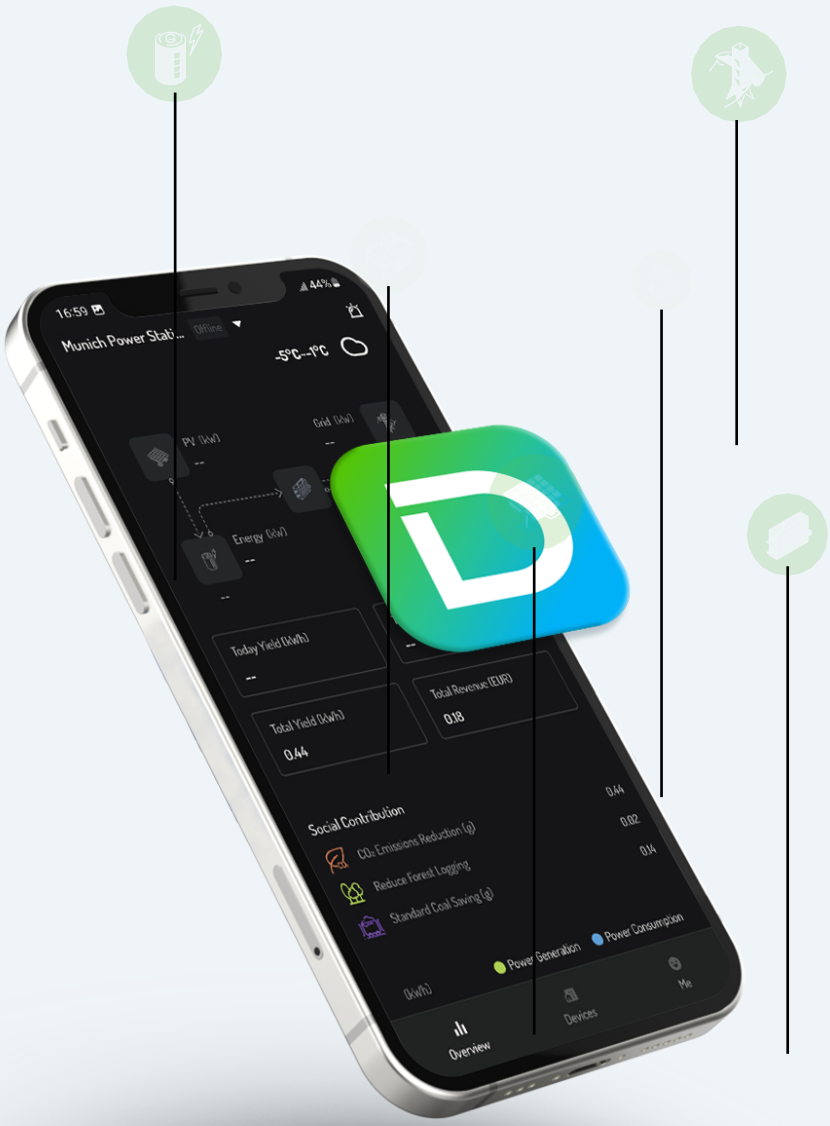


Dyness User Manual

Version: V2.1.0

Veröffentlichungsdatum: 2024-8-12

目录

Preface

This document mainly introduces the common operations of the Dyness App.

Before setting parameters, please read this manual and the corresponding model's user manual carefully, familiarize yourself with the product's features and characteristics. Incorrect grid parameter settings may result in inability to connect to the grid or failure to connect according to grid requirements, affecting power generation.

The document may be updated irregularly. Please visit the official website to obtain the latest version of the materials and more information about the product.

Applicable Personnel

This document is only applicable to professionals who are familiar with local regulations and standards, have received specialized training, and possess a thorough understanding of the relevant knowledge about this product

App Introduction

The Dyness App is a mobile application software that communicates with energy storage batteries, inverters, and data loggers through Bluetooth and WiFi modules.
The common functions include:
Configuring the system based on customer requirements.
Checking firmware versions.
Setting safety standards according to local grid requirements and national/regional regulations.
Configuring power limits.

Monitoring and viewing the performance of the energy storage system.

Complementary Products

The Dyness App is compatible with all Dyness series devices, including energy storage systems, inverters, data loggers, and other related device.

Download and Install the App

Operating Steps

Method 1: Download and Install from the App Store.

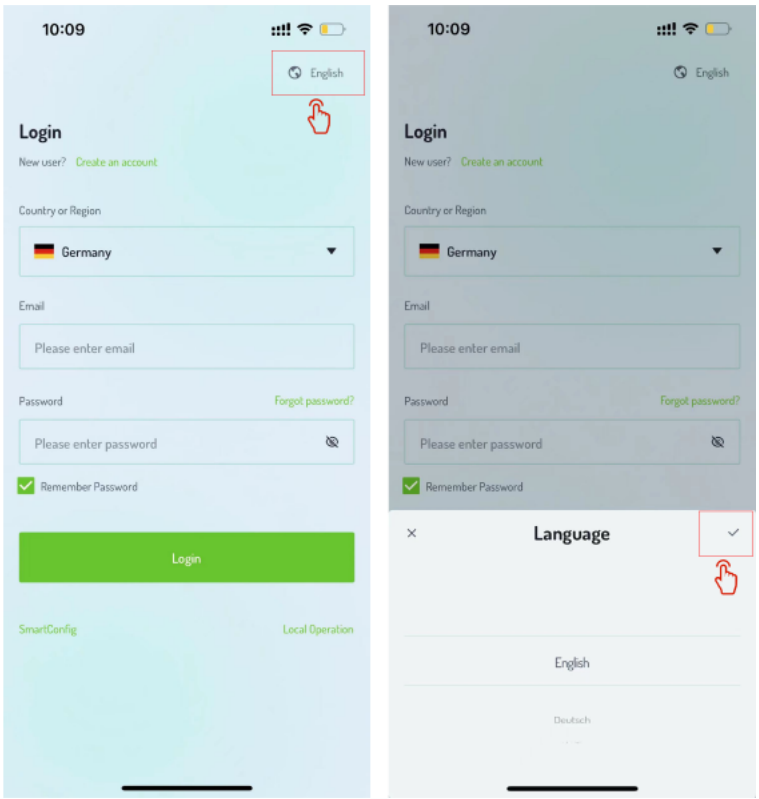
For Android users: Search for "Dyness" on the Google Play Store.

For iPhone users: Search for "Dyness" on the App Store."

Method 2: Scan the following QR code for download and installation.

Set Language

Set the App language according to your actual needs.



Account Registration

Applicable Users

If you haven't registered an account in the Dyness App, please proceed to registration on the login interface. Note: If you have already registered an account, please log in directly.

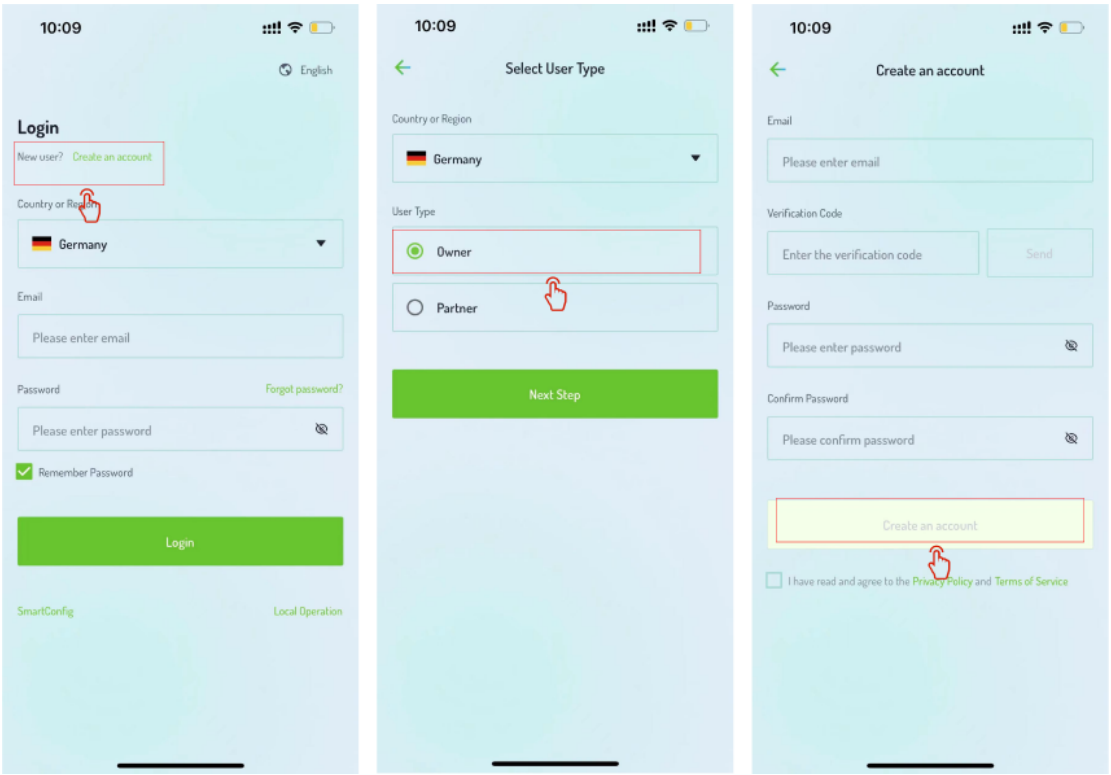
Operating Steps

On the Dyness App login interface, select "Create Account."
Choose the current "Country or Region."
Select the "User Type" for account registration.
Click "Next."
Follow the prompts on the "Create Account" interface to complete the account registration process.

Homeowner

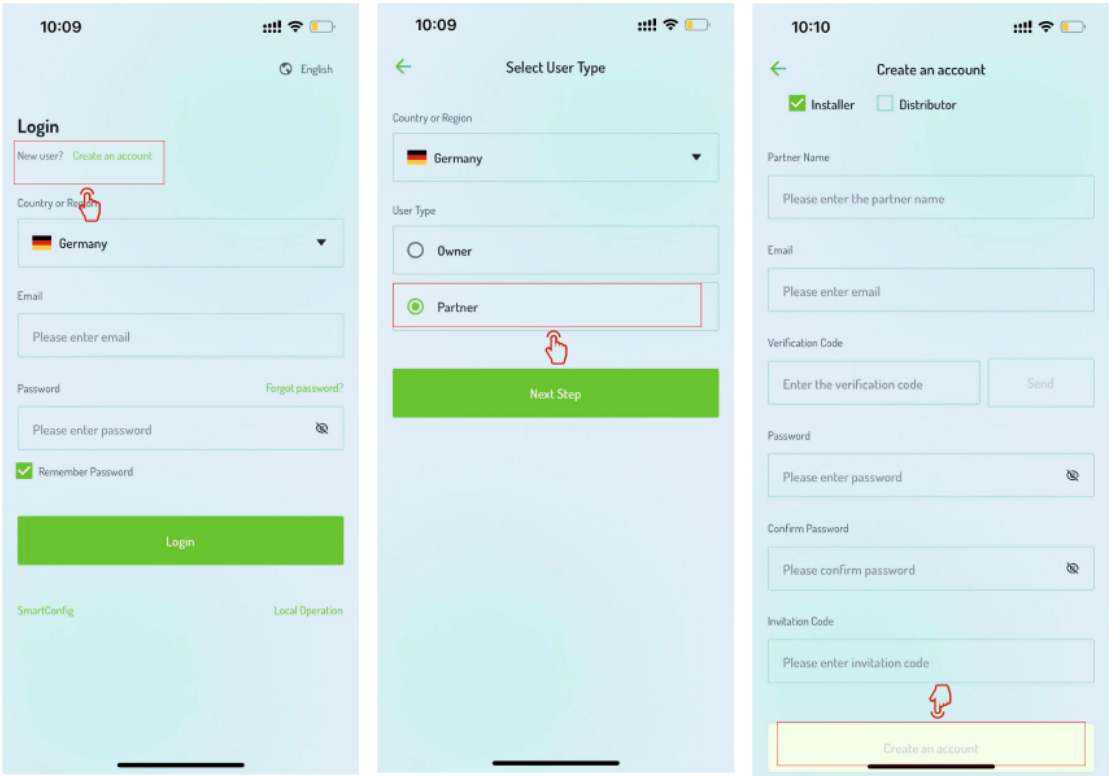
Select "Homeowner" as the user type.

Proceed to the "Next" interface.
Follow the prompts to input email, verification code, password, and other necessary information. Then click "Create Account."



Partner

Choose "Partner" as the user type.
Proceed to the "Create Account" interface.
Follow the process to input the account information.
As a partner of Dyness, you can contact the platform's business department to obtain your exclusive invitation code to complete the account registration.

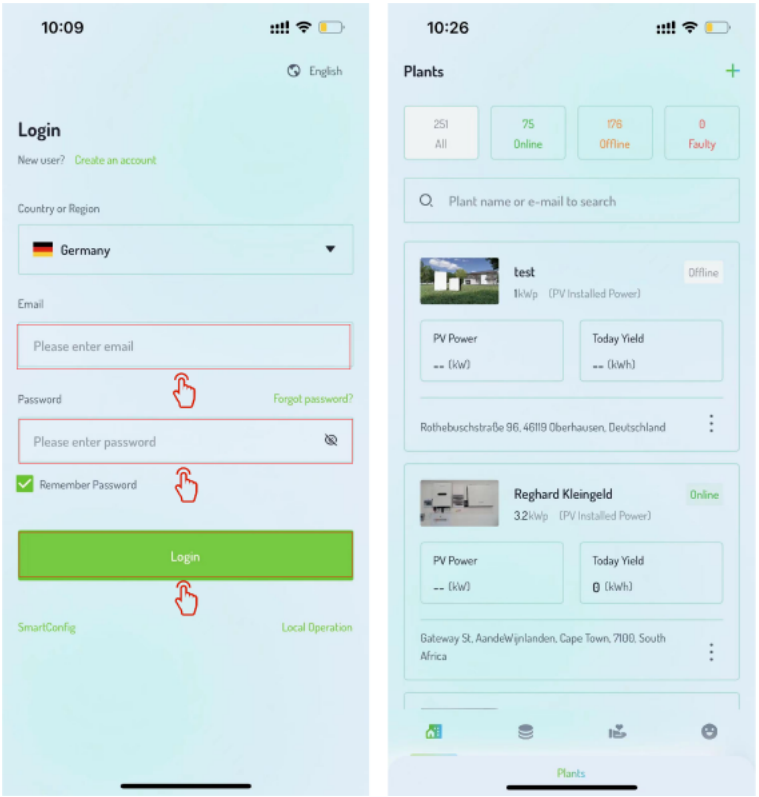


Log In and Log Out

When you download and install the Dyness App on your mobile phone, you can access and manage your devices through the app.

Log in to the App

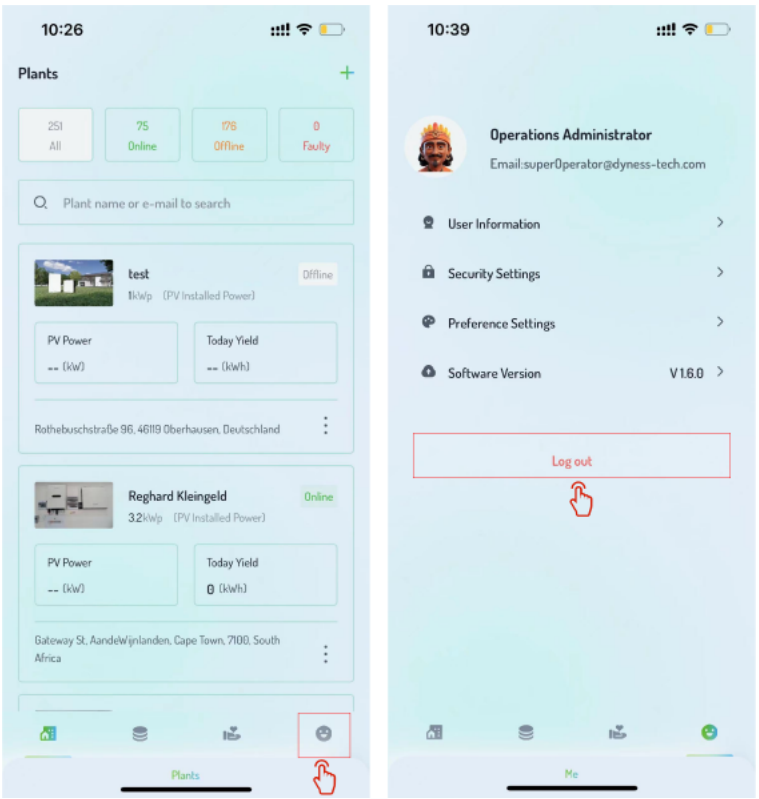
On the mobile client desktop, tap the App application icon to enter the login interface.
Select the country or region, enter the account and login password.
Click the **"Log In"** button.
Access the App's power station list.



