FusionSolar App

Quick Guide (Charger)

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1 Downloading and Installing the App

NOTICE

- Mobile phone operating system: Android 8.0, iOS 11.0, or later versions.
- To ensure the stability of each function, you are advised to use mobile phones running Android 8.0, iOS 13.0, or later versions. (For the mobile phones running iOS, iPhone 6 and later versions are supported, but iPhone SE is not supported.)
- Use mobile phones that support the access to the Internet.
- Use mobile phones that support the WLAN function.
- The router supports 2.4 GHz WLAN, and the WLAN signal reaches the device.
- The WPA, WPA2, or WPA/WPA2 encryption mode is recommended for routers. The Enterprise mode is not supported (such as airport WLAN and other public hotspots that require authentication). WEP and WPA TKIP are not recommended because they have serious security vulnerabilities. If the access fails in WEP mode, log in to the router and change the encryption mode of the router to WPA2 or WPA/WPA2.

Procedure

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

- Huawei mobile 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.

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NOTE

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.

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 Registering the Company's First Installer Account

An installer account is required for device deployment and commissioning. If you do not have an installer account of the FusionSolar SmartPVMS or FusionSolar app, perform the following steps to register an account.

Intended Audience

Installers who have not registered a company with the FusionSolar SmartPVMS or FusionSolar app.

Owners who commission chargers by themselves.

NOTE

If your company has registered an account, contact the administrator to add you to the company.

Procedure

1. Tap **No account?** in the lower part of the FusionSolar app login screen.
2. On the **Role** screen, tap **I'm an installer** and register an account as prompted.

   After the account is registered, you can log in to the FusionSolar app with the registered username and password.

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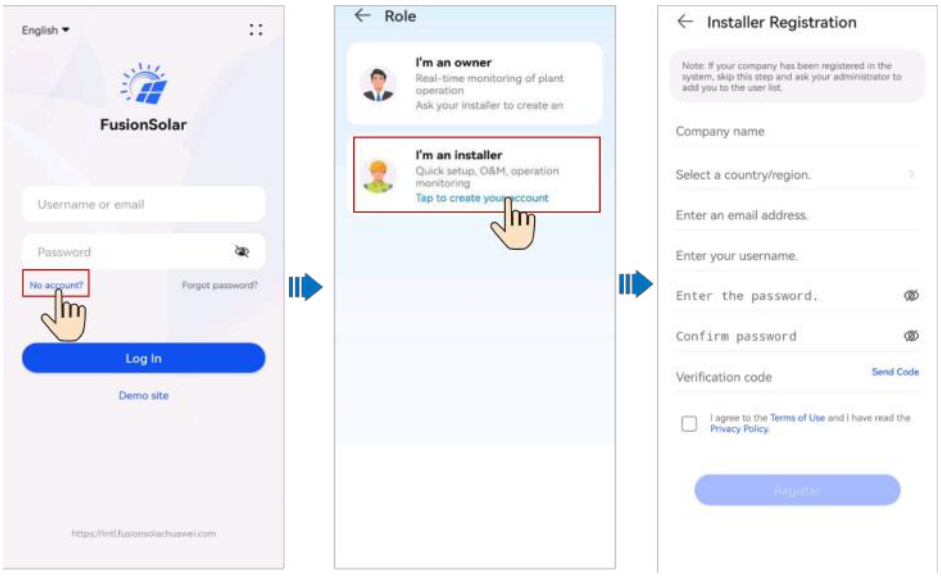
English
FusionSolar
Username or email
Password
No account?
Forgot password?
Log In
Demo site
Role
I'm an owner
Real-time monitoring of plant operation
Ask your installer to create an
I'm an installer
Quick setup, O&M, operation monitoring
Tap to create your account
Installer Registration
Company name
Select a country/region.
Enter an email address.
Enter your username.
Enter the password.
Confirm password
Verification code
Send Code
Register

3 Registering an Owner Account or Another Installer Account

- If self-service registration is not supported in your region, your installer needs to **create an account** for you and bind a plant. After the account is created, the system will send you the username and initial password by email.
- If self-service registration is supported in your region, your installer needs to initiate an **invitation**. After receiving an invitation email from the installer, you can **register an account** on the registration screen according to the instructions.

After the account is registered, you can log in to the FusionSolar app with the registered username and password.

1. Invite a user.

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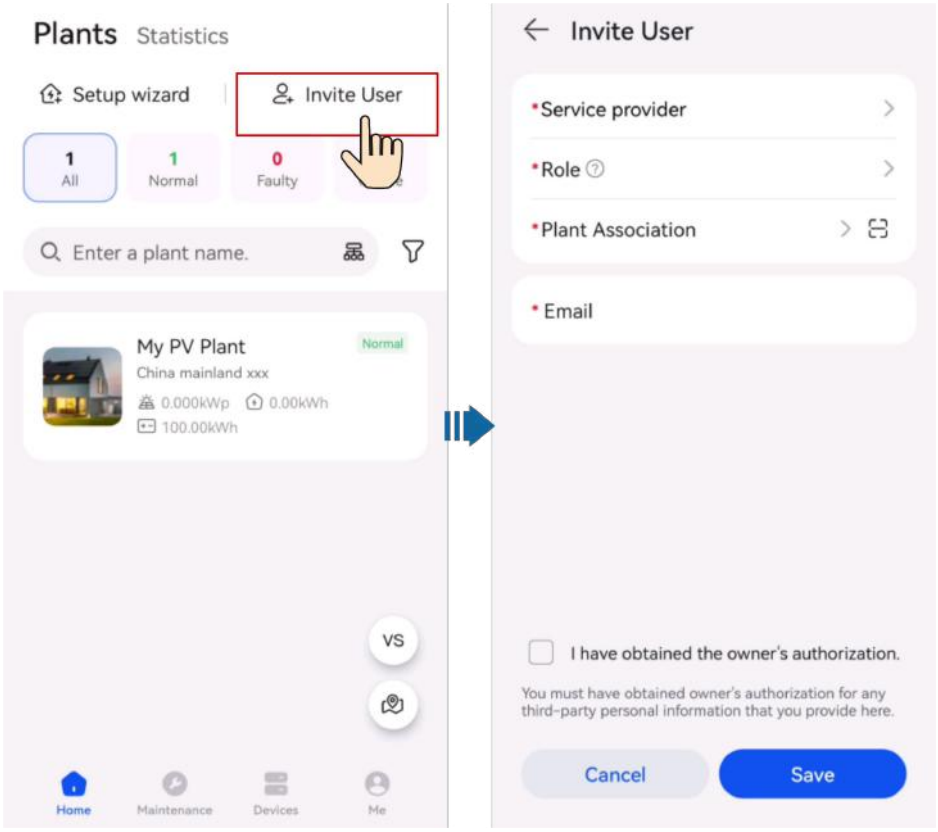
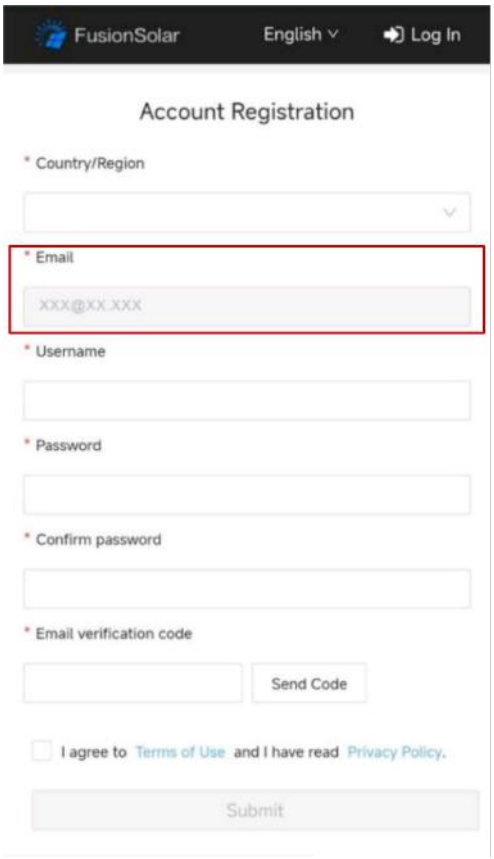


2. Register an account.



The email address should be the same as that in the invitation and cannot be changed during registration.

