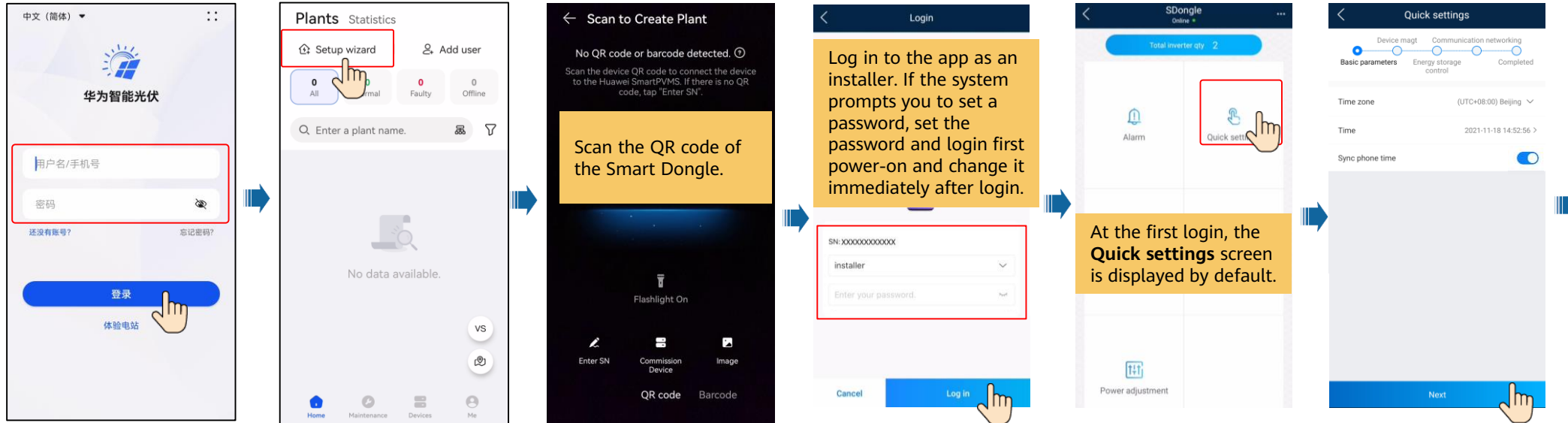
Previous Submit

• SDongleA-03+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.



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

Quick settings

Device magt

Basic parameters

Communication networking

Completed

Networking mode

RS485 MBUS

Device list

SUN2000

SUN2000-XXXXXX

SN:XXXXXXXXXXXX

Connected device

Opics

Search for device

RS485 scenarios

Previous Next

Quick settings

Device magt

Basic parameters

Communication networking

Completed

Networking mode

RS485 MBUS

Crosstalk suppression

MBUS whitelist

Network band

2.5-5.7(MHz)

Device list

SUN2000

SUN2000-XXXXXX

SN:XXXXXXXXXXXX

Connected device

Opics

Search for device

MBUS scenarios

Previous Next

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

Quick settings

Device magt

Communication networking

Basic parameters

Energy storage control

Completed

Grid code

Select a grid code

Inverter

Inverter(COM2-1)

Grid code

1pcs

Check whether the inverter grid code matches the local grid code. If so, go to the next step.

Previous Next

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.

Quick settings

Device magt

Communication networking

Basic parameters

Energy storage control

Completed

Working mode settings

Maximum self-consumption

Maximum self-consumption

Fully fed to grid

TOU

Previous Next

You can tap ? to obtain the detailed working mode information.

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

Quick settings

Device magt

Communication networking

Basic parameters

Energy storage control

Completed

Monitor the PV plant through the management system.

Setting management system parameters

Domain name

Port

TLS encryption

Dongle parameter settings

APN mode

Automatic

Network mode

4G/3G/2G automatic selection

Wired network parameters

Previous Next

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**.

Add a plant.

← Create plant

Add plant >

Connect to existing plant >

← Add plant

1 Basic info 2 Add devices 3 Plant Profile

*Country/Region >

*Service provider ⓘ >

*Plant type Select >

*Plant name

Total string capacity (kWp) -Enter-

*Grid connection date 18/04/2023 >

Start date of safe running 18/04/2023 >

*Plant address -Enter- ⓘ

☐ I have obtained the owner's authorization.