Note
For new users logging in for the first time or after resetting the password, you can check 'Remember Password.' Subsequent logins may not require entering the password.

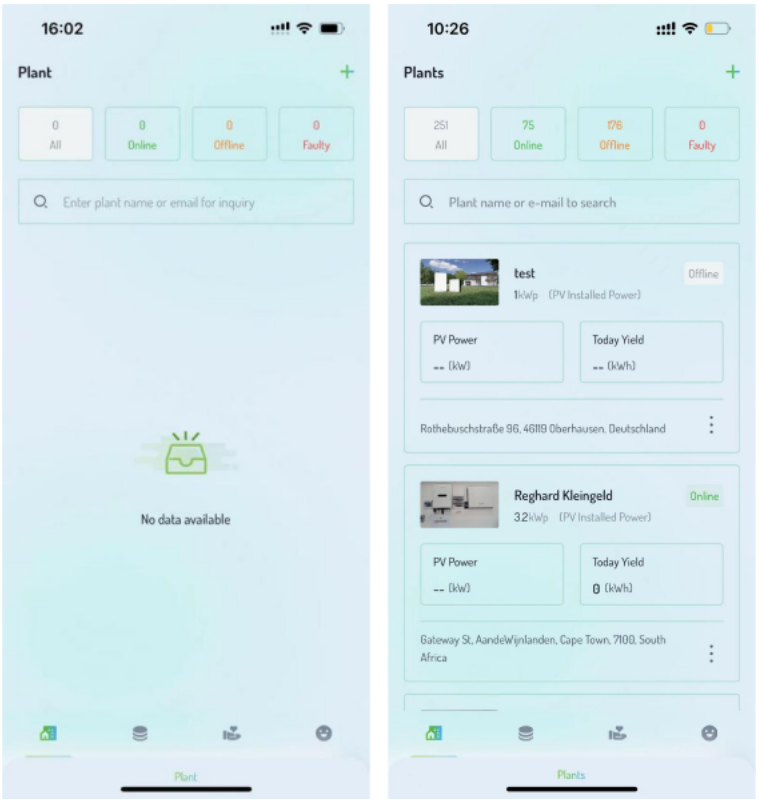
Log out of the App

Tap on the **"My"** tab in the home area.
In the **"My"** interface, click on **"Log Out."**



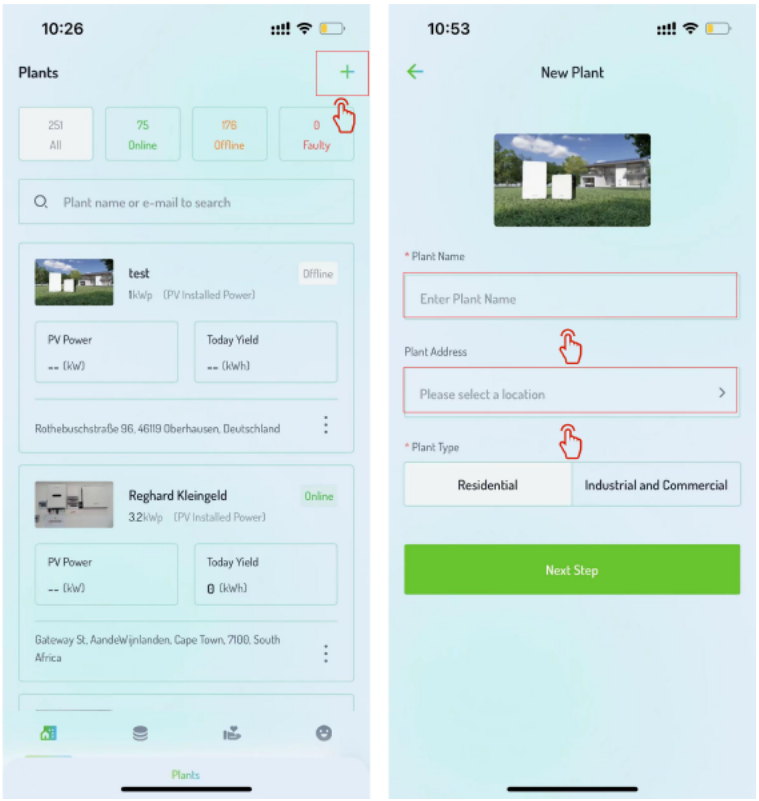
Power Plant List

Upon logging into the app, you will enter the power plant list, where the current interface will display all power plants under your account.
Note: For new users, it's normal to have an empty power plant list after the first login.



New Power Plant Creation

To create a new power plant, click on the "+" icon in the top right corner of the list to enter the new power plant creation interface.
Follow the prompts to input the power plant name, address, and type information.



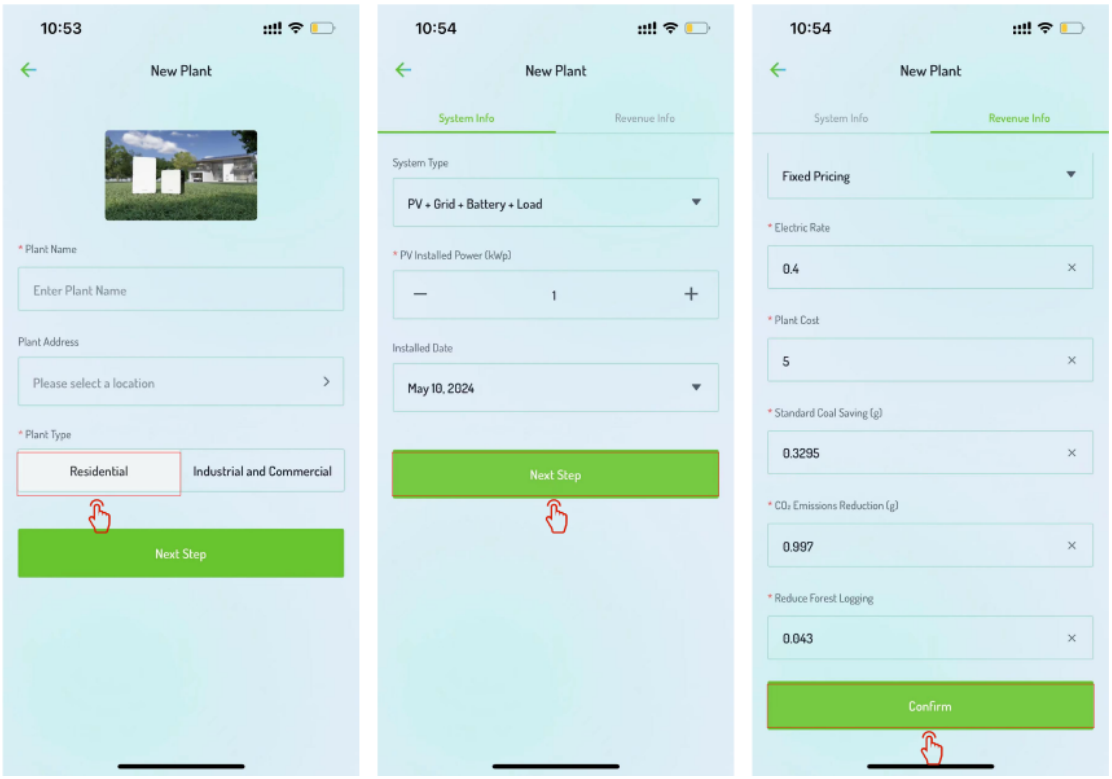
Residential Energy Storage

After entering the power plant information, click "Next" to enter the system information setting interface:

(1) System Information: System type, installed capacity, installation date.

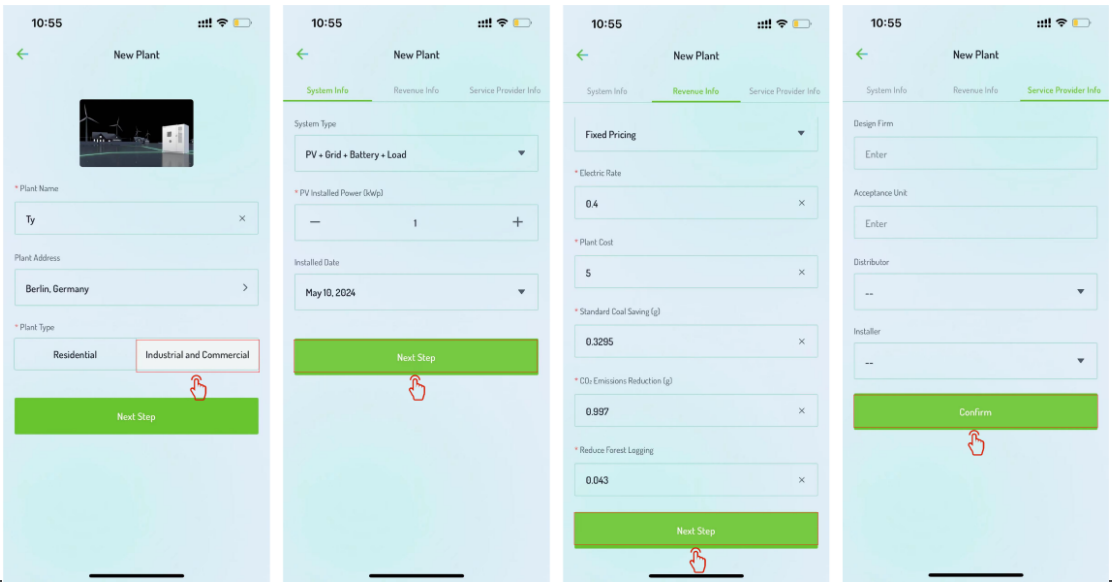
(2) Revenue Information: Currency unit, electricity price type, selling price, total cost, saved standard coal (grams), CO2 reduction (grams), reduced deforestation (trees).

(3) After inputting the information, click the "Confirm" button to complete the new power plant creation operation.



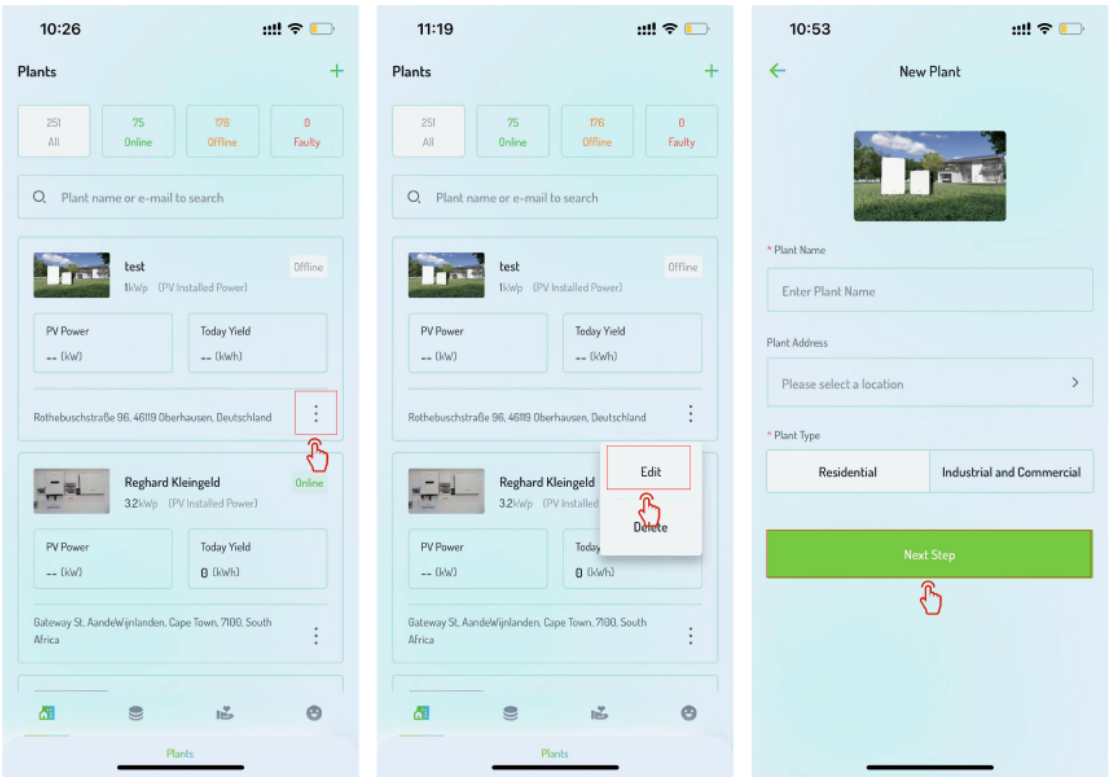
Commercial and Industrial Energy Storage

After entering the power plant information, click "Next" to enter the system information setting interface:
(1) System Information: System type, installed capacity, installation date.
(2) Revenue Information: Currency unit, electricity price type, selling price, total cost, saved standard coal (grams), CO2 reduction (grams), reduced deforestation (trees).
(3) Service Provider Information: Design unit, acceptance unit, distributor, installer.
(4) After inputting the information, click the "Confirm" button to complete the new power plant creation operation.



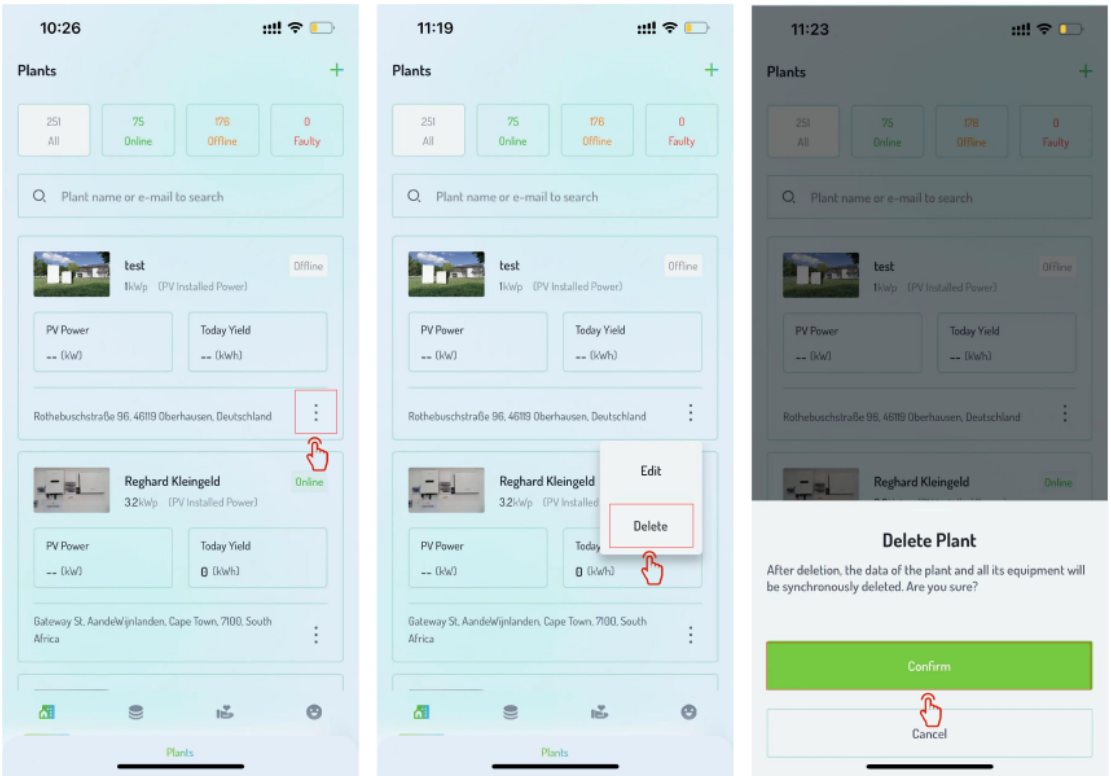
Edit Power Plant

To edit the basic information of a power plant, you need to access the power plant card by clicking on the "⋮" icon in the bottom right corner:
(1) Click on the "⋮" icon on the power plant card.
(2) Select "Edit."
(3) Enter the editing interface for the power plant.
a. Basic Information: Name, location, type.
b. System Information: System type, installed capacity, installation date.
c. Revenue Information: Currency unit, electricity price type, selling price, total cost, saved standard coal (grams), CO2 reduction (grams), reduced deforestation (trees).
d. Service Provider Information: Design unit, acceptance unit, distributor, installer.