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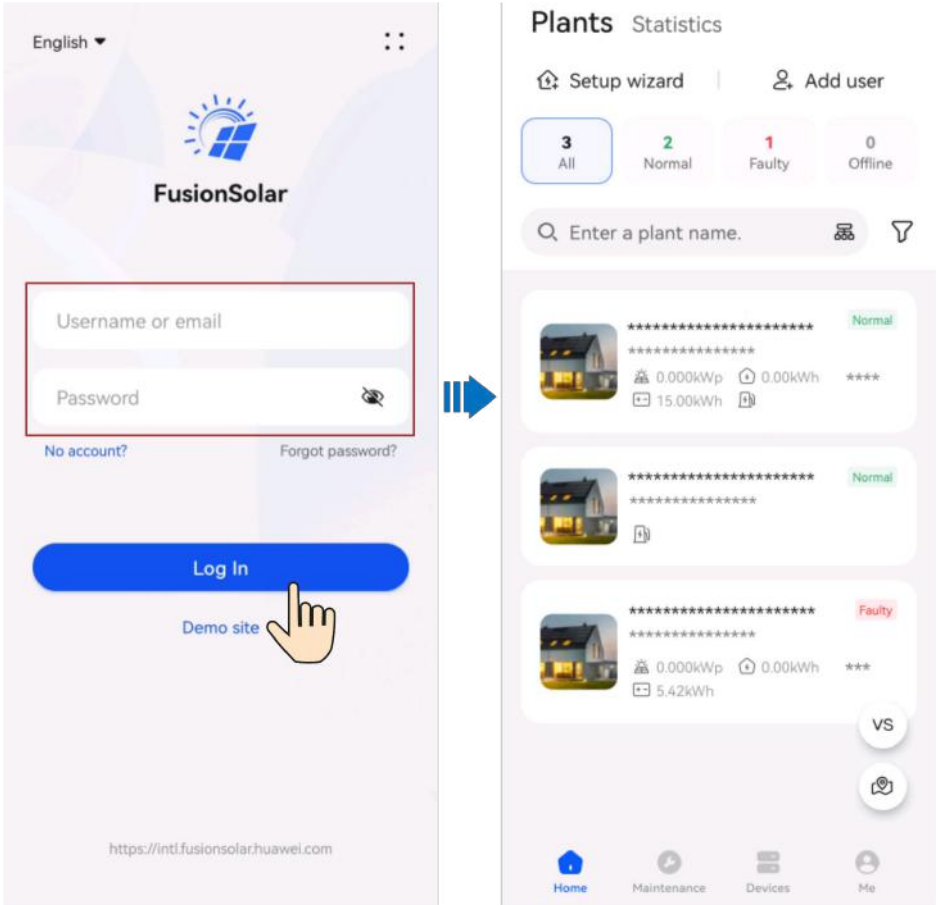
4 Logging In to or Logging Out of FusionSolar App

After the app is correctly installed on a mobile phone, you can access the management system through the app.

Logging In to the App

1. On the mobile device, tap the app icon to access the login screen.
2. On the app login screen, enter the account and password and tap **Log In**.



NOTE

- If a new user logs in to the app for the first time or a user logs in to the app for the first time after the password is reset, change the login password as prompted.
- If a user enters incorrect passwords for five consecutive times within 5 minutes, the account will be locked for 30 minutes. The user can log in gain after the lockout period expires or contact the installer or administrator to unlock the account.

Logging Out of the App

1. On the home screen, tap **Me**.
2. On the **Me** screen, tap **Settings** > **Log out**.

5 Device Commissioning (Charger)

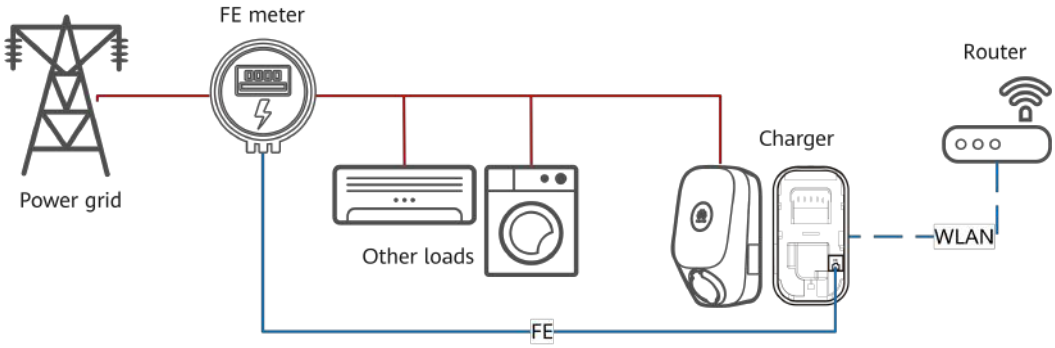
5.1 Charging-only

NOTE

6.23.00.157 and later versions support chargers and new functions. Update the app to the latest version before connecting to chargers.

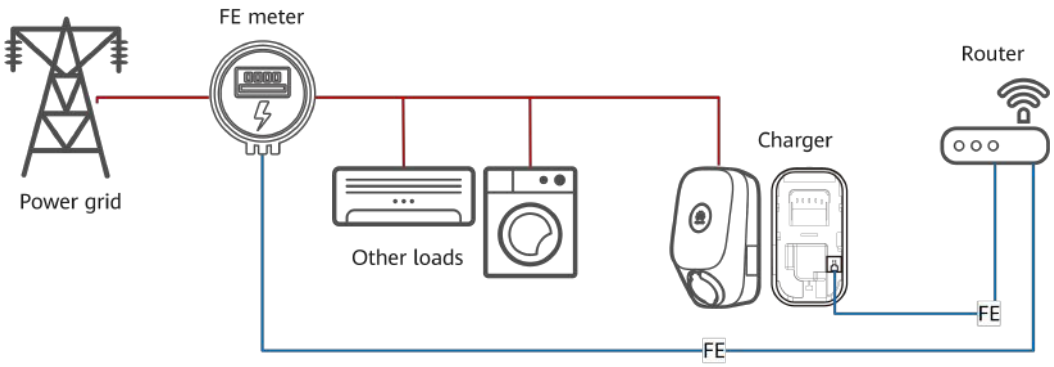
The chargers can implement dynamic power by connecting to the DTSU666-FE meter or the WLAN/FE Smart Dongle in the PV system through virtual meter networking to obtain RS485 meter detection data. Perform commissioning based on the actual networking scenarios of chargers, meters, and routers.

Figure 5-1 Charger FE port directly connected to a meter



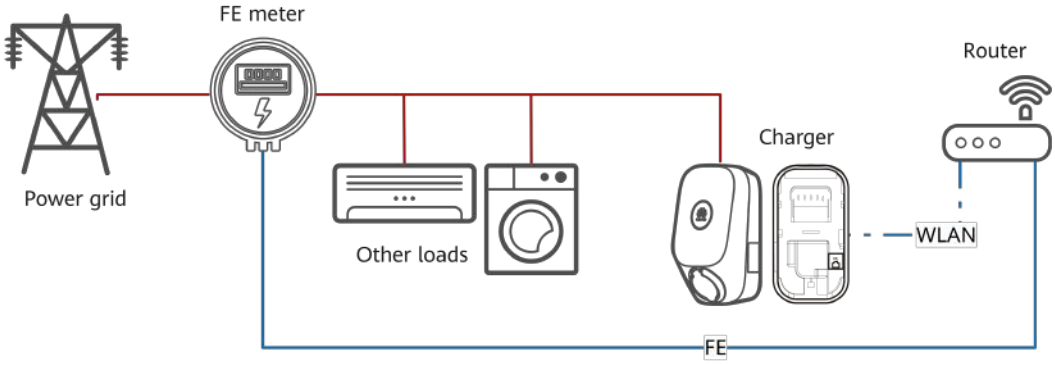
For details about the commissioning procedure, see **5.1.1 Charger FE Port Directly Connected to a Meter**.

Figure 5-2 Charger FE port directly connected to a router



For details about the commissioning procedure, see **5.1.2 Charger FE Port Directly Connected to a Router**.

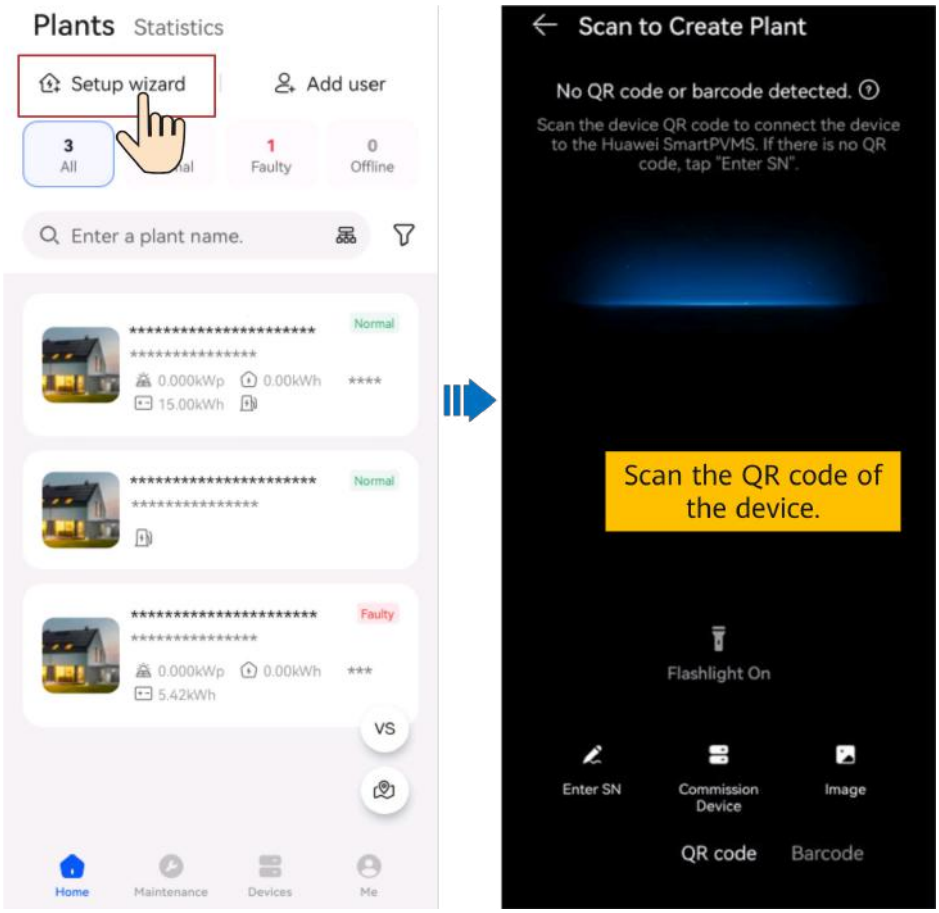
Figure 5-3 Charger connected to a router through WLAN