You must have obtained owner's authorization for any third-party personal information that you provide here.

Next

← Add plant

✓ 1 Basic info ✓ 2 Add devices 3 Plant Profile

Added devices

Device type *****

Device model *****

Connected devices

Previous Next

← Add plant

✓ 1 Basic info ✓ 2 Add devices 3 Plant Profile

Upload Plant Photo

Plant Photo Upload >

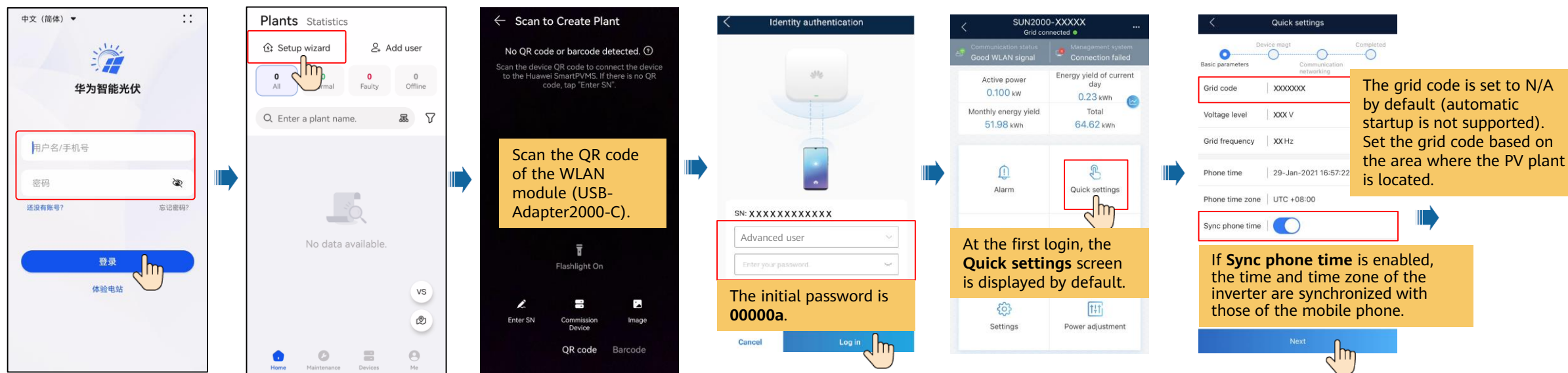
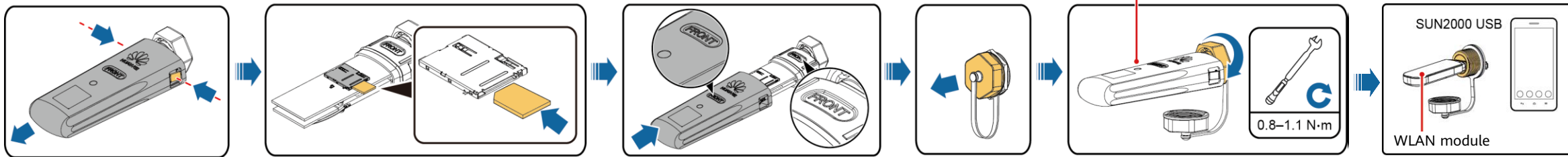
Previous Submit