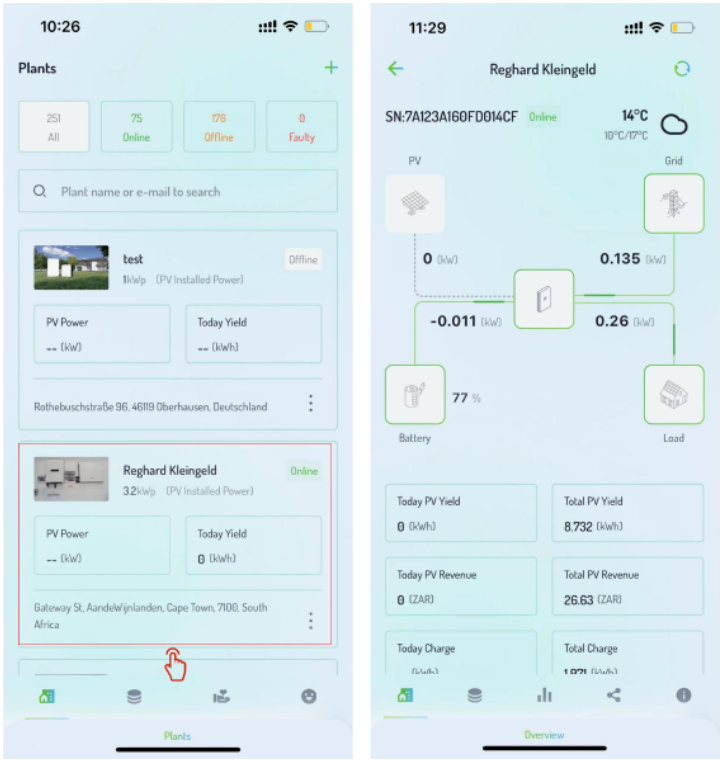
Delete Plant

To delete a power plant, you can access the power plant card by clicking on the "⋮" icon in the bottom right corner:
(1) Click on the "⋮" icon on the power plant card.
(2) Click "Confirm" to delete the power plant.
(3) Click "Cancel" to cancel the deletion operation of the power plant.



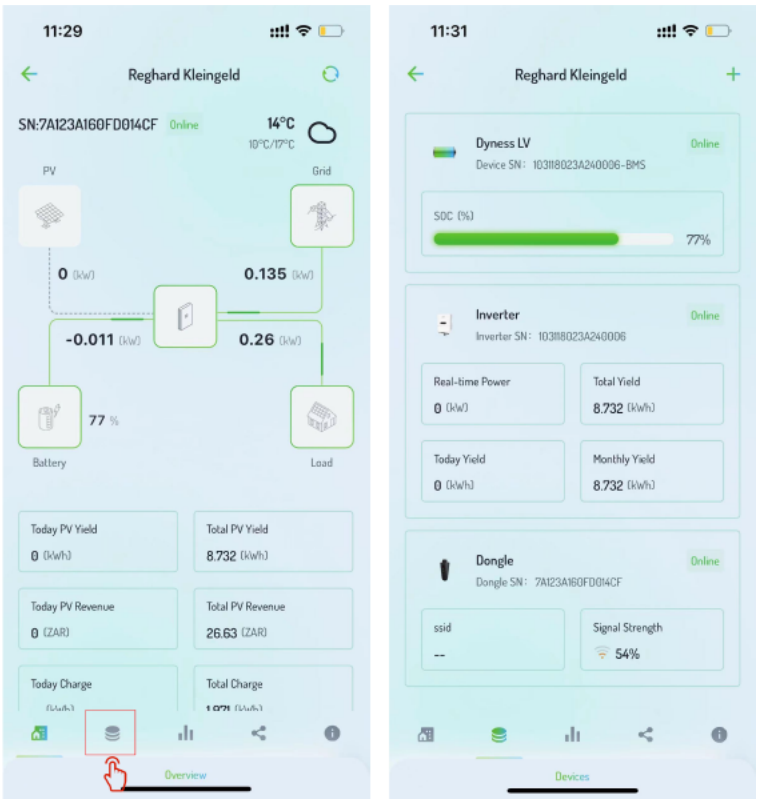
Plant Overview

By clicking on a power plant card in the power plant list, you can access the power plant overview page. Here, you can view data, device, station authorization, etc. You can also monitor the overall operation of the power plant, and in case of device failure, you can view alarm messages through the app.



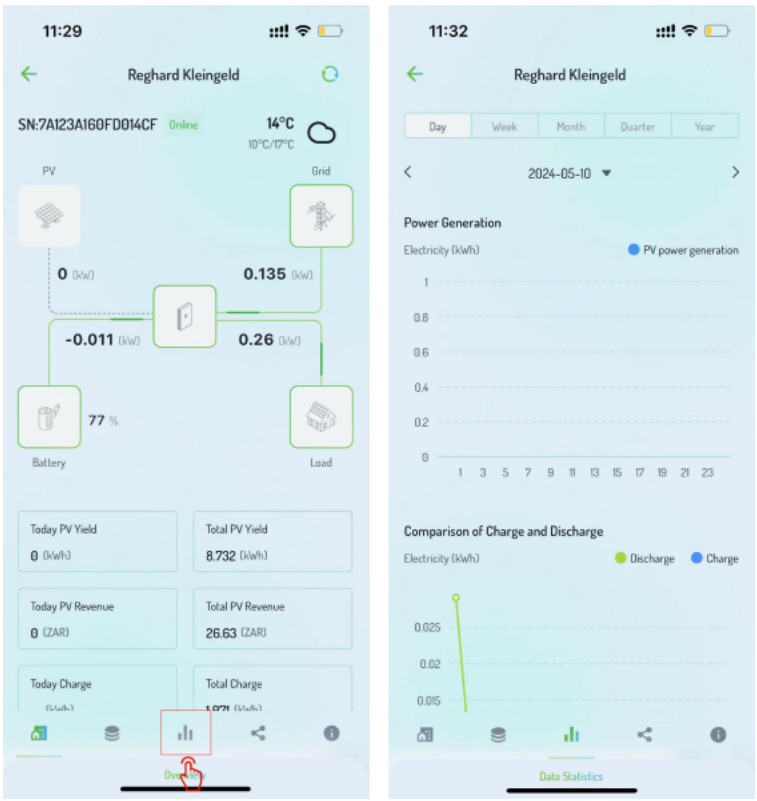
Plant Devices

You can view the devices associated with the current power plant by switching the navigation menu.



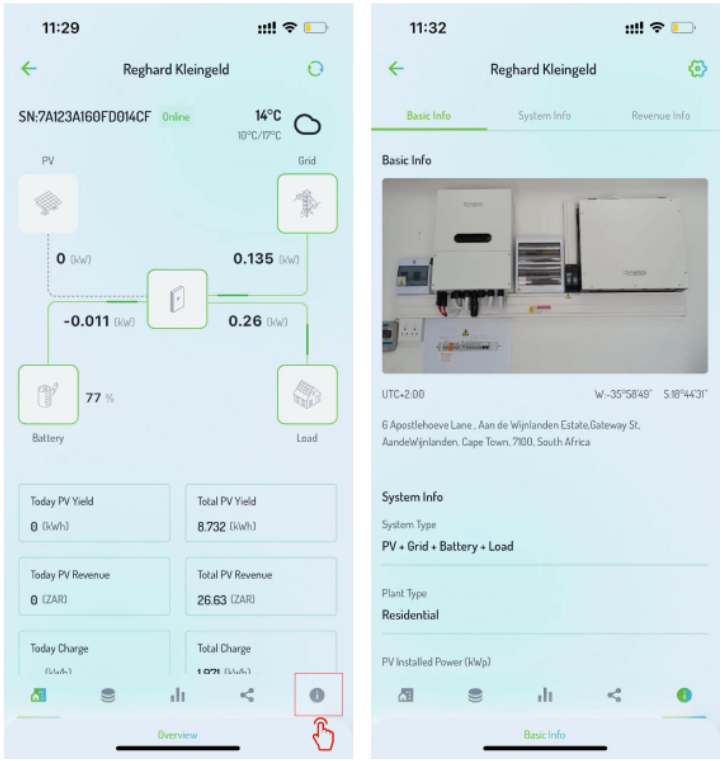
Data Statistics

By switching the navigation menu to access the data statistics interface, you can view various statistical information such as: power generation, charge and discharge comparison, revenue comparison, load consumption, grid power, comprehensive discharge efficiency, discharge achievement rate, etc.



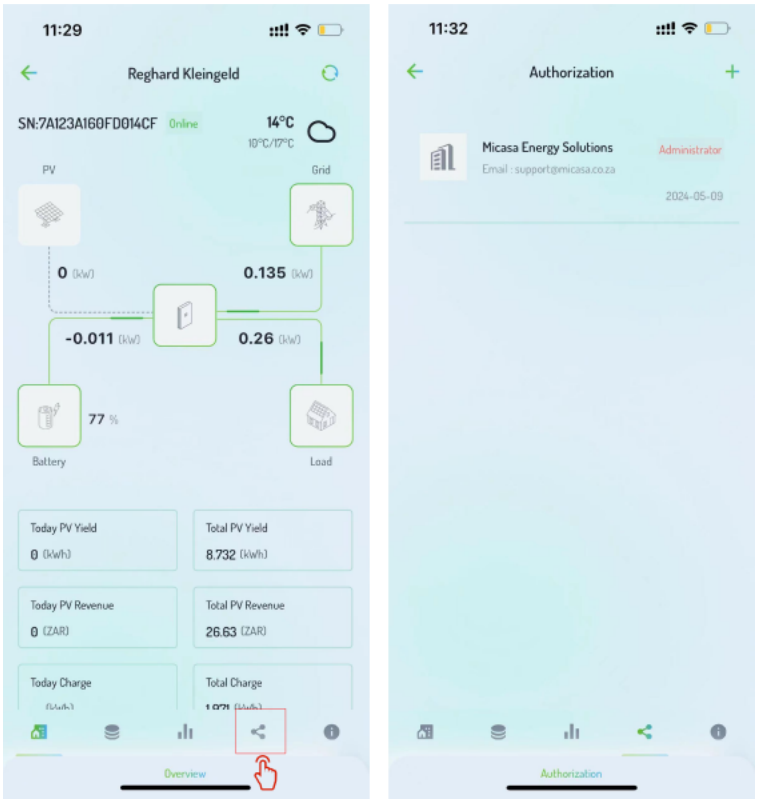
Basic Information

You can view basic information, system information, and revenue information by switching the navigation menu to access the basic information interface.



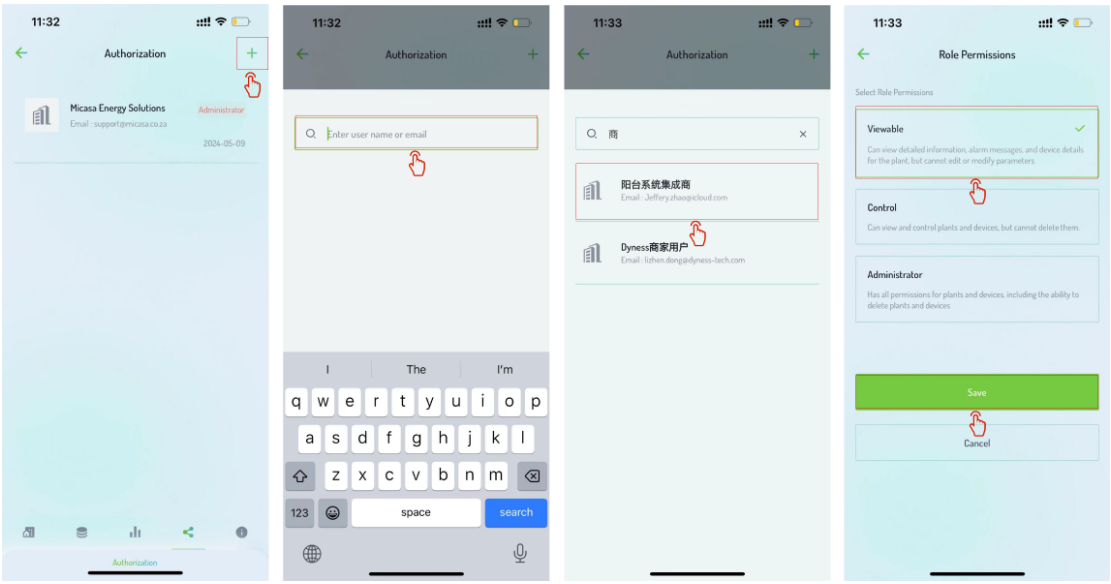
Authorization Information

You can access the power plant authorization interface by switching the navigation menu. Here, you can authorize the power plant to other users and also set:
(1) Add Authorization
(2) Authorization Details
(3) Edit Authorization
(4) Revoke Authorization



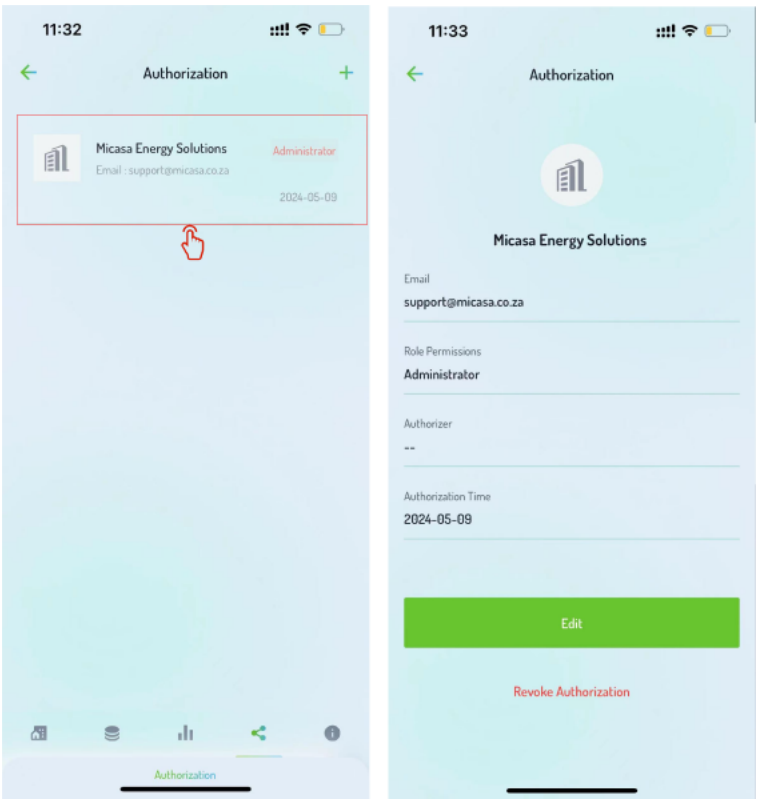
Add Authorization

Click on the "+" icon.
A search interface will pop up, allowing you to search for users by entering their account/email.
Enter the account information to search for the user list.
Click on the target user to enter the role permission selection interface.
(1) Based on the selected target user, choose the corresponding permissions.
(2) Click the "Save" button to complete the authorization operation.
(3) Click the "Cancel" button to cancel the authorization operation and return to the authorization list interface.