For details about the commissioning procedure, see **5.1.3 Charger Connected to a Router Through WLAN**.

5.1.1 Charger FE Port Directly Connected to a Meter

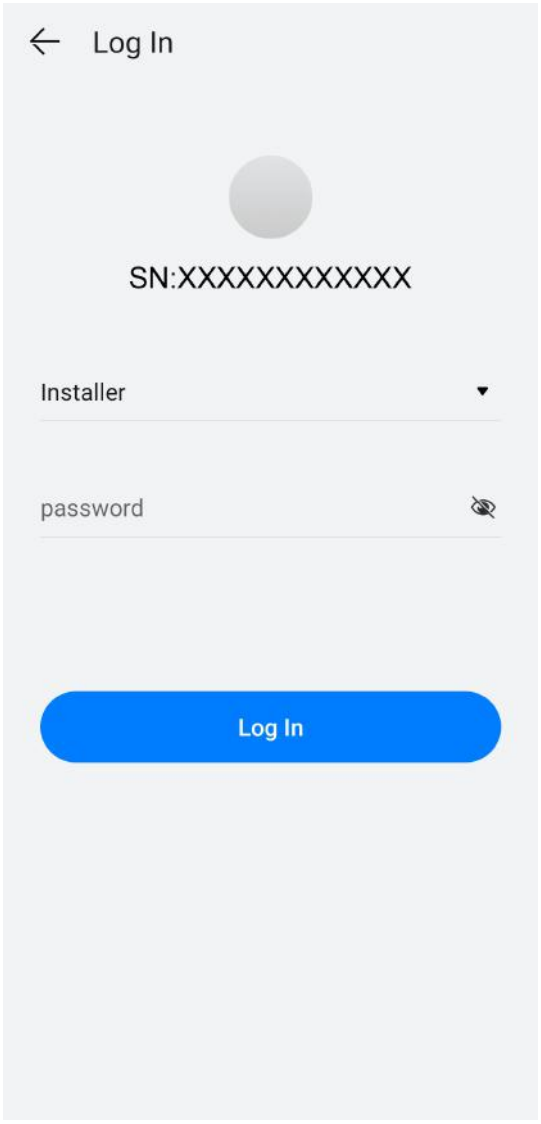
1. Log in to the FusionSolar app as an installer, tap **Setup wizard** on the **Home** screen, scan the QR code of the device, and follow the instructions to connect to the WLAN.



NOTE

- The last six digits of the product WLAN name are the same as the last six digits of the product SN.
- Use the initial password to log in for the first time and change the password as prompted.
- To ensure account security, protect the password by changing it periodically, and keep it secure. Your password might be stolen or cracked if it is left unchanged for extended periods. If a password is lost, devices cannot be accessed. In these cases, the Company shall not be liable for any loss.
- If the login screen is not displayed after you scan the QR code, check whether the device is correctly connected to the WLAN network. If not, manually select and connect to the WLAN network.
- If the **This WLAN network has no Internet access. Connect anyway?** message is displayed when you connect to the device WLAN, tap **CONNECT**. Otherwise, you cannot log in to the system. The actual UI and messages may vary with mobile phones.

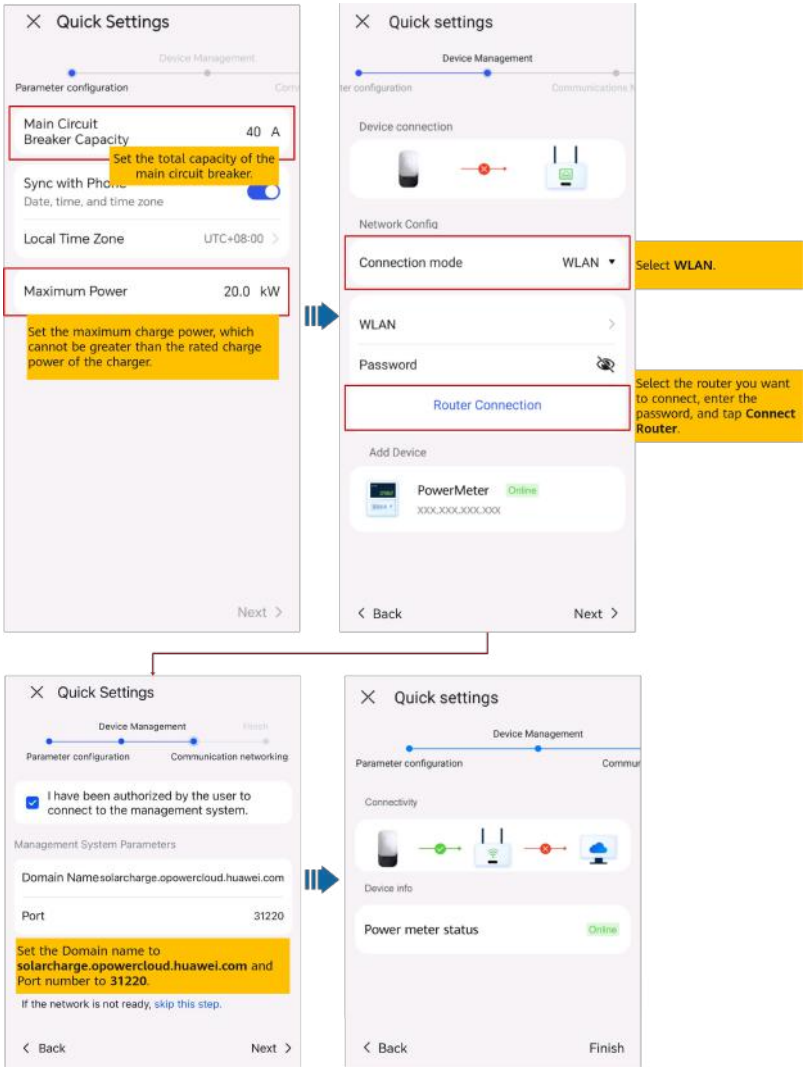
2. Log in to the app as an **Installer**.



NOTE

For the first login, the initial password is **Changeme**. If the system prompts you to set a password, set the login password as prompted.