• Local Commissioning Using a Smart USB-WLAN Adapter

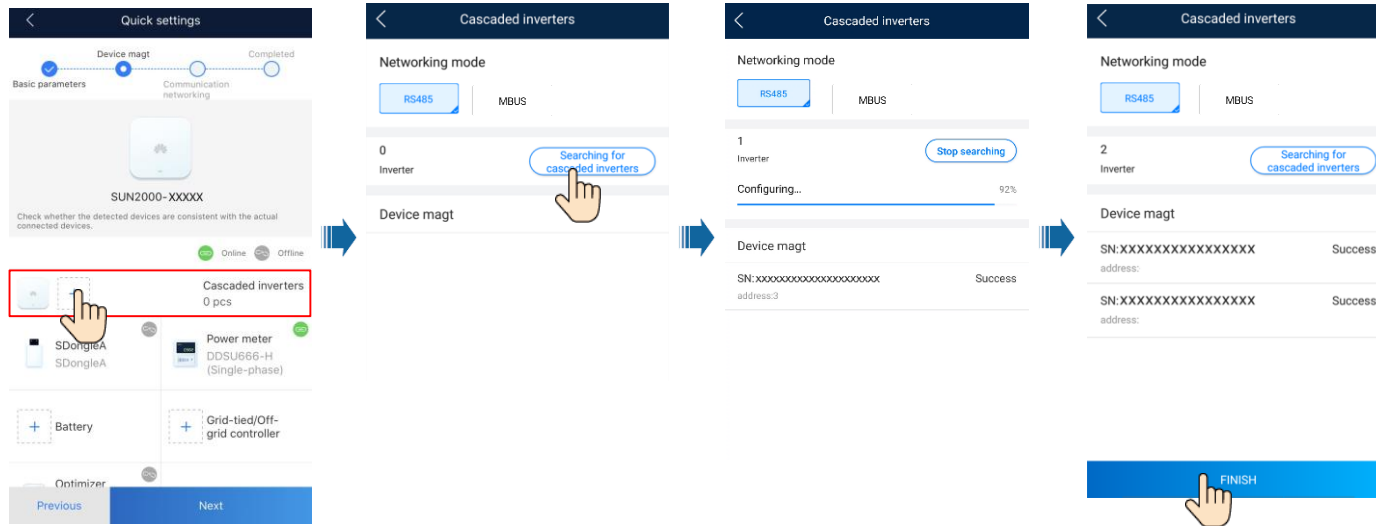
Note:

Before commissioning a commercial inverter, connect the 4G Smart Dongle to identify parameters. If the indicator status is normal, remove the Smart Dongle, and then connect the USB-WLAN adapter to start commissioning.

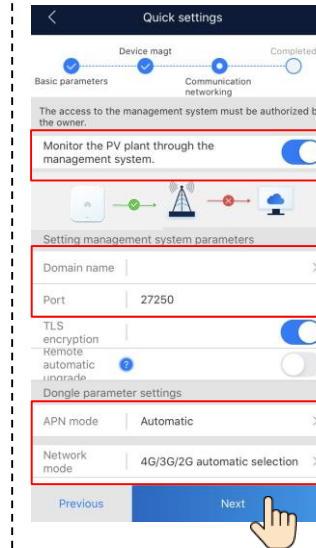
Check the indicator status. When the indicator blinks green at an interval of 2s (on for 0.1s and then off for 1.9s), remove the 4G Smart Dongle.



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



Set network parameters and domain name.



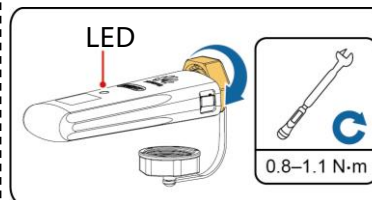
4G communication

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

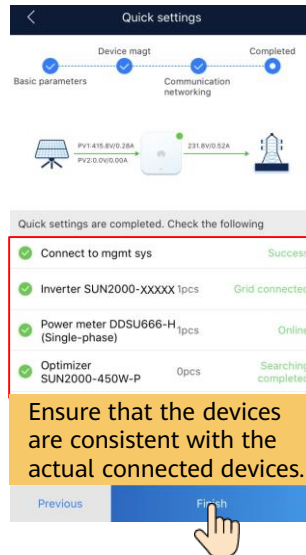
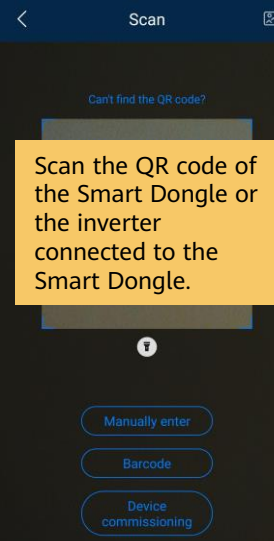
Set the **Domain name** to **intl.fusionsolar.huawei.com** and **Port** number to **27250**.