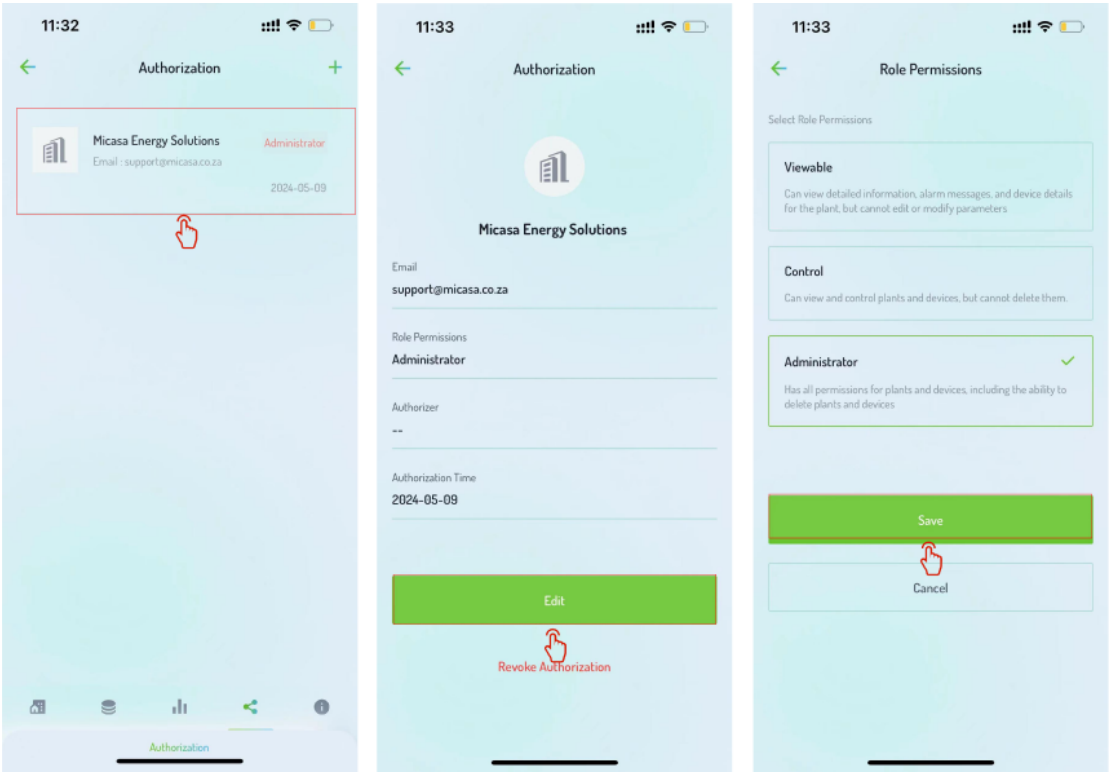
Authorization Details

By clicking on the target user in the authorization list, you can enter the user's authorization details. Here, you can view the user's account, role permissions, authorizer, authorization time, and you can also edit and revoke the authorization on this current page.



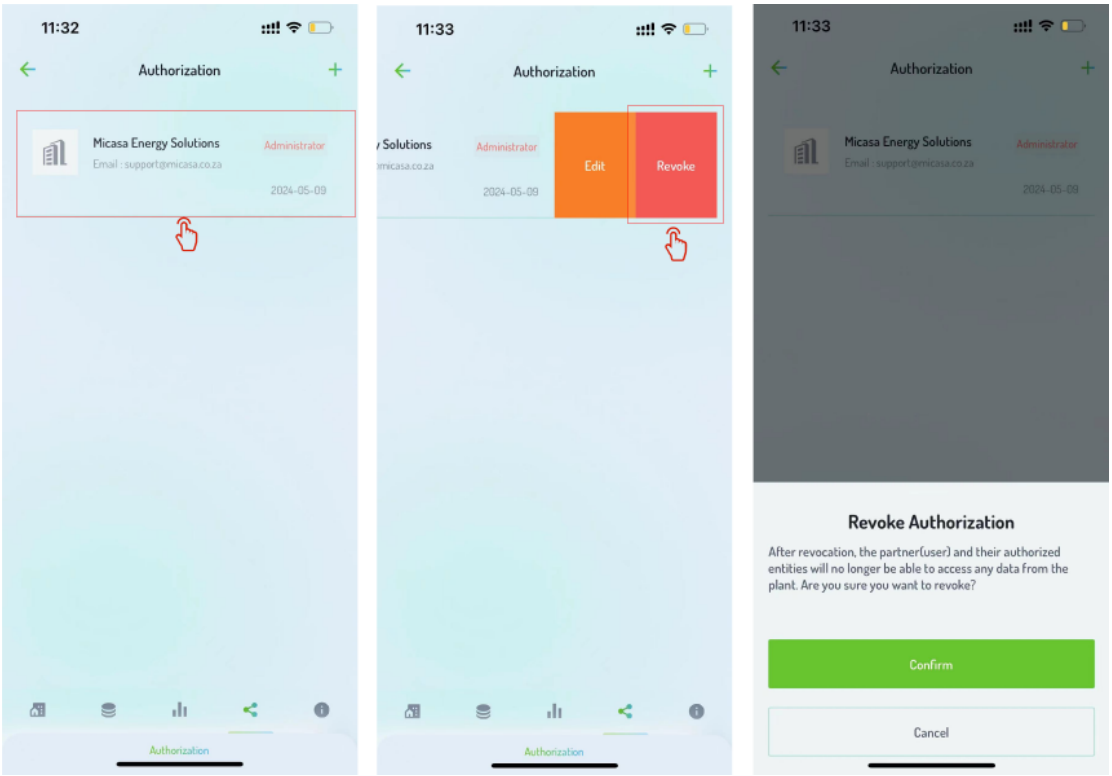
Edit Authorization

(1) Click on the user authorization card and swipe left, then click the "Edit" button.
(2) Click on the user card information to enter the user authorization details, then click the "Edit" button.



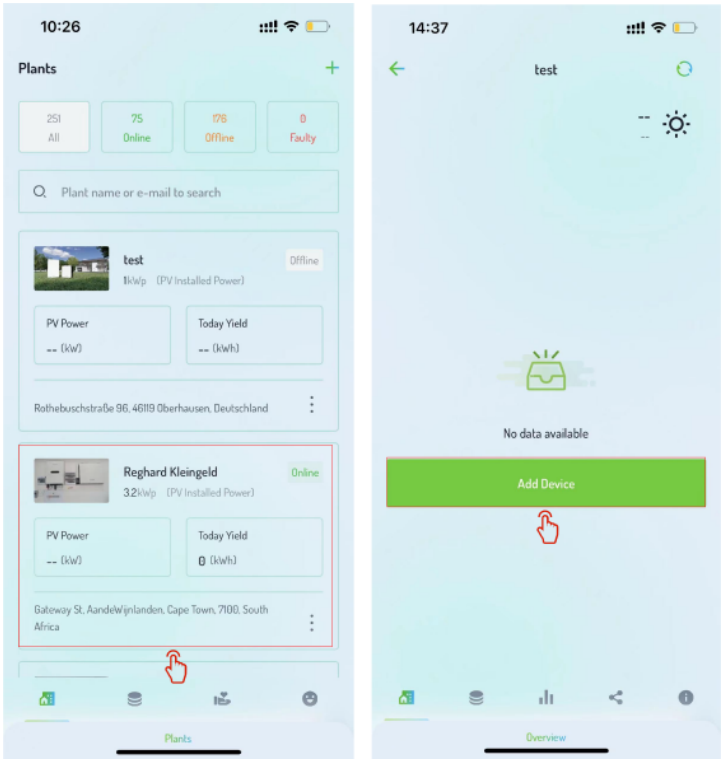
Cancel Authorization

(1) Long press on the user card information, swipe left, then click the "Revoke Authorization" button.
(2) Click on the user card information to enter the user authorization details, then click the "Revoke Authorization" button.



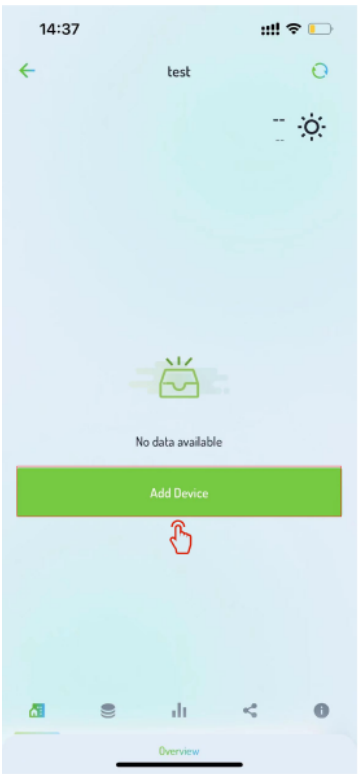
Device Information

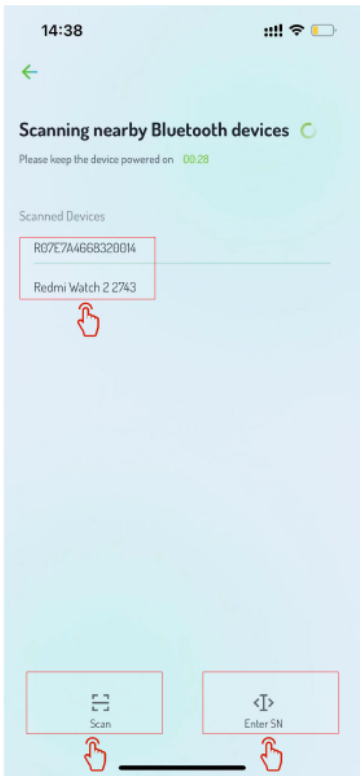
After adding the power plant, it remains offline due to the absence of connected devices. Click on the power plant card to access the interface for adding devices.



Adding Devices

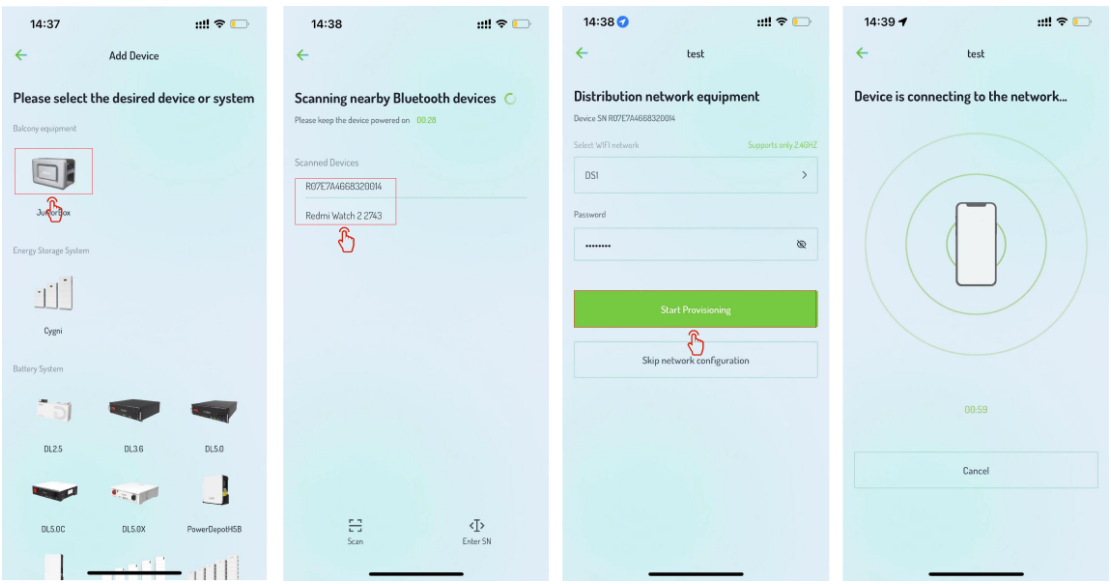
Click on "Add Device" to enter the device selection interface, then choose the corresponding device type and model.
Adding Methods:
Method 1: Adding via Bluetooth
a. Ensure that your phone is connected to Wi-Fi and that Bluetooth is turned on. b. Bluetooth will automatically scan for nearby devices and display the results. c. Select the device you want to connect to and click on the device "name".
Method 2: Adding via QR Code Scan [This method supports devices with QR codes. If no QR code is available, please choose another method.]
a. Click on "Scan QR Code".
b. Align the device QR code with the focus of your phone's scanner. Results will be displayed in a list.
c. Choose the device you want to connect to from the result list and click on the device "name".
Method 3: Adding via SN Input [If only one device needs to be connected at a time, it's recommended to use this method.]
a. Click on "Input SN".
b. Enter the device's SN code.
c. Once the SN code is entered, click "Next".





JuniorBox

(1) Select "JuniorBox".
(2) Enter the device's Bluetooth query interface.
(3) Input the Wi-Fi account and password.
(4) Click on "Start Networking".
(5) Wait for the "Networking Result".

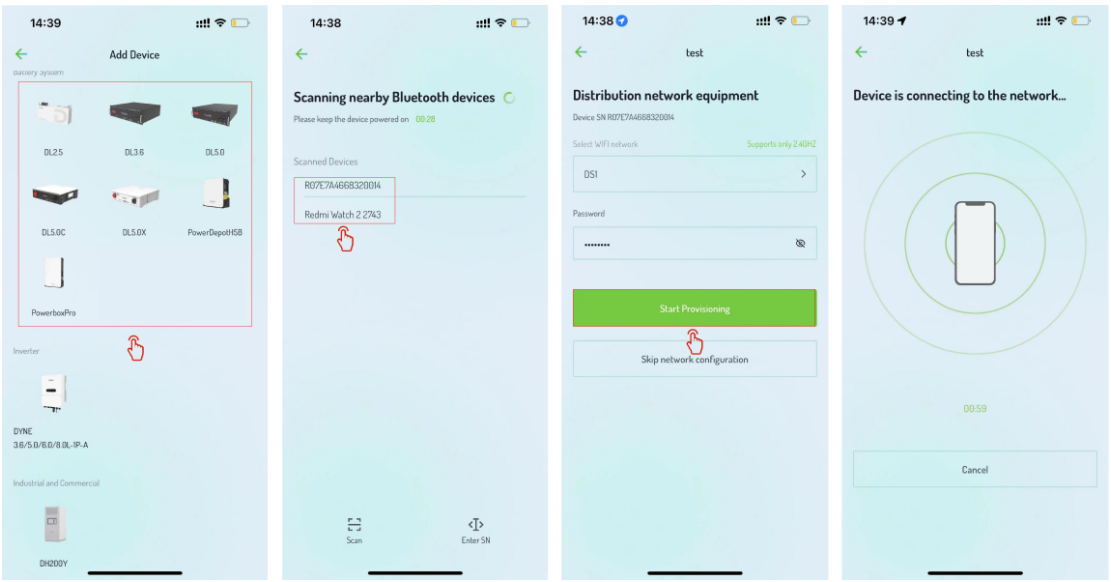


Tips
Ensure the device is powered on when connecting via Bluetooth. During Bluetooth connection, the device scans for 30 seconds. If there's a timeout, please click "Rescan" or switch to another method. When connecting via QR code scan, the system supports uploading images of QR codes already taken for device recognition. Wi-Fi account and password are required for device networking. If the app has already completed network setup, you can click "Skip Networking" step. If the app's network setup differs from the current device's network setup, you can switch networks. If network setup is not completed, clicking "Skip Networking" will result in the device being offline and unable to retrieve data.