3. Commission the device according to the wizard procedure.



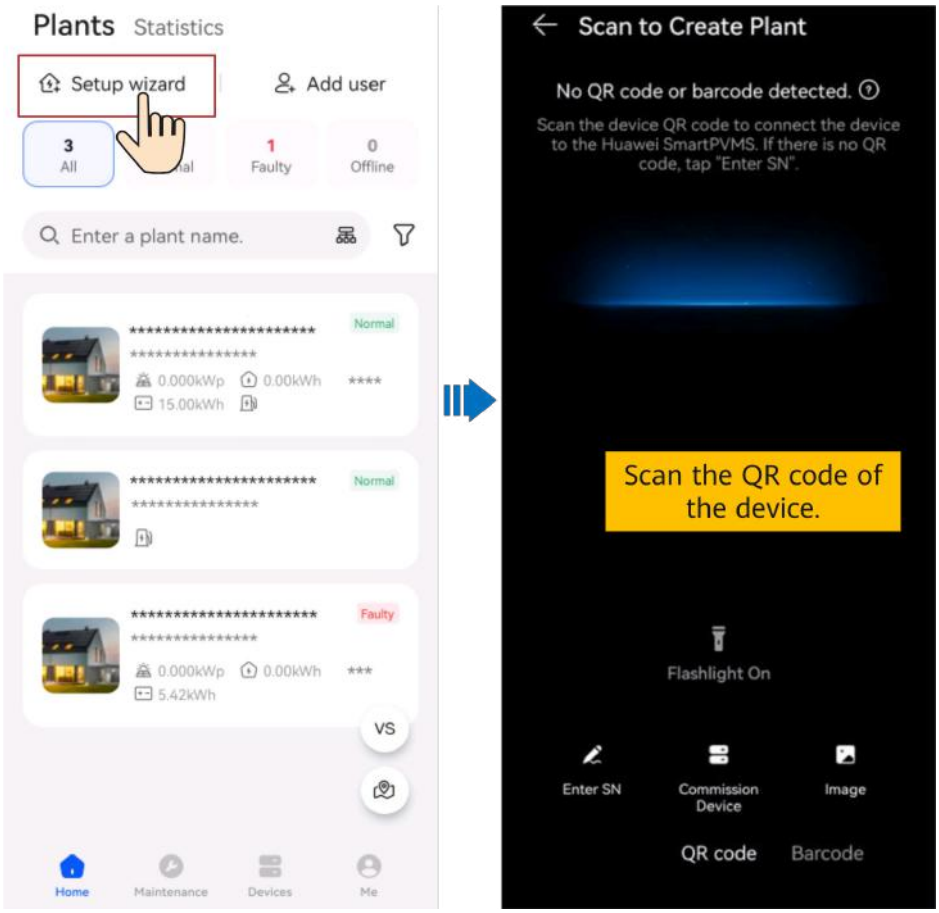
NOTE

Set the capacity of the main circuit breaker based on site requirements. If the set value is greater than the actual capacity, the circuit breaker trips due to overcurrent. If the set value is less than the actual capacity, the charger cannot work.

4. Tap **Finish** and connect devices to a plant as prompted. For details, see **6 Connecting to a Plant**.

5.1.2 Charger FE Port Directly Connected to a Router

1. Log in to the FusionSolar app as an installer, tap **Setup wizard** on the **Home** screen, scan the QR code of the device, and follow the instructions to connect to the WLAN.



NOTE

- The last six digits of the product WLAN name are the same as the last six digits of the product SN.
- Use the initial password to log in for the first time and change the password as prompted.
- To ensure account security, protect the password by changing it periodically, and keep it secure. Your password might be stolen or cracked if it is left unchanged for extended periods. If a password is lost, devices cannot be accessed. In these cases, the Company shall not be liable for any loss.
- If the login screen is not displayed after you scan the QR code, check whether the device is correctly connected to the WLAN network. If not, manually select and connect to the WLAN network.
- If the **This WLAN network has no Internet access. Connect anyway?** message is displayed when you connect to the device WLAN, tap **CONNECT**. Otherwise, you cannot log in to the system. The actual UI and messages may vary with mobile phones.

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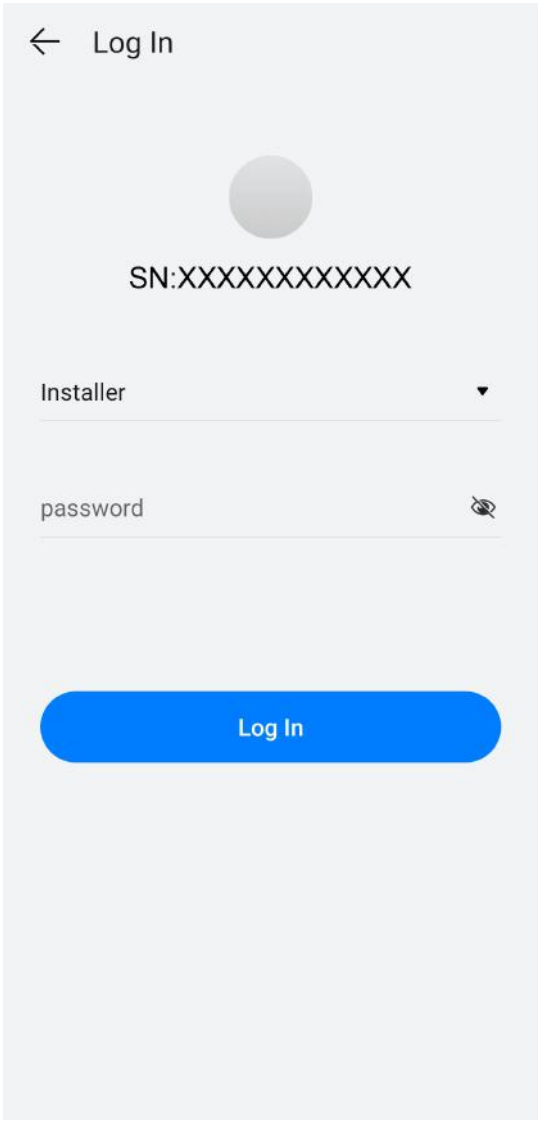

NOTE

For the first login, the initial password is **Changeme**. If the system prompts you to set a password, set the login password as prompted.

3. Commission the device according to the wizard procedure.

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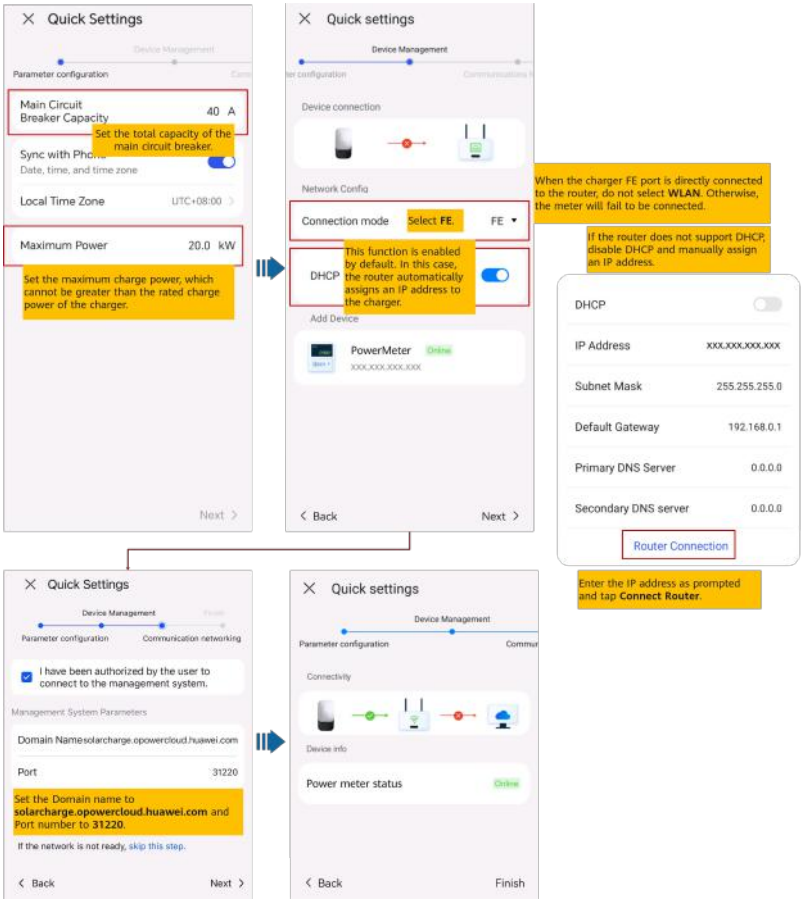


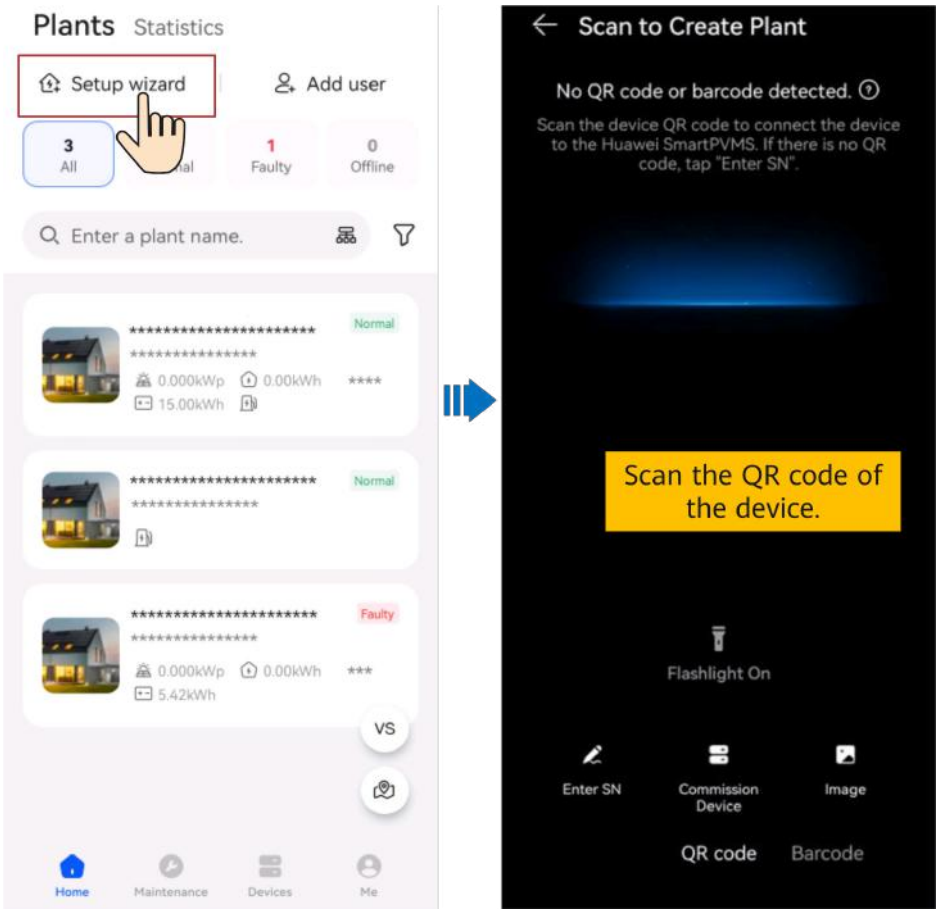
NOTE

Set the capacity of the main circuit breaker based on site requirements. If the set value is greater than the actual capacity, the circuit breaker trips due to overcurrent. If the set value is less than the actual capacity, the charger cannot work.