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.



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

Add a plant.

← Create plant

Add plant >

Connect to existing plant >

← Add plant

1 Basic info 2 Add devices 3 Plant Profile

*Country/Region >

*Service provider ⓘ >

*Plant type Select >

*Plant name

Total string capacity (kWp) -Enter-

*Grid connection date 18/04/2023 >

Start date of safe running 18/04/2023 >

*Plant address -Enter- ⓘ

☐ I have obtained the owner's authorization.

You must have obtained owner's authorization for any third-party personal information that you provide here.

Next

← Add plant

✓ 1 Basic info ✓ 2 Add devices 3 Plant Profile

Added devices

Device type *****

Device model *****

Connected devices

Previous Next

← Add plant

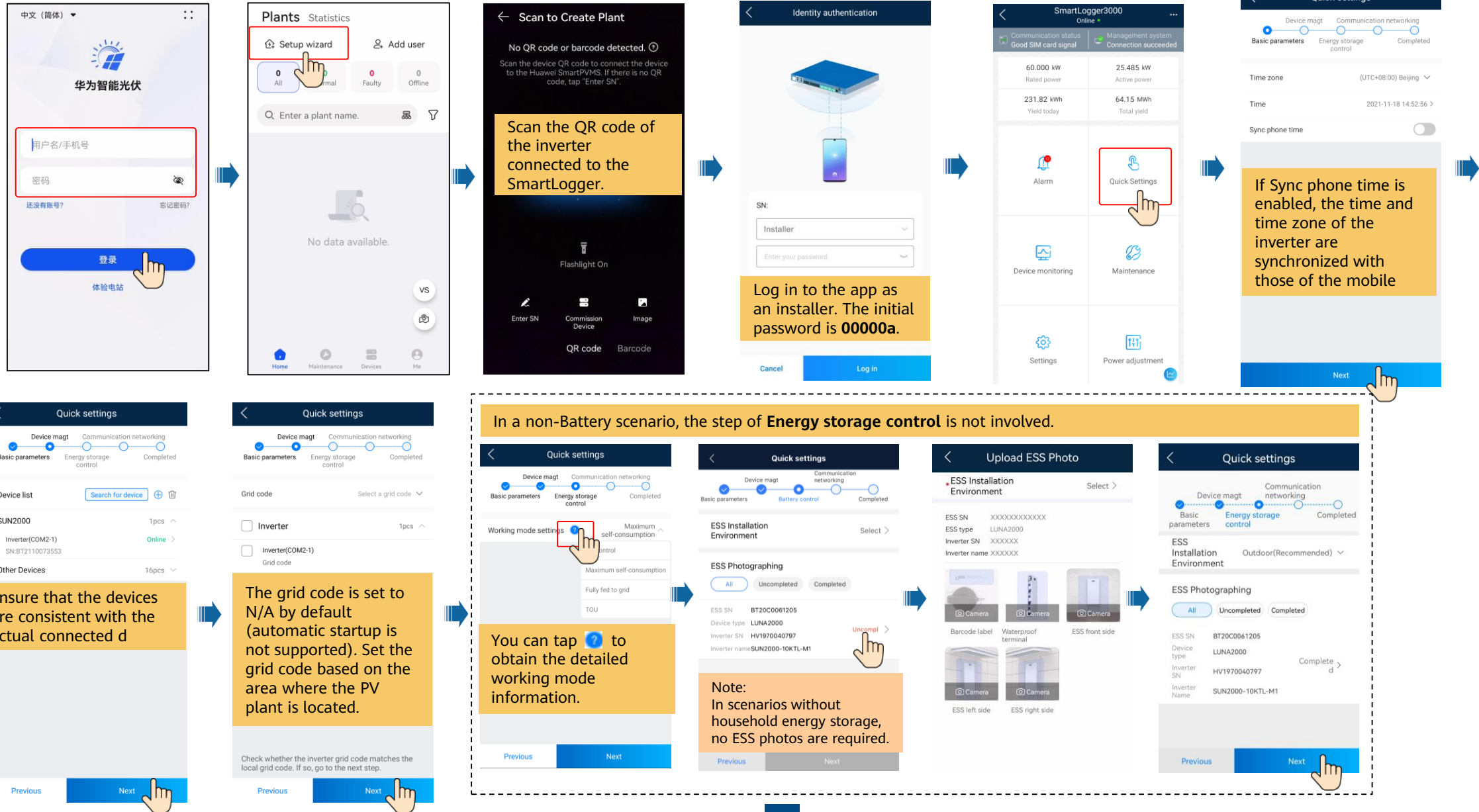
✓ 1 Basic info ✓ 2 Add devices 3 Plant Profile