Low voltage device（DL、PowerboxPro）

(1) Select "Low voltage device".
(2) Enter the device's Bluetooth query interface.
(3) Input the Wi-Fi account and password.

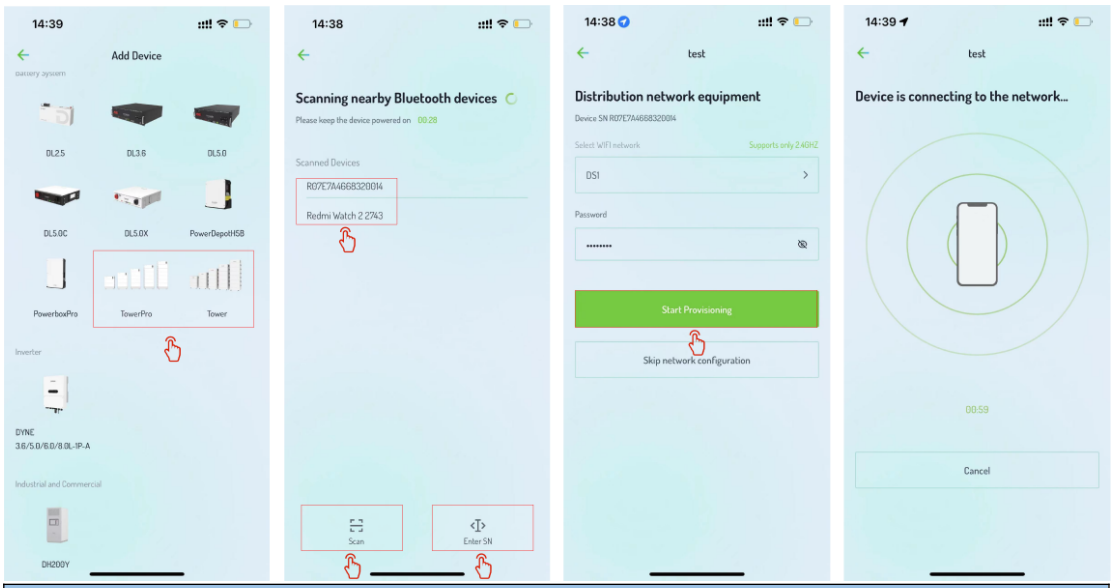
(4) Click on "Start Networking".
(5) Wait for the "Networking Result".



Tips
Ensure the device is powered on when connecting via Bluetooth. During Bluetooth connection, the device scans for 30 seconds. If there's a timeout, please click "Rescan" or switch to another method. When connecting via QR code scan, the system supports uploading images of QR codes already taken for device recognition. Wi-Fi account and password are required for device networking. If the app has already completed network setup, you can click "Skip Networking" step. If the app's network setup differs from the current device's network setup, you can switch networks. If network setup is not completed, clicking "Skip Networking" will result in the device being offline and unable to retrieve data.

High voltage device（TowerPro）

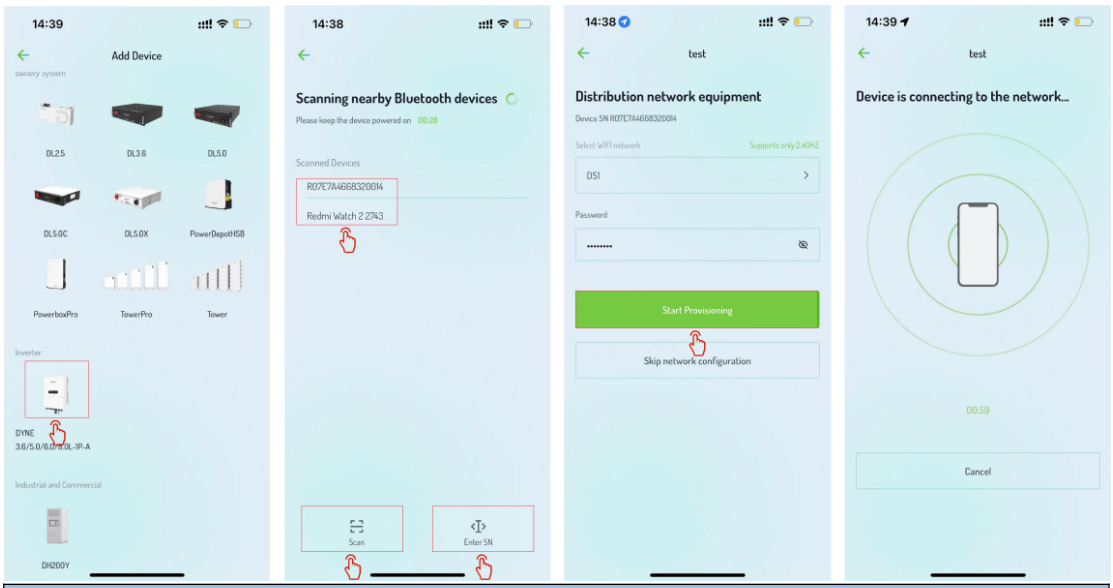
(1) Select "High voltage device".
(2) Enter the device's Bluetooth query interface.
(3) Input the Wi-Fi account and password.
(4) Click on "Start Networking".
(5) Wait for the "Networking Result".



Tips
Ensure the device is powered on when connecting via Bluetooth. During Bluetooth connection, the device scans for 30 seconds. If there's a timeout, please click "Rescan" or switch to another method. When connecting via QR code scan, the system supports uploading images of QR codes already taken for device recognition. Wi-Fi account and password are required for device networking. If the app has already completed network setup, you can click "Skip Networking" step. If the app's network setup differs from the current device's network setup, you can switch networks. If network setup is not completed, clicking "Skip Networking" will result in the device being offline and unable to retrieve data.

Inverter

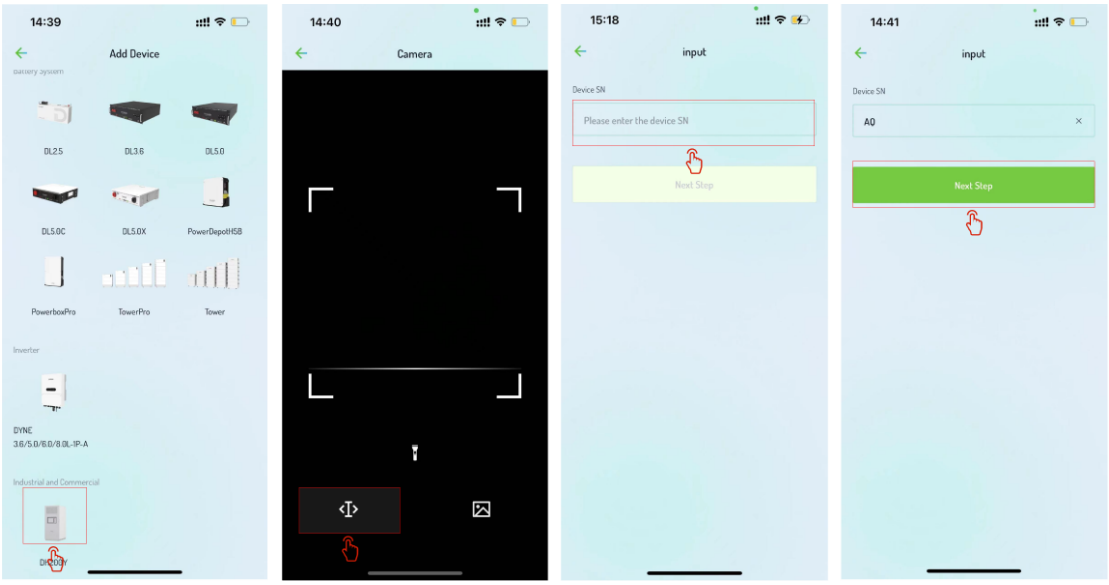
(1) Select "Inverter".
(2) Enter the device's Bluetooth query interface.
(3) Input the Wi-Fi account and password.
(4) Click on "Start Networking".
(5) Wait for the "Networking Result".



Tips
Ensure the device is powered on when connecting via Bluetooth. During Bluetooth connection, the device scans for 30 seconds. If there's a timeout, please click "Rescan" or switch to another method. When connecting via QR code scan, the system supports uploading images of QR codes already taken for device recognition. Wi-Fi account and password are required for device networking. If the app has already completed network setup, you can click "Skip Networking" step. If the app's network setup differs from the current device's network setup, you can switch networks. If network setup is not completed, clicking "Skip Networking" will result in the device being offline and unable to retrieve data.

Commercial and Industrial Energy Storage

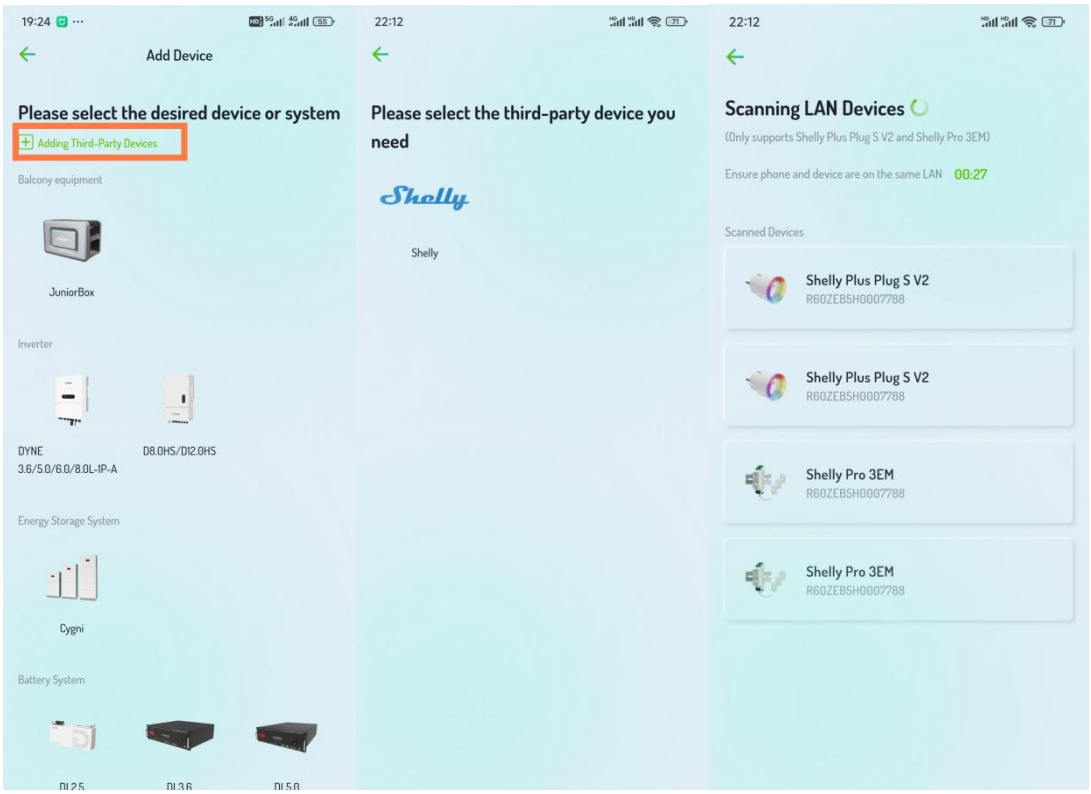
(1) Select "DH200Y".
(2) Enter the device addition interface.
(3) Choose Bluetooth scan or input SN.
(4) After inputting the SN, click "Next".
(5) Wait for the "Networking Result".



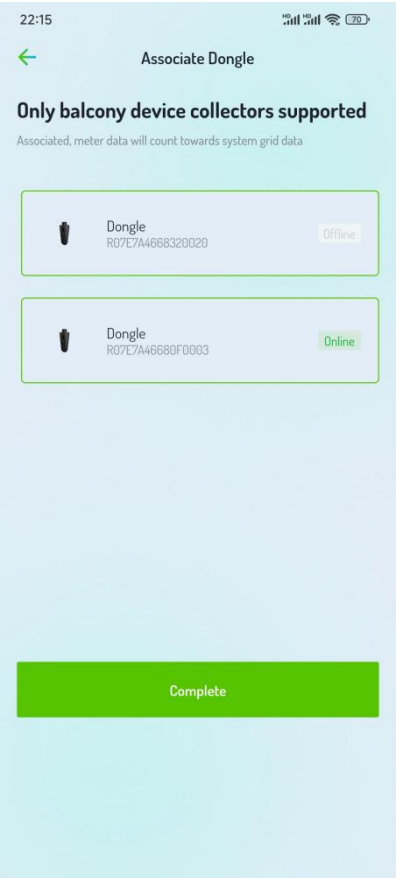
Shelly Meter/Plug

(1) Ensure the Shelly meter/plug is properly connected to Wi-Fi.

(2) Open the Dyness APP, select "Add Third-Party Device" in the plant, choose Shelly from the third-party list, and select the desired Shelly device from the scanned list

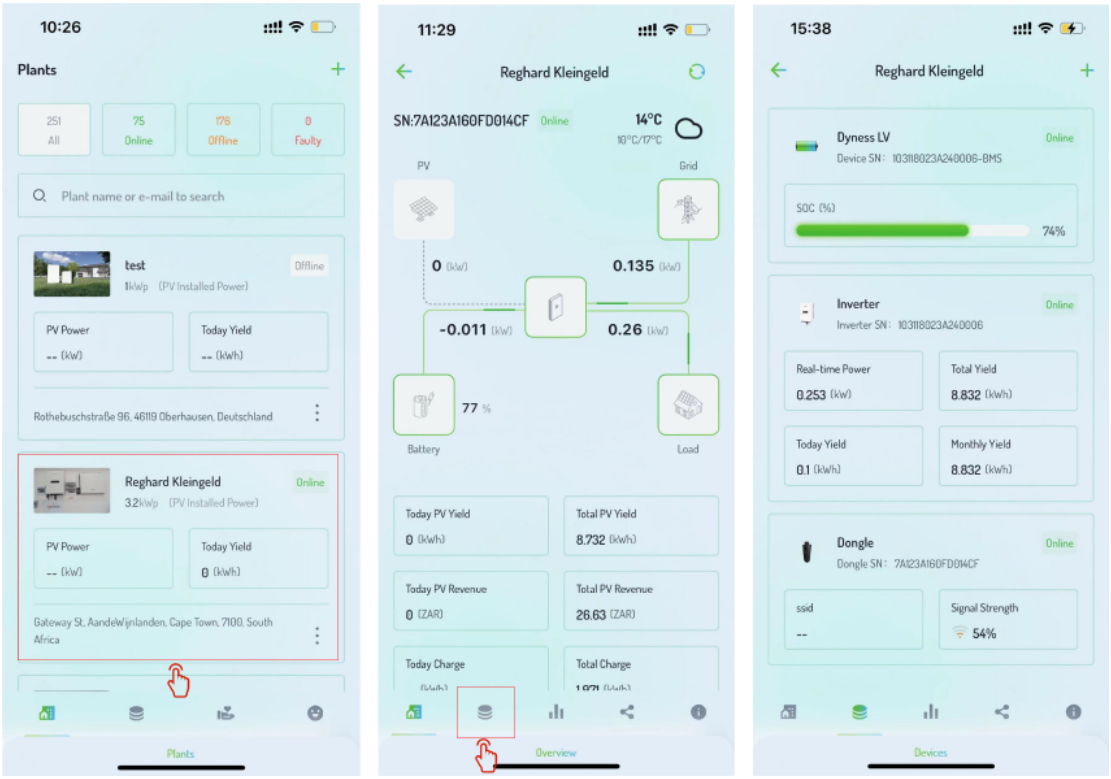


(3) Once the device is successfully connected, you need to associate it with the JuniorBox's collector. After adding the Shelly meter or plug, you can find the added device in the device list.