4. Tap **Finish** and connect devices to a plant as prompted. For details, see **6 Connecting to a Plant**.

5.1.3 Charger Connected to a Router Through WLAN

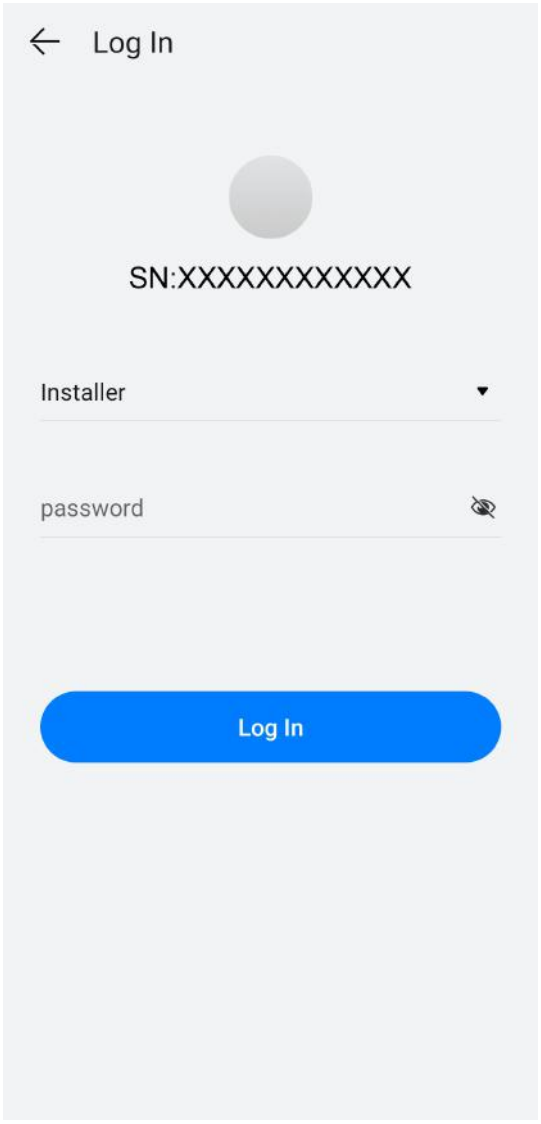
1. Log in to the FusionSolar app as an installer, tap **Setup wizard** on the **Home** screen, scan the QR code of the device, and follow the instructions to connect to the WLAN.



NOTE

- The last six digits of the product WLAN name are the same as the last six digits of the product SN.
- Use the initial password to log in for the first time and change the password as prompted.
- To ensure account security, protect the password by changing it periodically, and keep it secure. Your password might be stolen or cracked if it is left unchanged for extended periods. If a password is lost, devices cannot be accessed. In these cases, the Company shall not be liable for any loss.
- If the login screen is not displayed after you scan the QR code, check whether the device is correctly connected to the WLAN network. If not, manually select and connect to the WLAN network.
- If the **This WLAN network has no Internet access. Connect anyway?** message is displayed when you connect to the device WLAN, tap **CONNECT**. Otherwise, you cannot log in to the system. The actual UI and messages may vary with mobile phones.

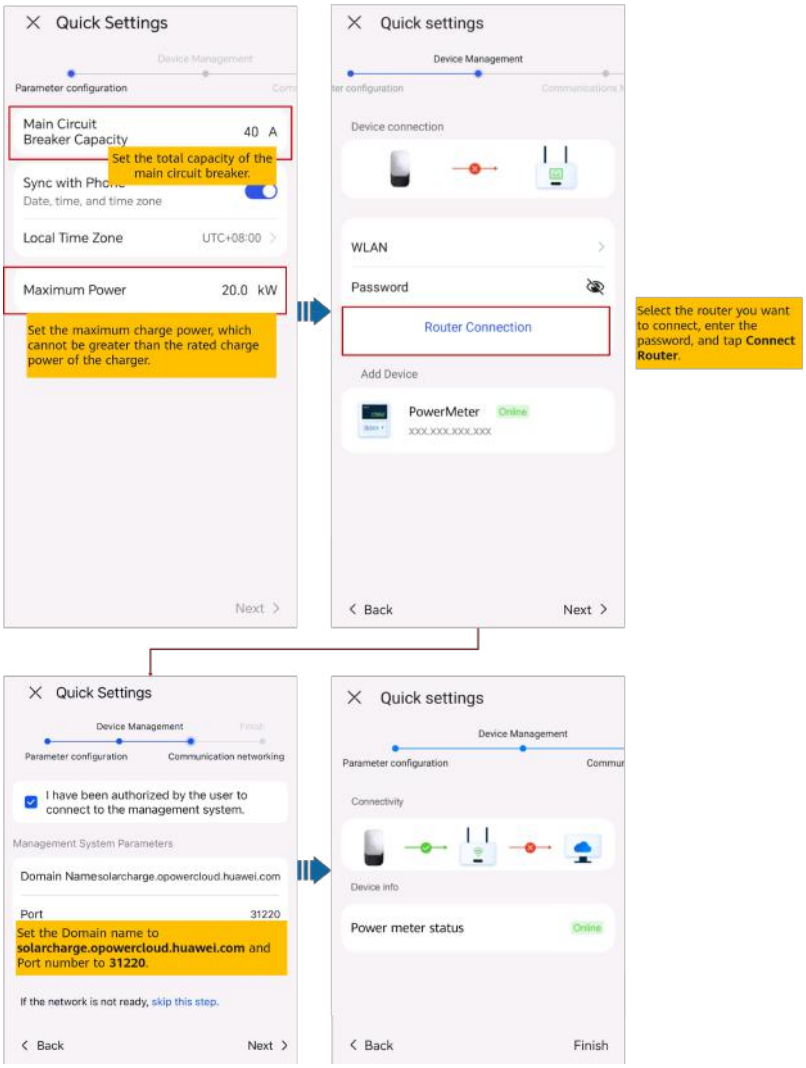
2. Log in to the app as an **Installer**.



NOTE

For the first login, the initial password is **Changeme**. If the system prompts you to set a password, set the login password as prompted.

3. Commission the device according to the wizard procedure.



NOTE

Set the capacity of the main circuit breaker based on site requirements. If the set value is greater than the actual capacity, the circuit breaker trips due to overcurrent. If the set value is less than the actual capacity, the charger cannot work.

4. Tap **Finish** and connect devices to a plant as prompted. For details, see **6 Connecting to a Plant**.

5.2 PV+ESS+Charger/ Charging-only (EMMA Scenario)

The charger can be connected to the same router as the EMMA over WLAN or FE. As one of the home loads, the charger is managed and controlled by the EMMA. After the deployment and commissioning on the EMMA side are complete, the charger can be connected to the management system. You do not need to perform deployment and commissioning on the charger separately.

For details about EMMA deployment and commissioning, see **FusionSolar App Quick Guide (EMMA)**, or scan the QR code to obtain the corresponding quick guide.

NOTE

- If there is only one charger, it can be directly connected to the EMMA through the FE port or connected to the router through the FE or WLAN port.
- If there are two chargers, connect the FE ports of the two chargers to the router. Do not connect one charger to the router over wired network (FE) and the other charger over WLAN.

5.3 PV+ESS+Charger (Smart Dongle/Inverter WLAN Direct Connection Scenario)

The charger can implement dynamic power by connecting to the DTSU666-FE meter or the WLAN/FE Smart Dongle in the PV system through virtual meter networking to obtain RS485 meter detection data.

1. For details about PV+ESS device deployment and commissioning, see **FusionSolar App Quick Guide**, or scan the QR code to obtain the corresponding quick guide.

   NOTE

   If a virtual meter is used for a charger, log in to the inverter connected to the Smart Dongle, choose **Settings** > **Communication configuration** > **Dongle parameter settings**, and set **Modbus TCP** to **Enable (unrestricted)**. If an FE meter is used, set **Modbus TCP** to **Disable**.