Upload Plant Photo

Plant Photo Upload >

Previous Submit

Local Commissioning Using the SmartLogger of the Inverter



Quick settings

Device mgmt. Communication networking

Basic parameters Energy storage control Completed

Network settings

Monitor the PV plant through the management system. ☒

Management system parameters

Domain name intl.fusionsolar.huawei.com >

Port 27250

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

Quick settings

Device mgmt. Communication networking

Basic parameters Energy storage control Completed

Network settings

Monitor the PV plant through the management system. ☒

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

Mobile network parameters

Network mode 4G/3G/2G automatic selection

APN mode Automatic

If there is no available network, tap **Skip** and connect to the management system later.

Previous Next

Quick settings

Device mgmt. Communication networking

Basic parameters Energy storage control Completed

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

Wired network parameters

Automatically obtain IP address ☒

*IP address XX.XX.XX.XX

*Subnet mask 255.255.255.0

*Gateway XX.XX.XX.XX

Primary DNS server XX.XX.XX.XX

Secondary DNS server 0.0.0.0

Previous Next

Quick settings

Device mgmt. Communication networking

Basic parameters Energy storage control Completed

Network settings

Monitor the PV plant through the management system. ☒

Signal strength Strong(5dBm)

Previous Next

Quick settings

Device mgmt. Communication networking

Basic parameters Energy storage control Completed

Successfully connected to the management system

Device list

SUN2000 1pcs

Inverter(COM2-1) Online

SN:BT2110073553

Other Devices 16pcs

Previous Finish

Add a plant.

Create plant

Add plant >

Connect to existing plant >

Add plant

1 Basic info 2 Add devices 3 Plant Profile

*Country/Region >

*Service provider >

*Plant type Select >

*Plant name

Total string capacity (kWp) -Enter-

*Grid connection date 18/04/2023 >

Start date of safe running 18/04/2023 >

*Plant address -Enter- >

☐ I have obtained the owner's authorization.

You must have obtained owner's authorization for any third-party personal information that you provide here.

Next

Add plant

1 Basic info 2 Add devices 3 Plant Profile

Added devices

Device type *****

Device model *****

Connected devices

Previous Next

Add plant

1 Basic info 2 Add devices 3 Plant Profile

Upload Plant Photo

Plant Photo Upload >

*Upload ESS Photo

SN *****

Device type *****

Device model *****

ESS Quantity 1

Upload

Note: In scenarios without energy storage, no ESS photos are required.

Upload ESS Photo

*ESS Installation Environment Sele >

ESS (DCDC) SN *****

ESS type *****

Inverter SN *****

Inverter name *****

Camera Camera Camera

Barcode label Waterproof terminal ESS front side

Camera Camera

ESS left side ESS right side

Upload

Add plant

1 Basic info 2 Add devices 3 Plant Profile

Upload Plant Photo

Plant Photo Upload >

*Upload ESS Photo

SN *****

Device type *****

Device model *****

ESS Quantity 1

Change Photos

Previous Submit

4. Create an owner account

Add user

Plants Statistics

Setup wizard Add user

All Normal Faulty Offline

Enter a plant name.