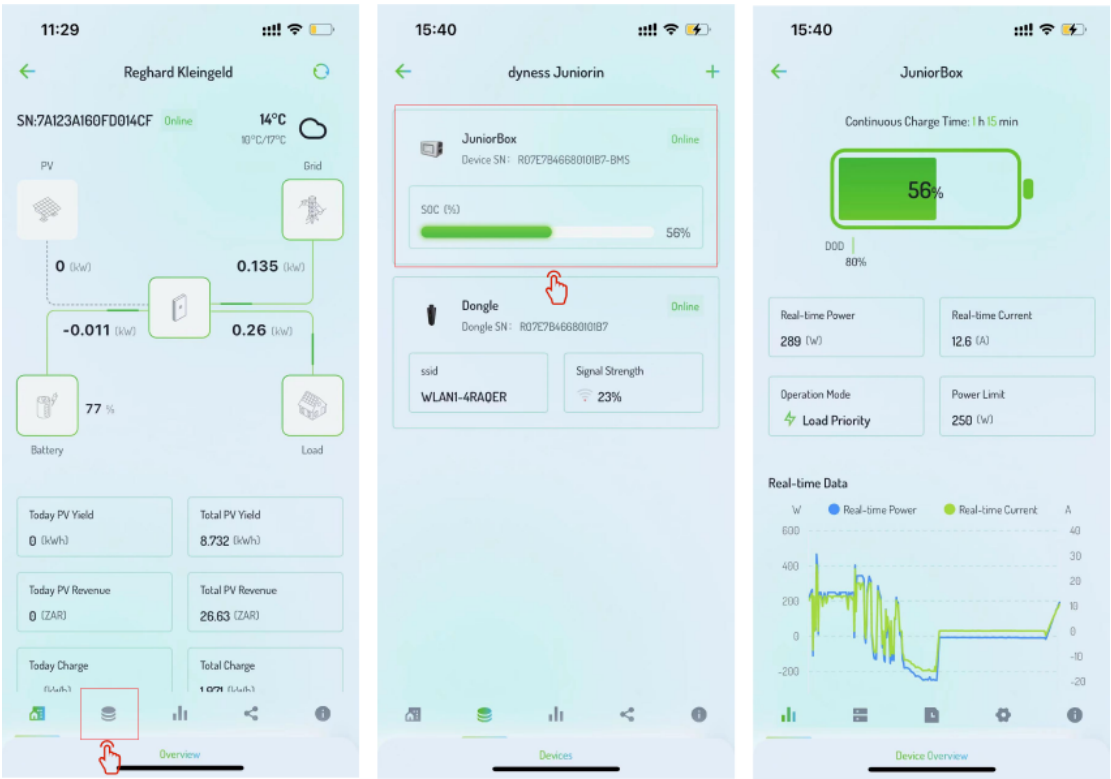
Device Details

Click on the device information card in the power plant device or device list to enter the device details interface.
DeviceTypes:EnergyStoragedevice,Inverter,DataCollector

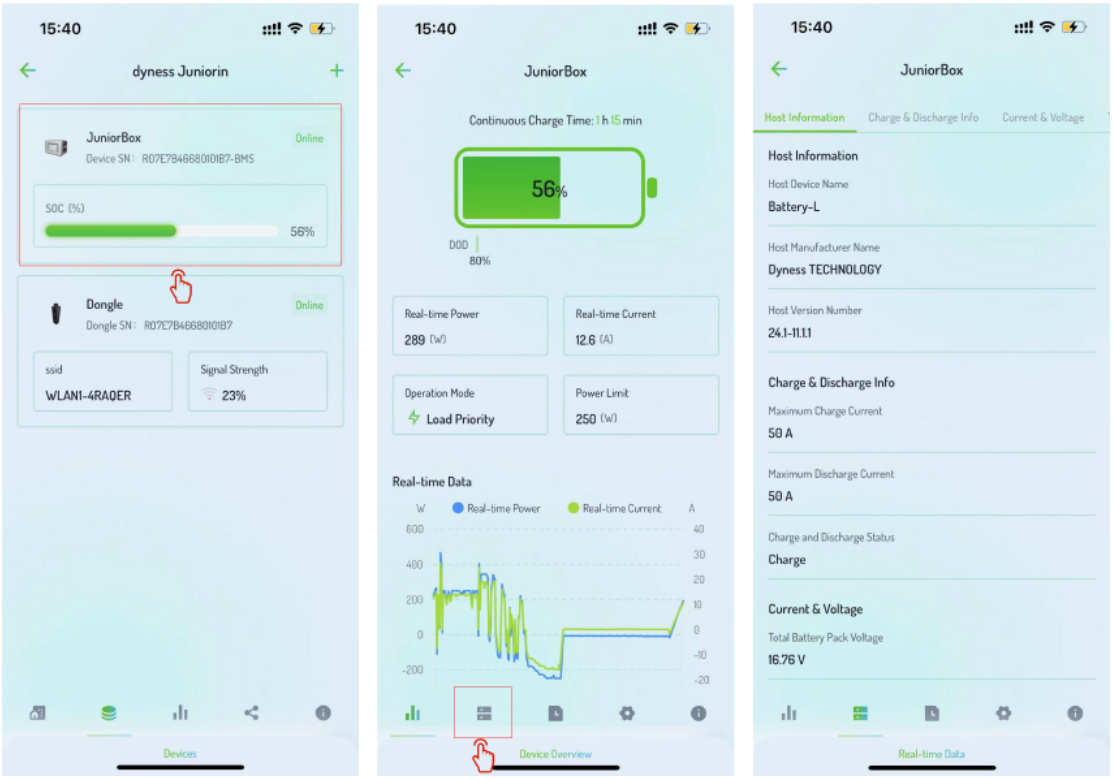


Energy Storage Device

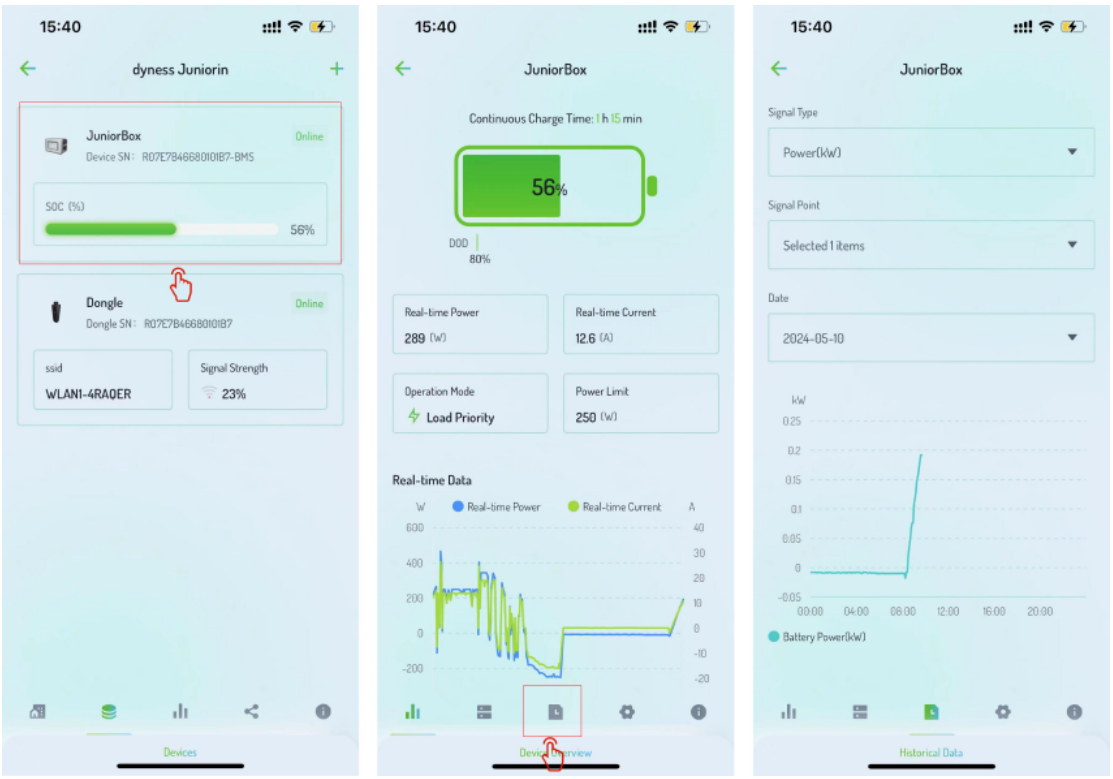
The details of the energy storage device default to showing real-time device data. Additionally, you can switch tabs to view BMS information, historical data, parameter configuration, and basic information.



By switching tabs, you can access the real-time data information page to view the data of the energy storage device.

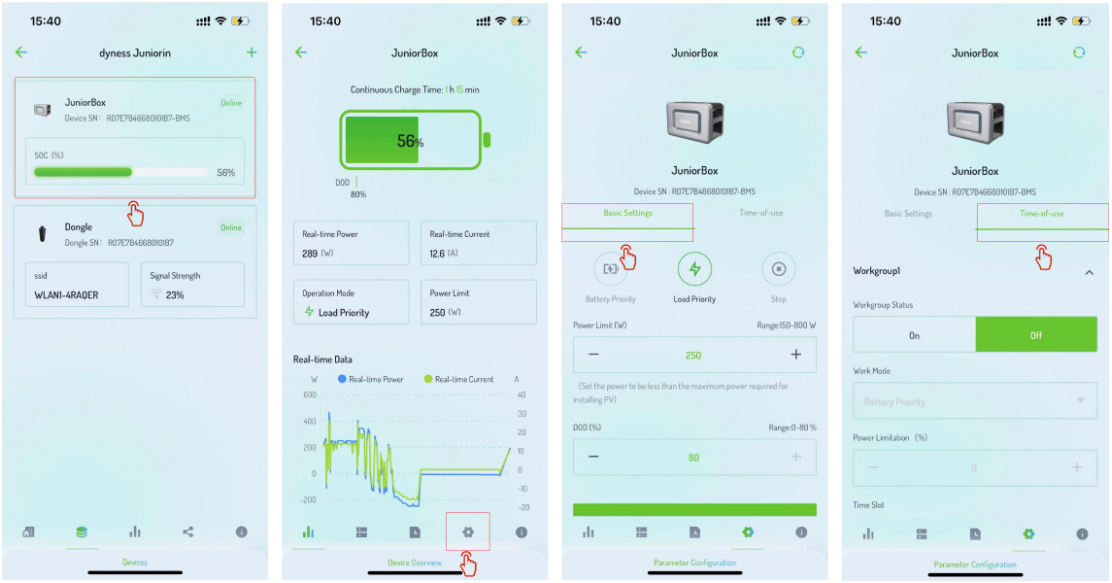


By switching tabs, you can access the historical data page to view the historical data of the energy storage device.

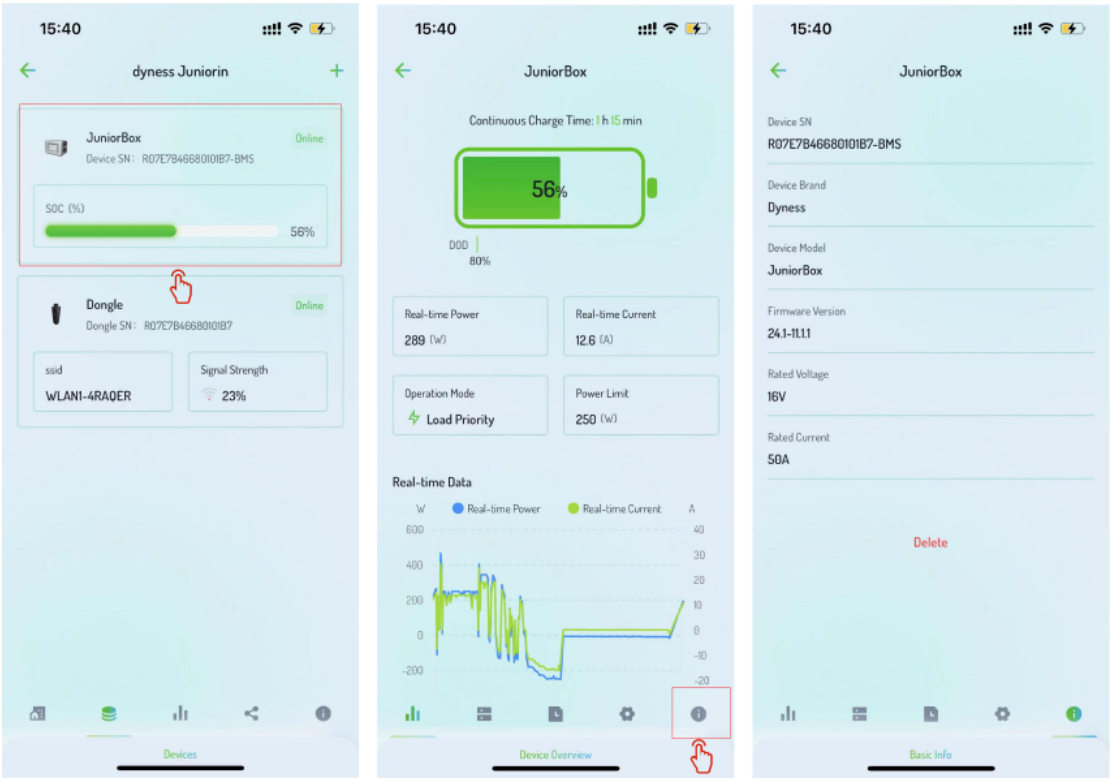


By switching tabs, you can access the parameter configuration page, where you can configure different charging modes according to the specific requirements of the

energy storage device.

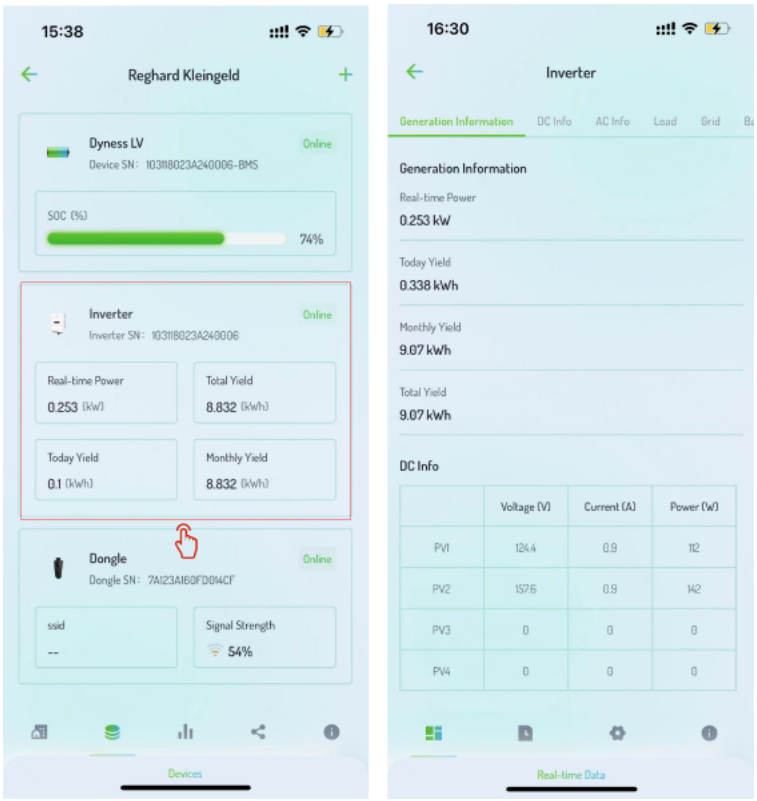


By switching tabs, you can access the basic information page to view the fundamental information of the energy storage device.