2. Commission the charger by referring to **5.1 Charging-only**.
3. Connect the charger to the created PV plant by referring to **6 Connecting to a Plant**.

6 Connecting to a Plant

After devices are commissioned, you can create a plant and configure basic information on the FusionSolar app to implement unified device monitoring and O&M.

- If the owner does not have a plant on FusionSolar SmartPVMS or FusionSolar app, see **6.1 Connecting to a New Plant** to connect the devices to a new plant.
- If the owner has a plant on FusionSolar SmartPVMS or FusionSolar app, see **6.2 Connecting to an Existing Plant** to connect the devices to an existing plant.
- If PV and energy storage devices and chargers are not provided by the same installer, see **6.3 Connecting Devices to a Plant with Multiple Installers** to connect them to a plant.

6.1 Connecting to a New Plant

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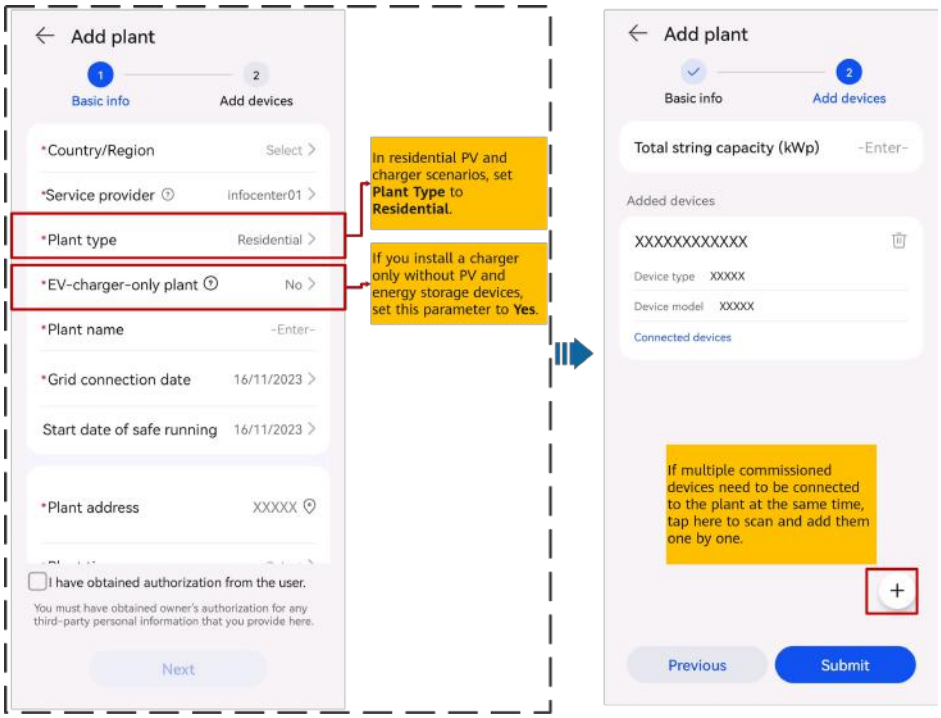
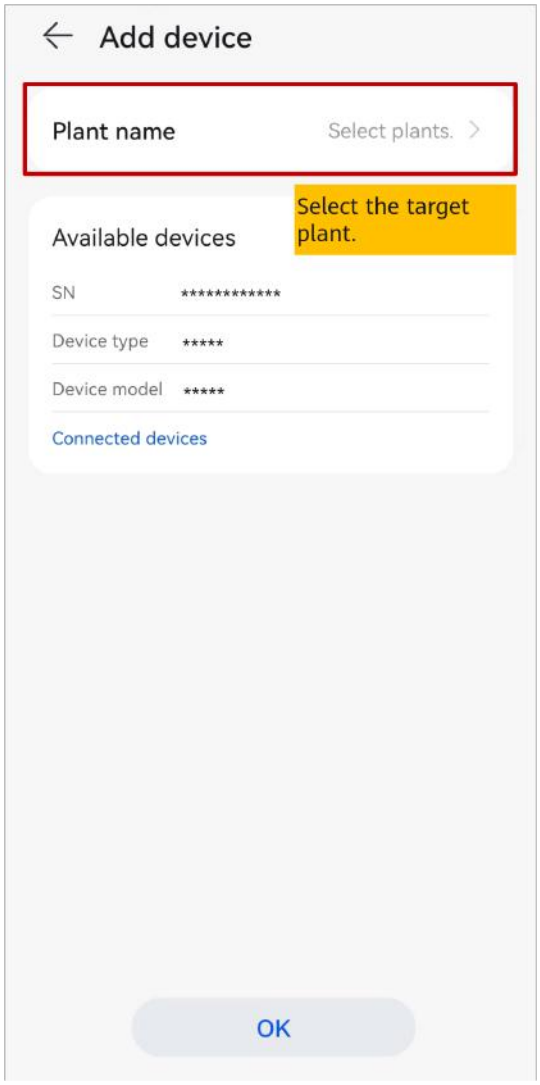

Add plant
1 Basic info
2 Add devices
*Country/Region Select
*Service provider infocenter01
*Plant type Residential
*EV-charger-only plant No
*Plant name -Enter-
*Grid connection date 16/11/2023
Start date of safe running 16/11/2023
*Plant address XXXXX
I have obtained authorization from the user.
You must have obtained owner's authorization for any third-party personal information that you provide here.
Next
In residential PV and charger scenarios, set Plant Type to Residential.
If you install a charger only without PV and energy storage devices, set this parameter to Yes.
Add plant
Basic info
2 Add devices
Total string capacity (kWp) -Enter-
Added devices
XXXXXXXXXXX
Device type XXXXX
Device model XXXXX
Connected devices
If multiple commissioned devices need to be connected to the plant at the same time, tap here to scan and add them one by one.
Previous
Submit

6.2 Connecting to an Existing Plant



6.3 Connecting Devices to a Plant with Multiple Installers

Charging-Only Plant Created by Installer A and PV Devices Connected by Installer B

1. The owner logs in to the FusionSolar app and unbinds the charger from the plant created by installer A.
   a. Choose **Me** > **Plant Management** and tap the target plant.
   b. Tap **Add Devices**.
   c. Tap and select **Unbind Device** or **Delete Device** based on the site requirements.

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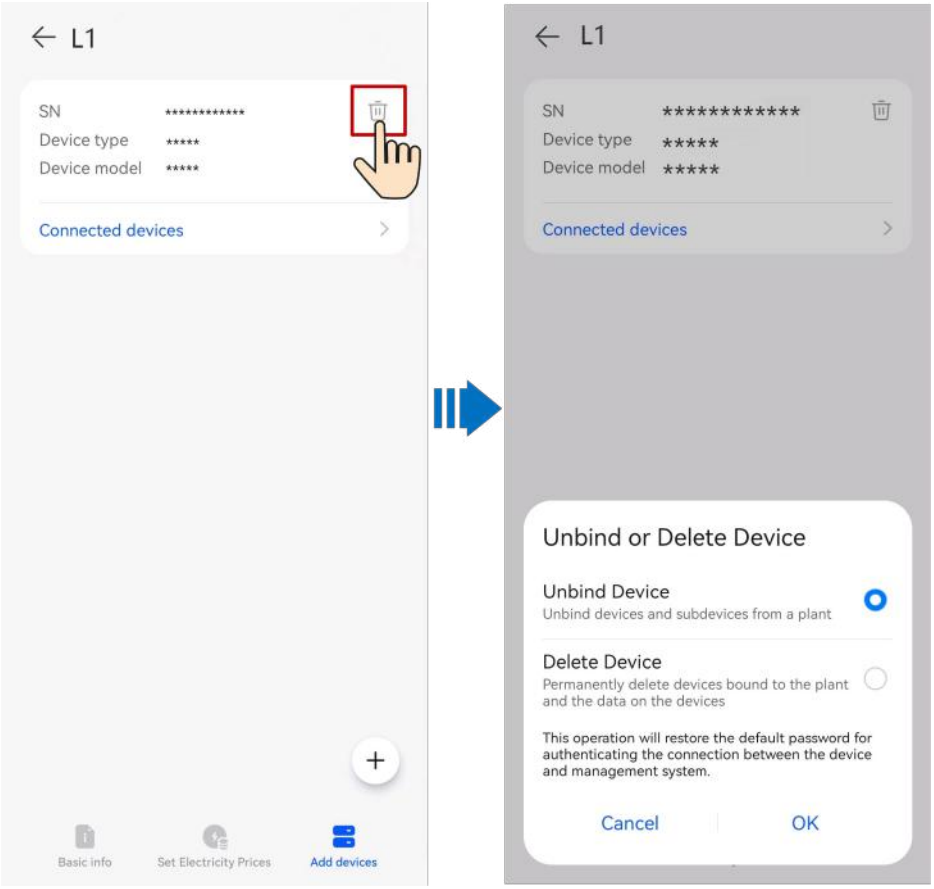
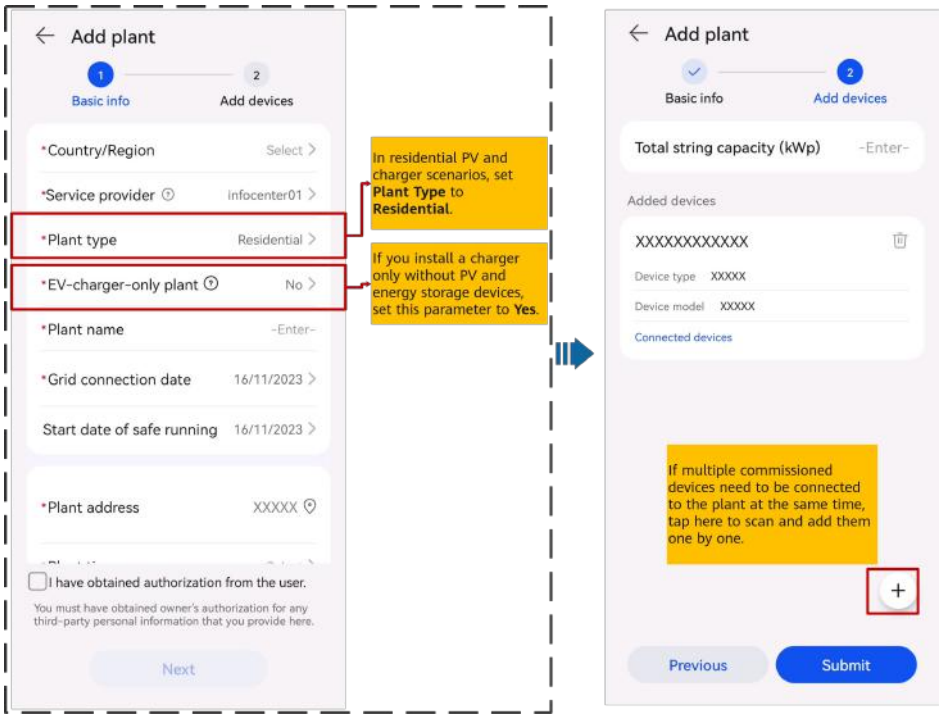