My PV Plant
China mainland xxx
0.000kWp 0.00kWh
100.00kWh

VS

Home Maintenance Devices Me

Add user

Service provider

Role

Plant Association

Username

Avatar

Country/Region code +86

Mobile number

Email

☐ I have obtained the owner's authorization.
You must have obtained owner's authorization for any third-party personal information that you provide here.

Cancel Save

Invite a user

Plants Statistics

Setup wizard Invite User

All Normal Faulty Offline

Enter a plant name.

My PV Plant
China mainland xxx
0.000kWp 0.00kWh
100.00kWh

VS

Home Maintenance Devices Me

Invite User

Service provider

Role

Plant Association

Email

☐ I have obtained the owner's authorization.
You must have obtained owner's authorization for any third-party personal information that you provide here.

Cancel Save

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.

Register an account

FusionSolar English Log In

Account Registration

Country/Region

Email
xxx@xx.xxx

Username

Password

Confirm password

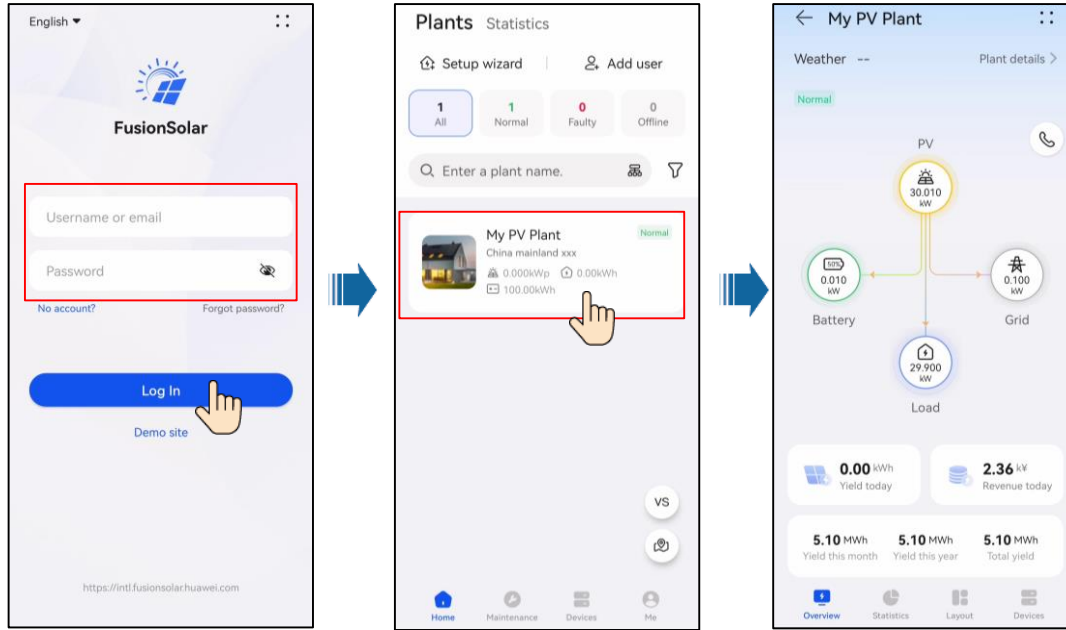
Email verification code
Send Code

☐ I agree to Terms of Use and I have read Privacy Policy.