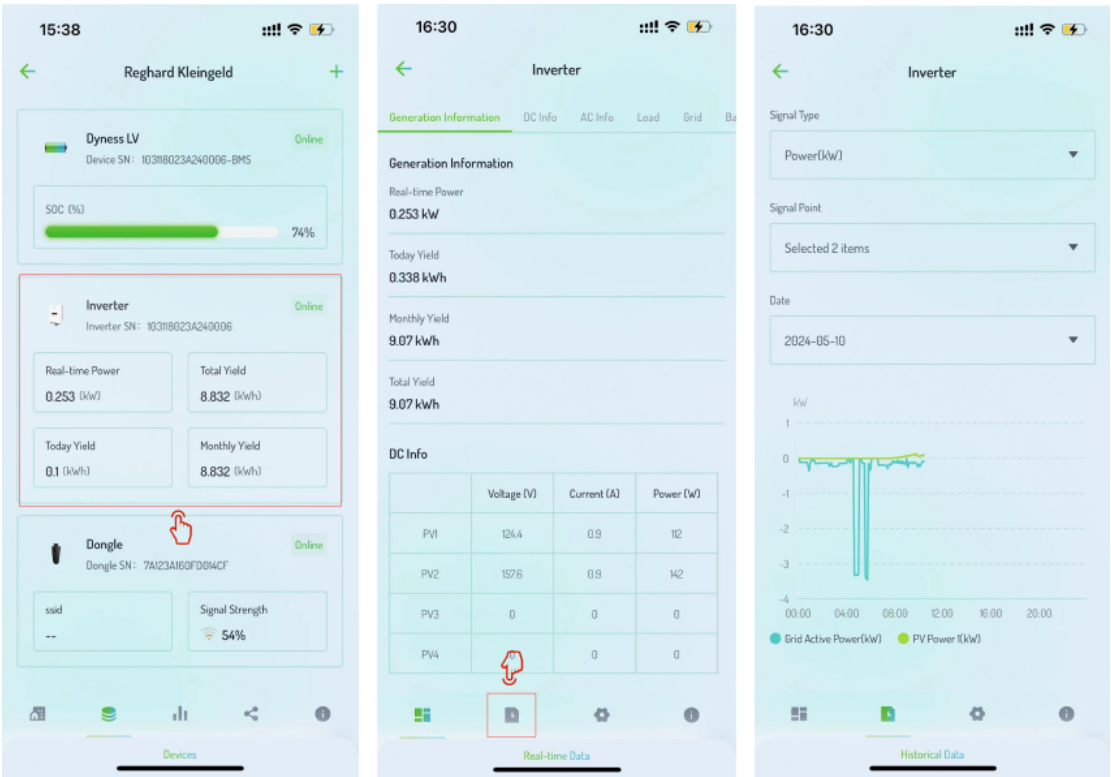


Inverter

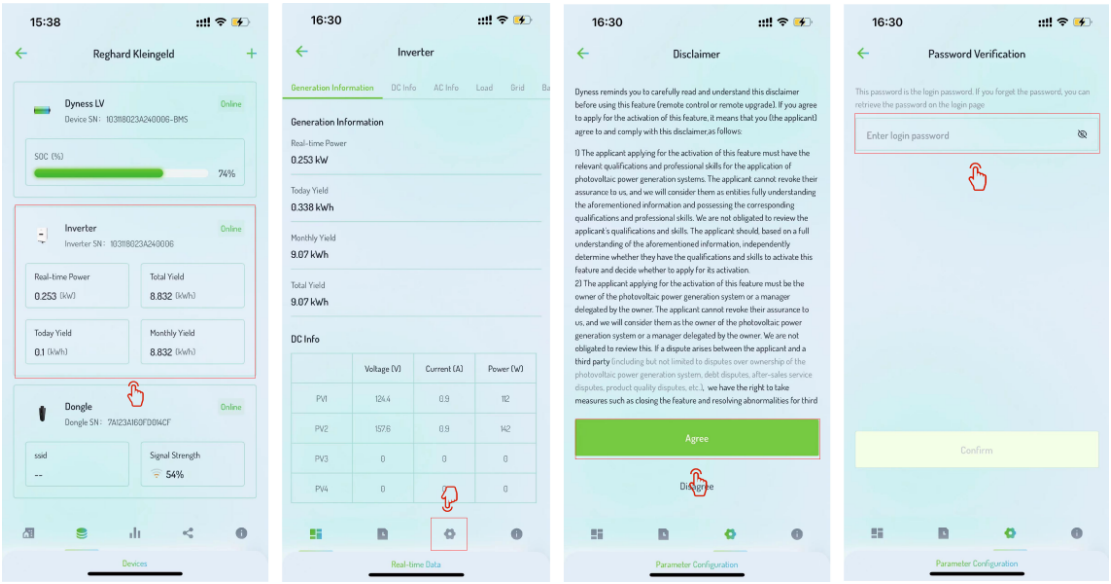
Inverter Device Details default to displaying real-time data. You can scroll up and down to view all information.



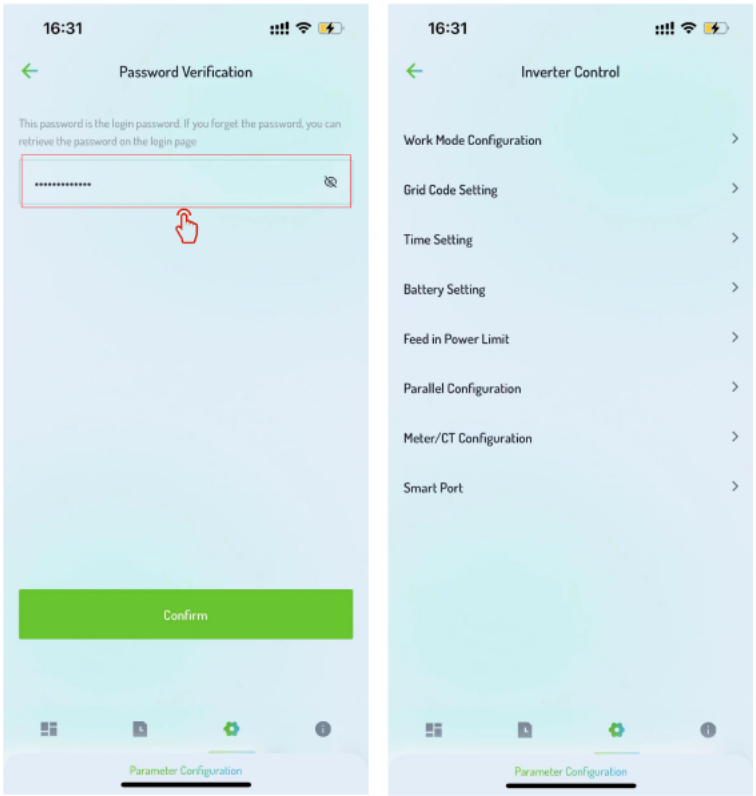
By switching tabs, you can access the historical data page to view the historical data of the inverter.



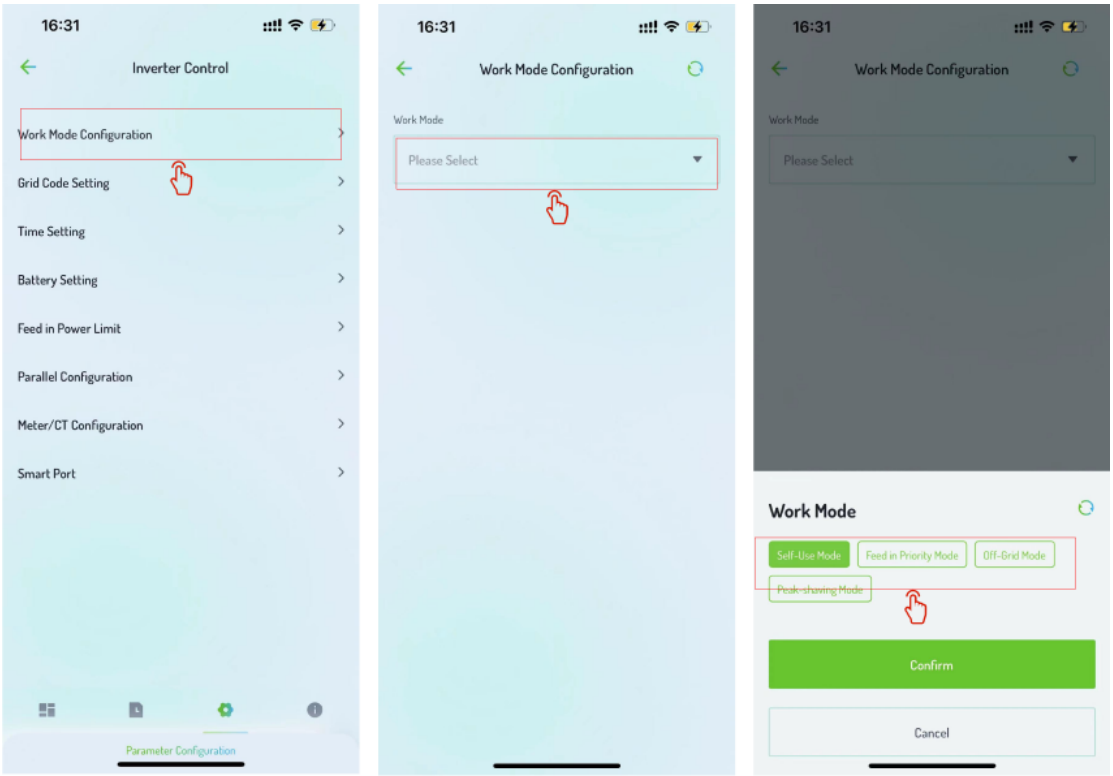
By switching tabs, you can access the inverter settings page. You can set the inverter by entering the login password.



By switching tabs, you can access the inverter settings page. You can set the inverter by entering the login password.



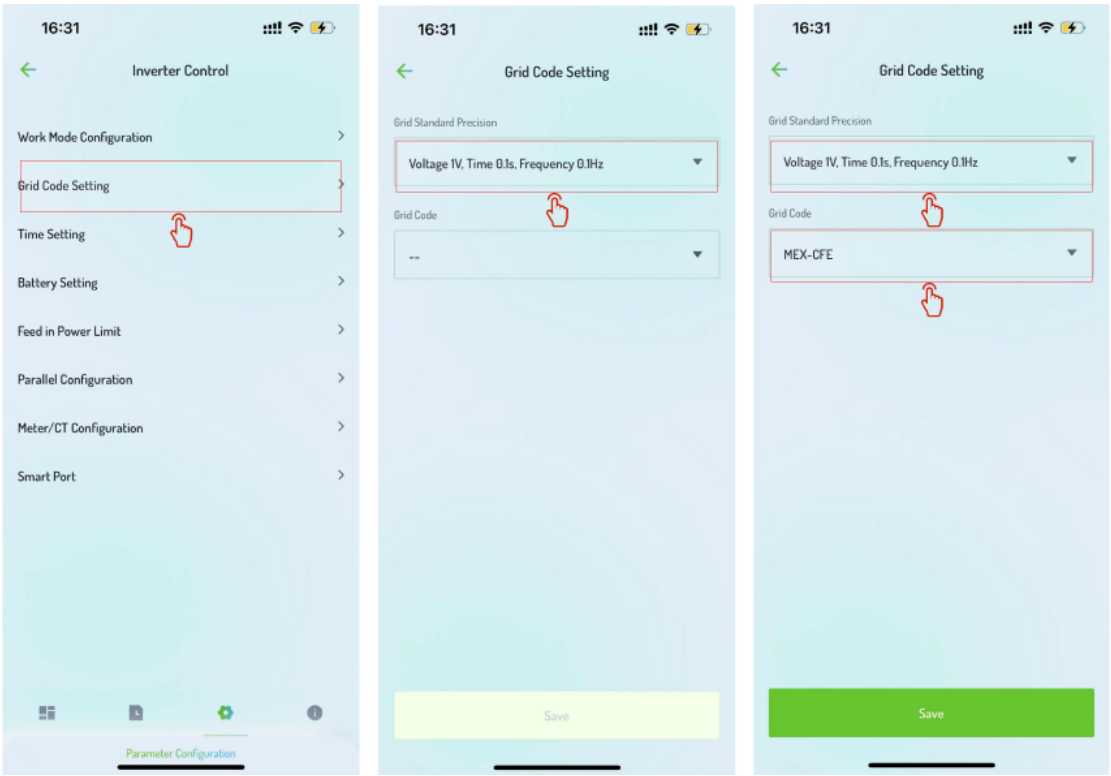
Work mode settings.



Number	Parameter Name	Note
1	Self-use Mode	The electricity generated by the photovoltaic system is used for self-consumption first. Any excess is used for charging, and if there is still surplus, it can be selectively fed into the grid.
2	Off-grid Mode	The photovoltaic system and the battery form a pure off-grid system, suitable for areas without a power grid.
3	Economic Mode	Based on the differences in grid prices during different time periods, set buying and selling electricity at different times. Use this function in accordance with local regulations.
4	Peak Shaving Mode	When the power consumption from the grid exceeds the peak value, the battery is prioritized for discharge.

Grid Standard Settings

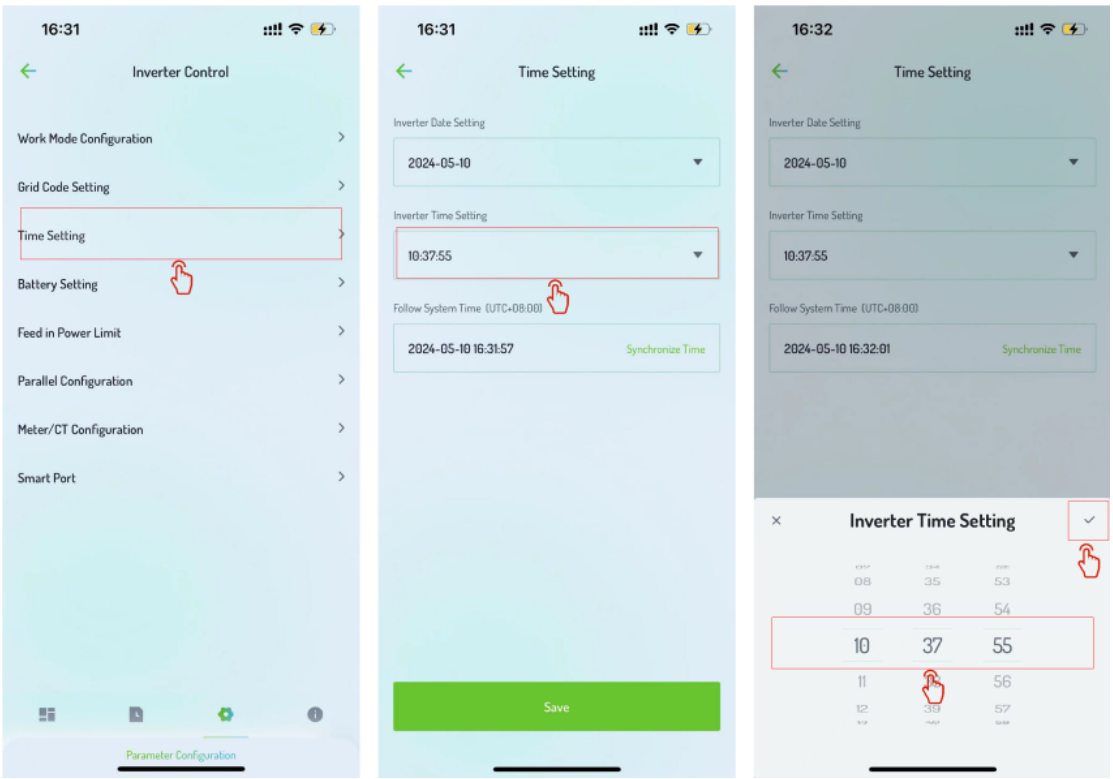
Grid Code Settings: Please select the relevant grid code to meet local requirements.