NOTE

- After a device is unbound, the running data of the device and its subdevices is stored in the database. The default data retention period is six months. To change the retention period, contact the system administrator.
  - If a device is rebound to a plant within the data retention period, the device inherits the retained data.
  - If a device is not bound to a plant within the data retention period, the data will be automatically deleted.
- After a device is permanently deleted, the running data of the device and its subdevices is deleted immediately. When the device is bound to the plant again, the running data of the device is not restored.

2. Installer B connects the commissioned PV devices and charger to a new PV plant.



PV Plant Created by Installer A and Charger Connected by Installer B

Installer B does not bind the charger to a plant after commissioning. The owner sends the SN or QR code of the charger to installer A, and installer A connects the charger to an existing PV plant.

1. Choose **Home** > **Plants**, and tap **Setup wizard**. Scan the QR code of the target charger.
2. On the plant creation screen, tap **Connect to existing plant**.
3. On the **Add Device** screen, select the target plant.
4. Tap **OK**.

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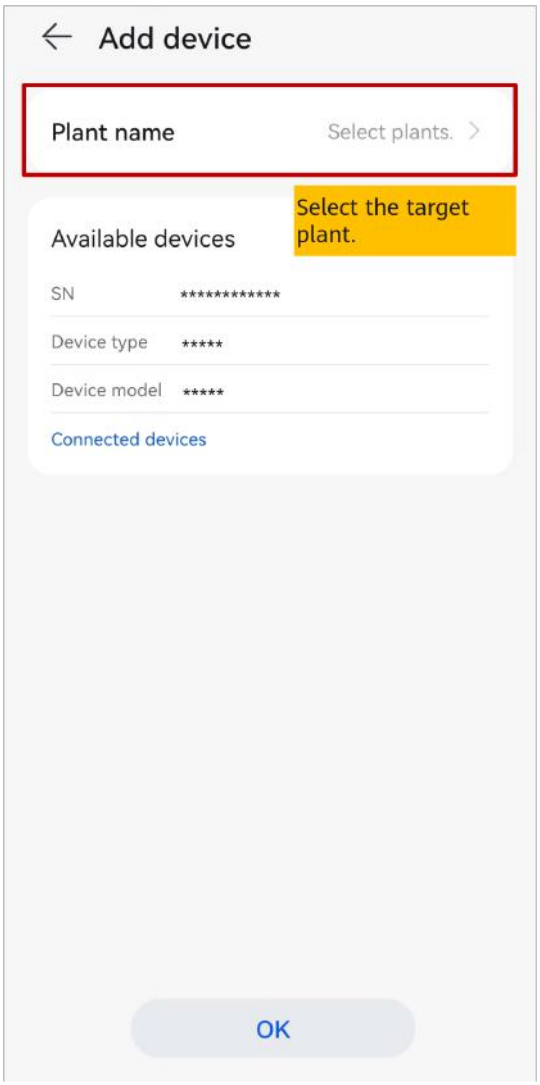
Add device
Plant name
Select plants.
Select the target plant.
Available devices
SN
****
Device type
*****
Device model
*****
Connected devices
OK

7 Creating a User

An installer can create owner user accounts and installer user accounts on the FusionSolar app. Owner users can monitor the device running status and start charging. Installer users can perform wizard-based commissioning and plant creation, monitor the running status of the plants, manage devices, query alarms, and perform mobile O&M.

When creating a user, ensure that the plant to be associated is available. If your company has created a plant, you can directly create a user and associate the user to the plant. If your company has not created a plant, create a plant and then add a user. For details, see Connecting to a Plant.

Creating an Owner User

On the **Home** screen, tap **Plants**. Tap **Add user** and create an account as prompted.

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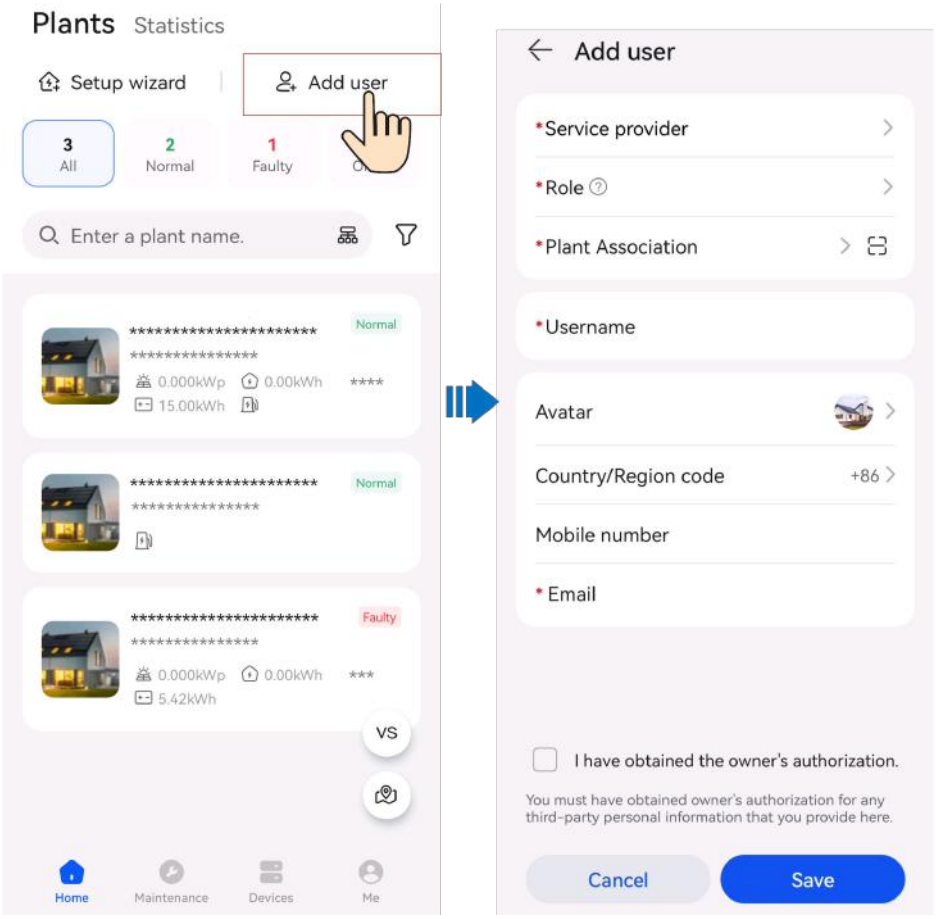

NOTE

After an account is created, the system sends a notification to the entered email address. Then the user can use the received username and password to log in to the FusionSolar SmartPVMS or FusionSolar app.