Submit

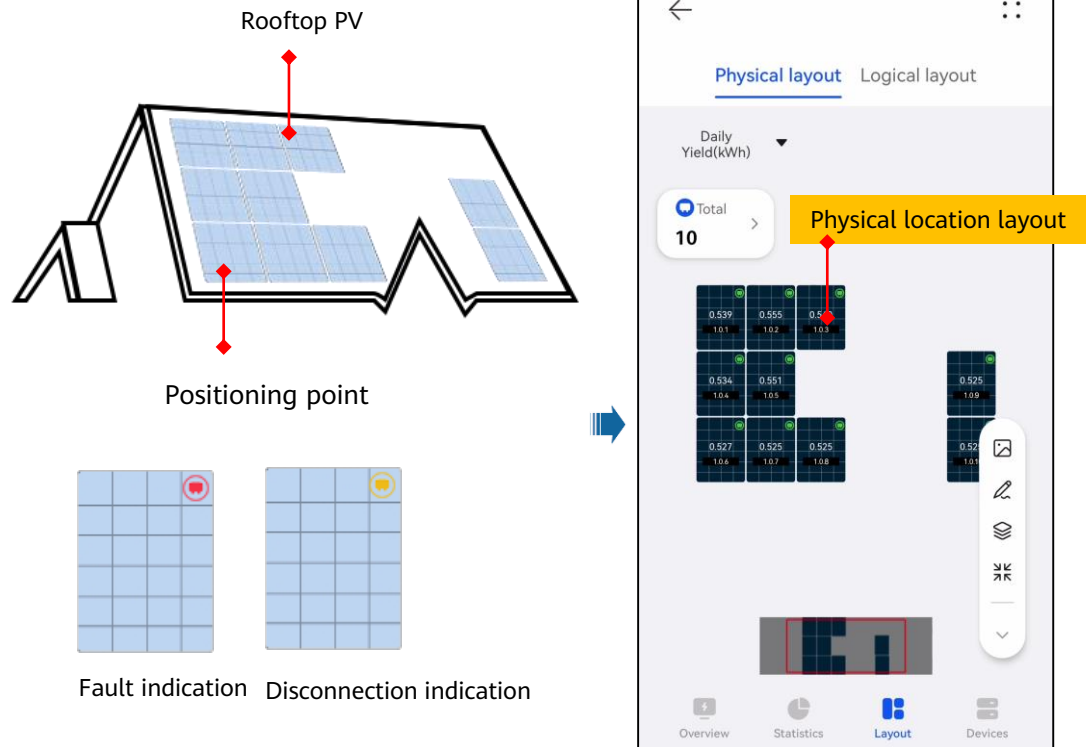
5. Checking the Device Status

- Checking the Device Status Using Device Commissioning

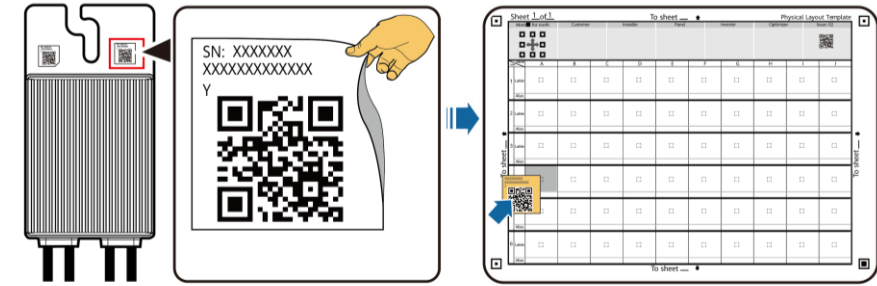


FAQ. Physical Layout Design (With Optimizers)

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.

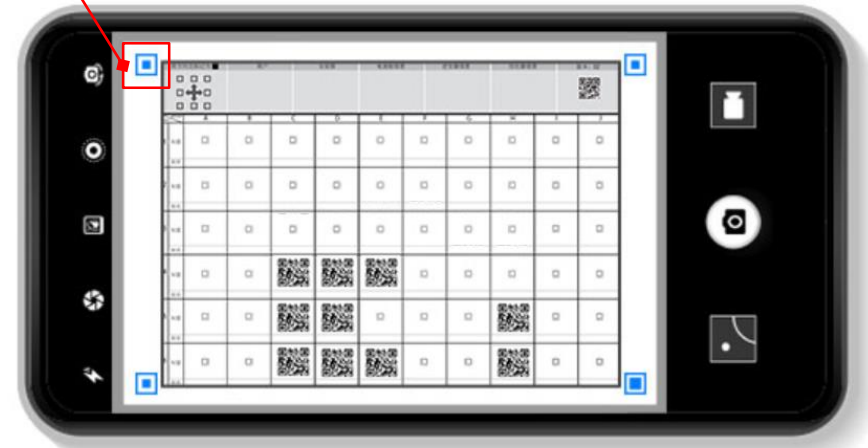


Step 1 After determining the installation position of an optimizer, remove the SN label from the optimizer and attach it to the physical layout template.