Creating an Installer User

1. On the **Home** screen, tap **Plants**. Tap **Add user** and create an account as prompted.

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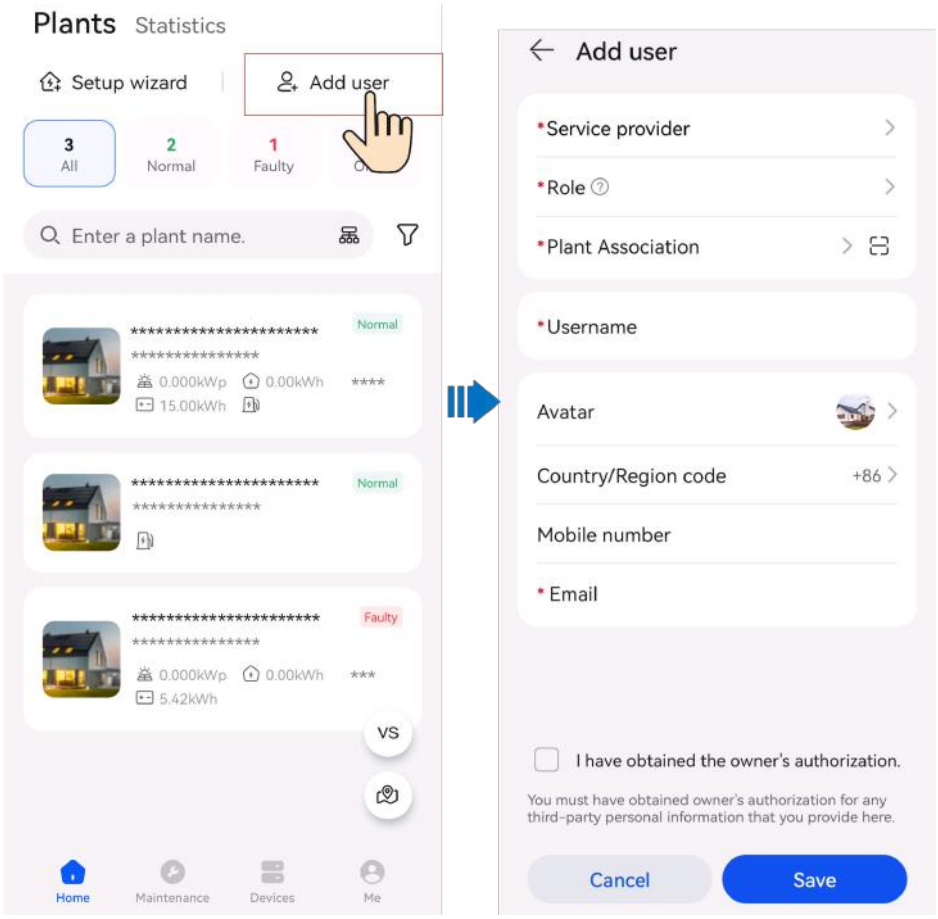

NOTE

- For a new user who is assigned the **Installer** role, if the user is associated with only plants, the installer can manage the associated plants within the permission of the role but cannot create a plant. If the installer is associated with a company, the installer can manage all plants of the associated company and has the permission to create plants.
- After an account is created, the system sends a notification to the entered email address. Then the user can use the received username and password to log in to the FusionSolar SmartPVMS or FusionSolar app.

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8 FAQs

8.1 How Do I Reset the Default Password of a Charger Using an RFID Card When I Forgot the Password?

Precautions

- This operation will reset both the WLAN password and login password. The charger login password will be reset to Changeme. The WLAN connection password will be reset to the initial password.
- Before resetting the password, ensure that the charger is in the **No Car Connected**, **"Faulty"**, or **Alarm** state.

Procedure

1. Swipe the card for five consecutive times (wait until the indicator flashes blue before you swipe the card again). Then, the indicator on the charger is steady white for 3s and the charger enters the swipe protection state. Stop swiping the card now.

   NOTE

   - When swiping the card consecutively, keep the intervals within 5s.
   - If you swipe your card in the swipe protection state, the swipe protection time will start again.

2. After 3s, the indicator flashes white fast for 20s. If you swipe the card again within this 20s, the indicator turns off and pulsates after 3s, indicating that the charger password has been successfully reset.

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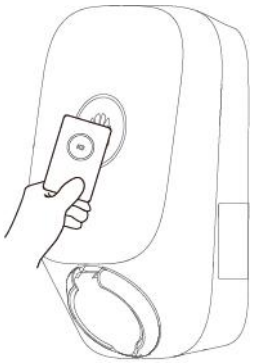
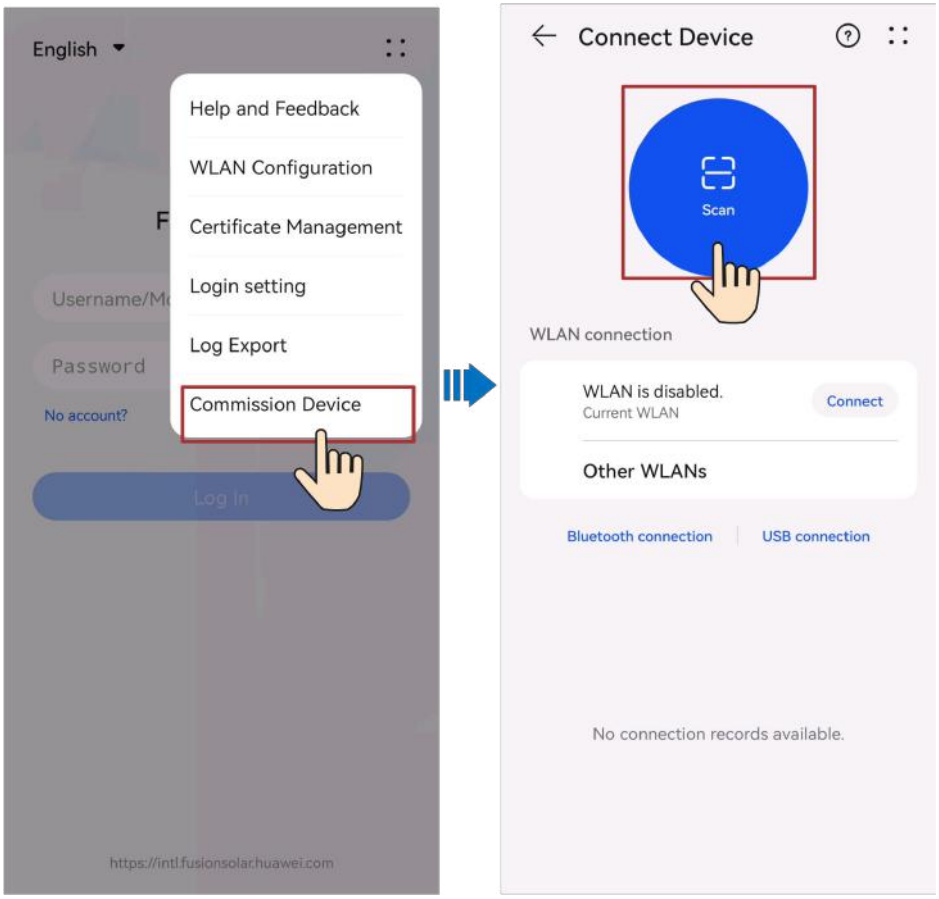


8.2 How Do I Connect to a Charger When I Cannot Log In to the FusionSolar App Due to Poor Network Connection?

NOTE

Before connecting to the WLAN of the charger, disable the mobile network function and ensure that the mobile phone cannot connect to the Internet. When connecting to the WLAN of the charger, enable the WLAN as prompted.

1. On the app login screen, tap **::** > **Commission Device**.
2. Connect to the WLAN of the charger as prompted.



8.3 What Should I Do If My Android Phone Fails to Connect to the WLAN After I Scan the QR Code?

Symptom

After the device QR code is scanned using an Android phone, the **Device to use with** message is displayed. After **CONNECT** is tapped three times, the **The WLAN connection has changed. Try to connect to the system WLAN** message is displayed.

Solution

- For Huawei mobile phones on Android 10 or later:
  a. On the home screen of your mobile phone, tap **Settings** > **WLAN**.
  b. Tap **More settings**.
  c. Disable **WLAN+**.
- For other mobile phones:
  a. On the home screen of your mobile phone, tap **Settings** > **WLAN**.
  b. Tap the WLAN of the target device, select **FORGET** or **DELETE**, and scan the QR code to connect to the WLAN again.

  NOTE

  If the **This WLAN network has no Internet access. Connect anyway?** message is displayed when you connect to the built-in WLAN, tap **CONNECT**. Otherwise, you cannot log in to the system. The actual UI and messages may vary with mobile phones.

8.4 What Can I Do If the System Prompts Me to Reconnect to the Charger's WLAN Hotspot During Quick Settings?

Cause

After setting routing parameters on some chargers, you need to restart the chargers for the settings to take effect. During the restart, the WLAN connection between your phone and the charger will become invalid.

Solution

Reconnect to the charger's WLAN hotspot as prompted.

NOTE

When reconnecting to the WLAN hotspot, you are advised not to stop the process of the FusionSolar app. Otherwise, you need to log in to the local commissioning screen of the charger again after the connection is set up.