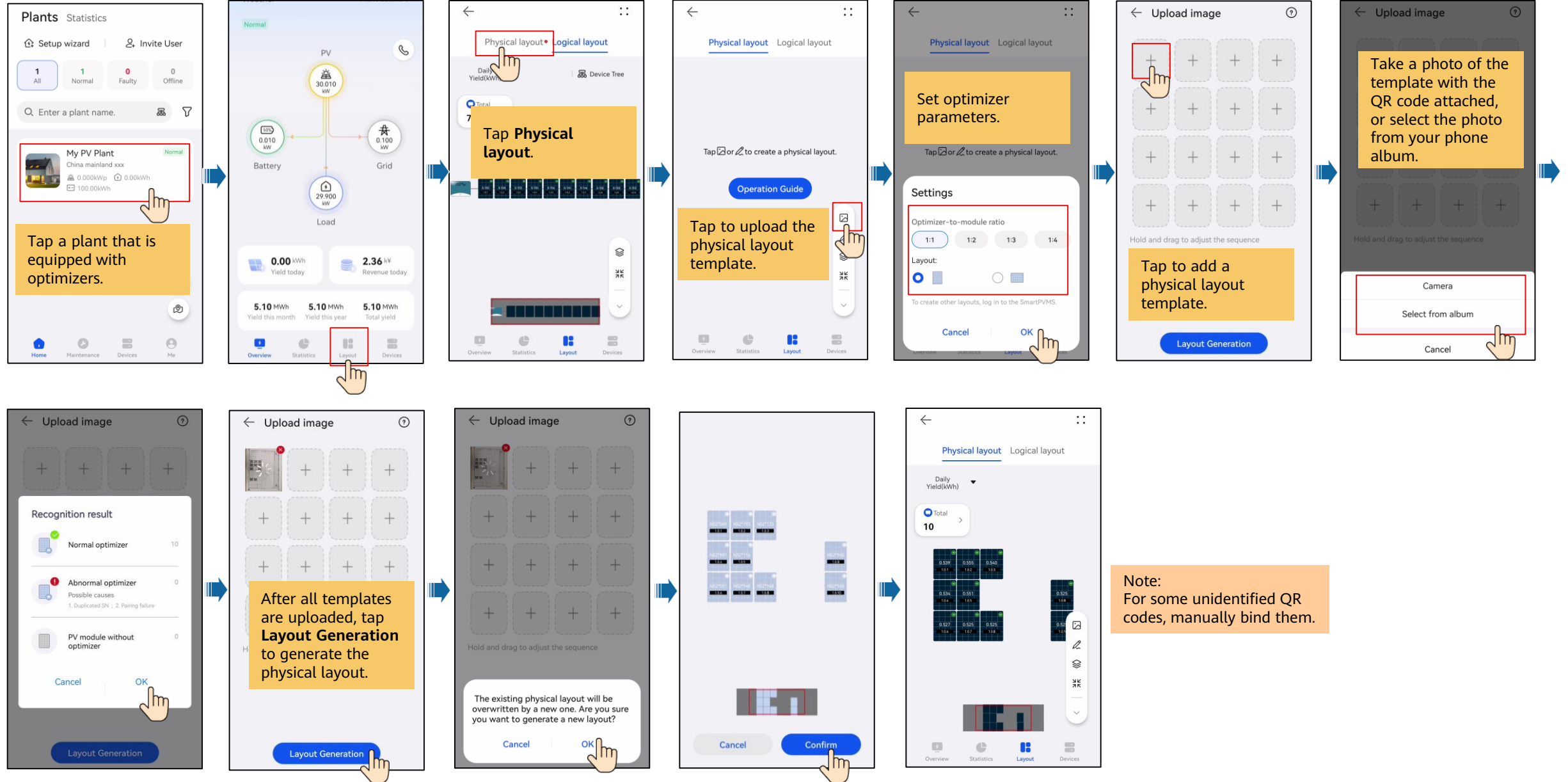
Step 2 Take a photo of the template with the QR code attached.

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.