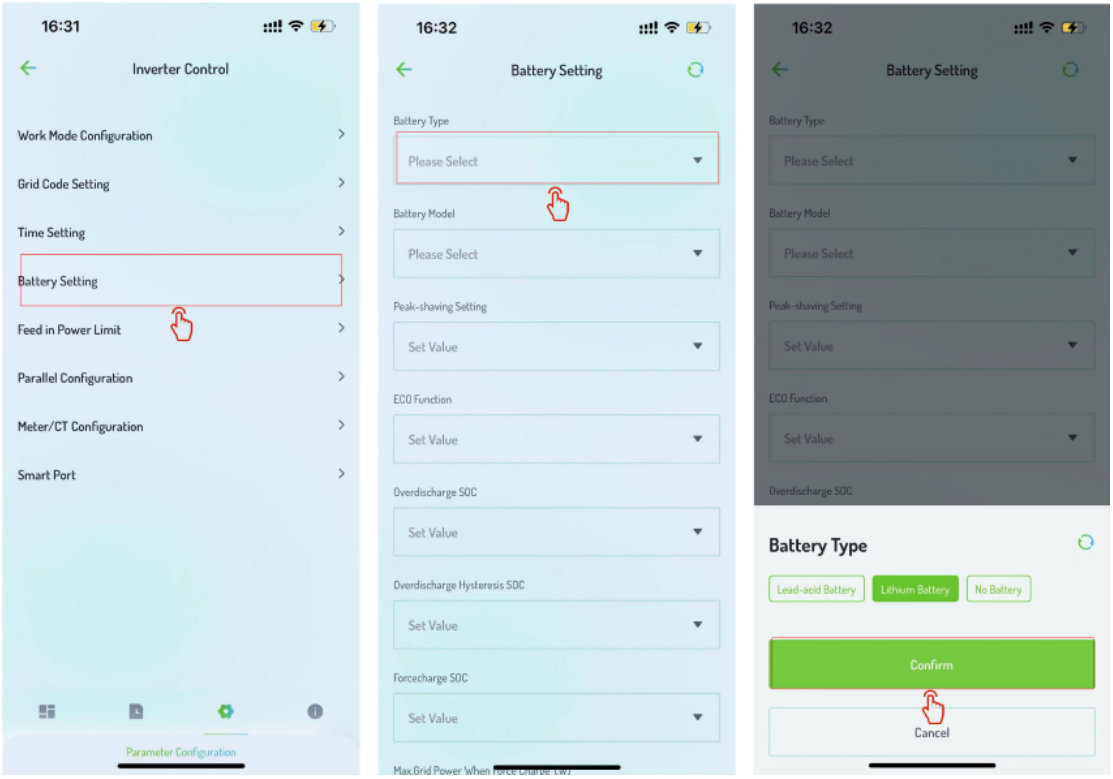
Time Settings

You can set the inverter time and date separately.

Turning on the Follow Phone Time switch will synchronize the inverter time with the phone time.



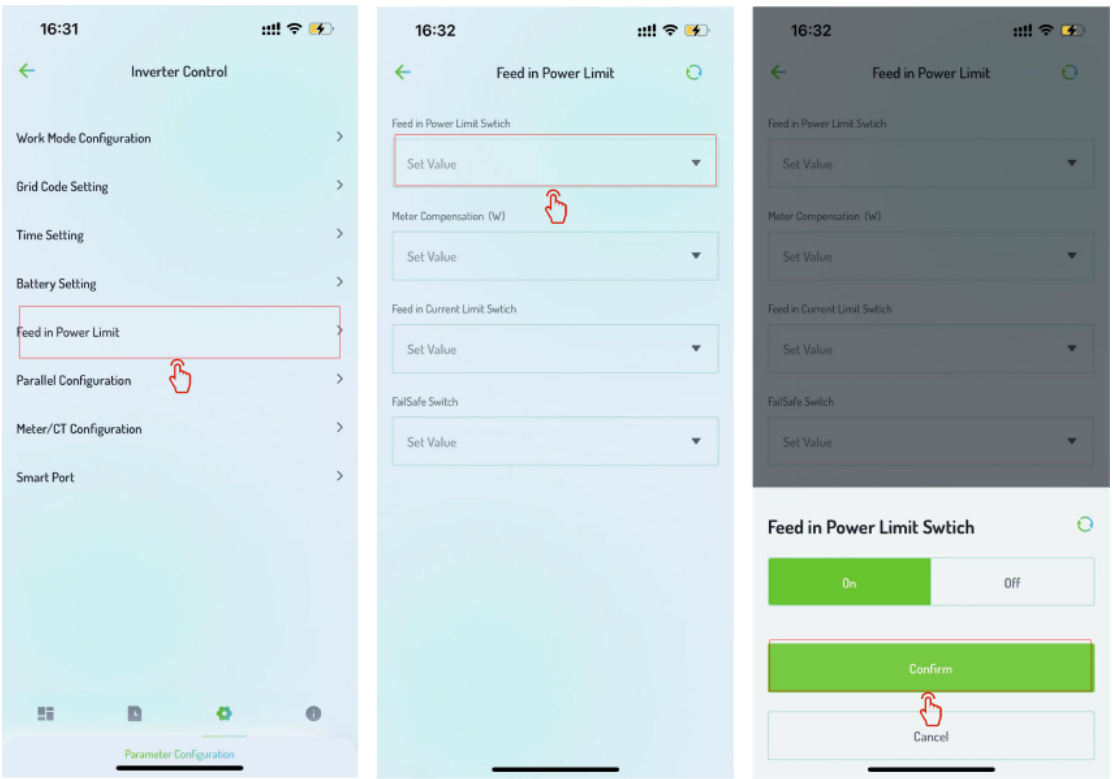
Battery Settings



Number	Parameter Name	Note
1	Battery Model	Set the current battery model connected to the inverter.
2	Over-Discharge SOC	When the battery's state of charge (SOC) reaches the over-discharge SOC, the inverter will stop discharging the battery.
3	Overcharge SOC	Due to self-discharge phenomena, the battery SOC may fall below the over-discharge SOC value. When the overcharge SOC is reached, the inverter will automatically charge the battery to prevent it from entering sleep mode.
4	Battery Treatment Switch	Used to enable/disable the battery treatment SOC. During periods of insufficient solar power generation, the battery may remain at a low SOC for an extended period. The battery treatment function will charge the battery to the target SOC.
5	Battery Treatment SOC	Target SOC value for the battery treatment function.
6	Grid Power Dynamic Adjustment	This switch is used to enable/disable dynamic adjustment of grid power during forced charging. When the switch is turned on, the inverter will dynamically force charge the battery while maintaining the "maximum grid power during forced charging" at the grid connection point.

7	Overcharge Power Limit Setting	Sets the maximum allowable grid power for forced charging the battery.
8	Night Energy Saving Mode	This switch is used to enable/disable the energy-saving function. When the battery SOC reaches the over-discharge SOC at night, the inverter will shut off the battery circuit to avoid battery power consumption.
9	Manual Battery Wake-up Switch	Manual wake-up function. The inverter will charge the battery port to the wake-up voltage level, then protect for a period of time to wake the battery from sleep mode.
10	Manual Battery Wake-up Voltage	Manual wake-up voltage setting.

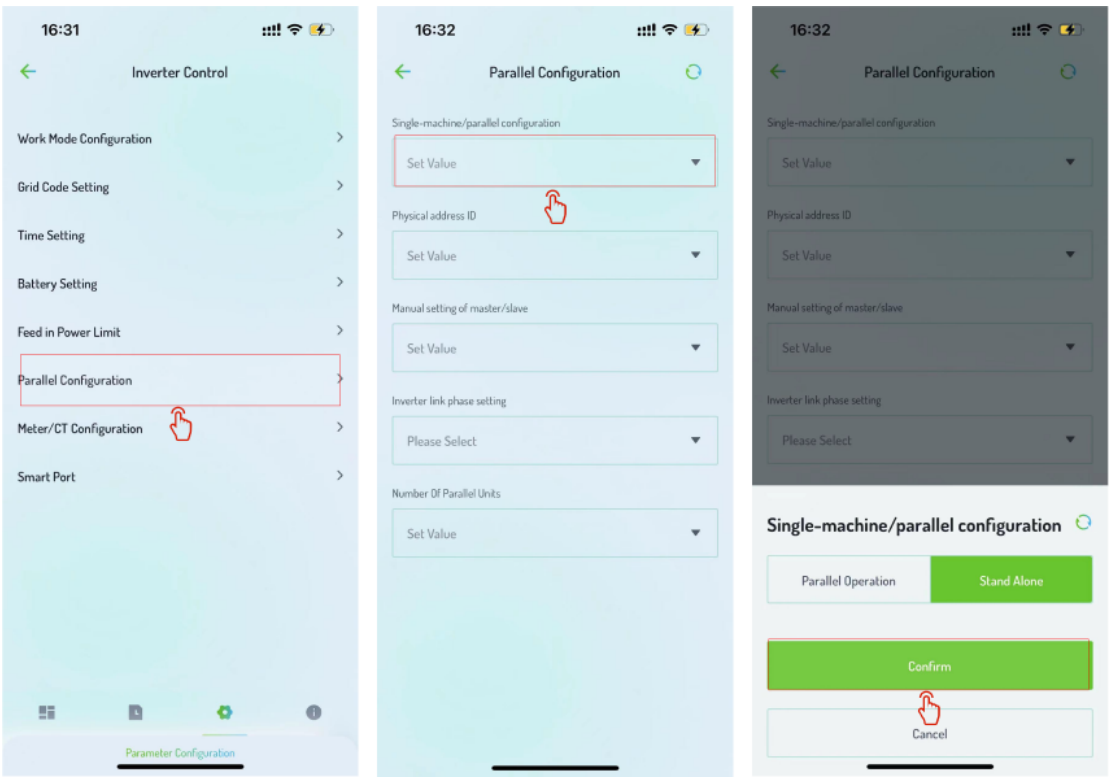
Grid-Feeding Power Limitation Settings



Number	Parameter Name	Note
1	Grid-Feed Power Limitation Switch	This switch is used to enable/disable the system's grid-feed control function.
2	Grid-Feed Power Limitation Value	Set the maximum allowable grid-feed power limit at the grid-connection point.
3	Grid-Feed Current Limitation Switch	This switch is used to enable/disable the system's grid-feed current control function.

4	Grid-Feed Current Limitation Value	Set the maximum grid-feed current limit at the grid-connection point.
5	FailSafe Switch	This switch is used to enable/disable the fail-safe function. If communication with the meter is lost, the inverter will report.
6	Meter Compensation	Set the EPM hard flow-back power (only applicable to Australia).

Parallel operation settings.

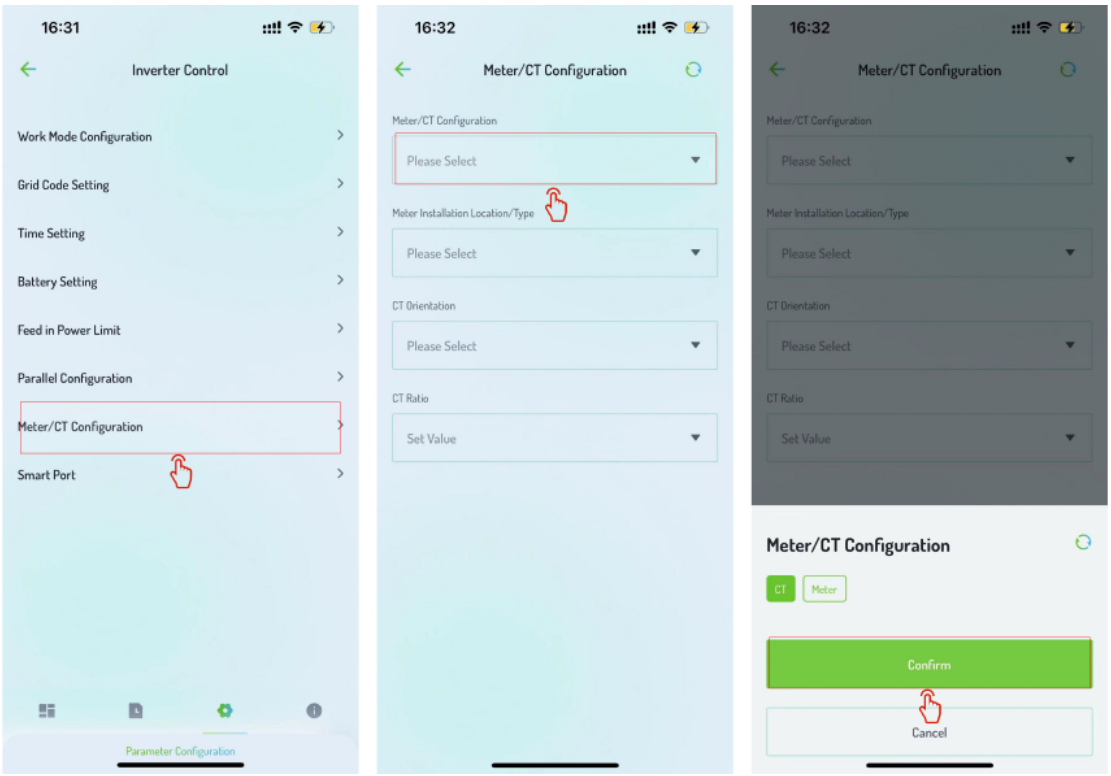


序号	参数名称	说明
1	Single Unit/Parallel Operation Settings	Set the inverter to operate in single-unit mode or parallel operation mode.
2	Physical Address ID	Set the physical address in parallel operation.
3	Manual Setting of Master/Slave	Set whether the inverter is a master or slave in parallel operation.
4	Inverter Connection Phase Setting	Set which phase the inverter is connected to.

Meter/CT Settings

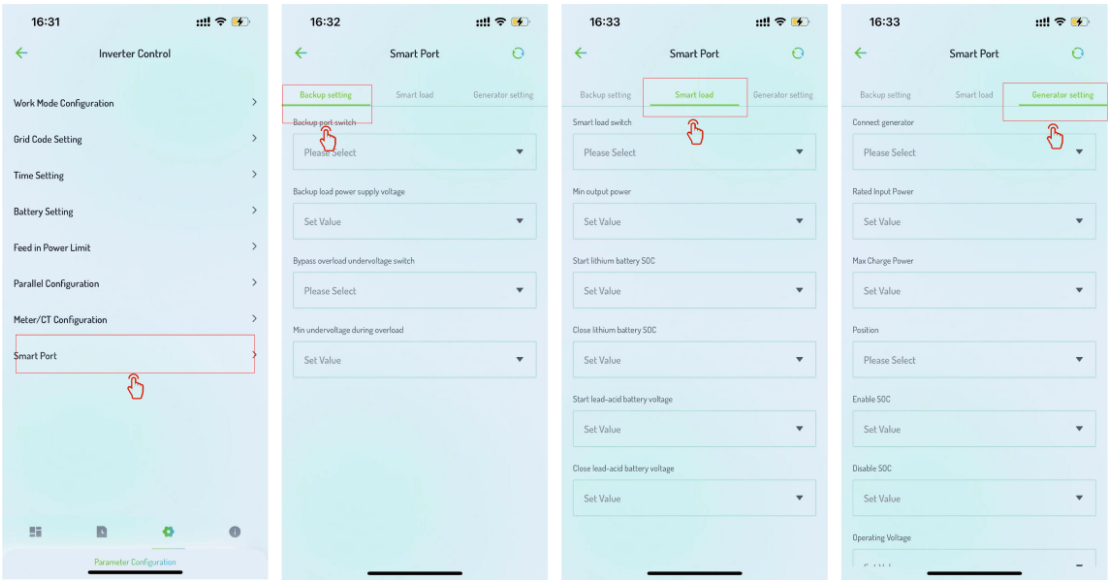
Meter Settings: Set the meter type and meter location. It is recommended to install the

meter at the system grid connection point, then select "Meter in Grid". If there is temporarily no connected meter, please select "No Meter" to avoid alarms.

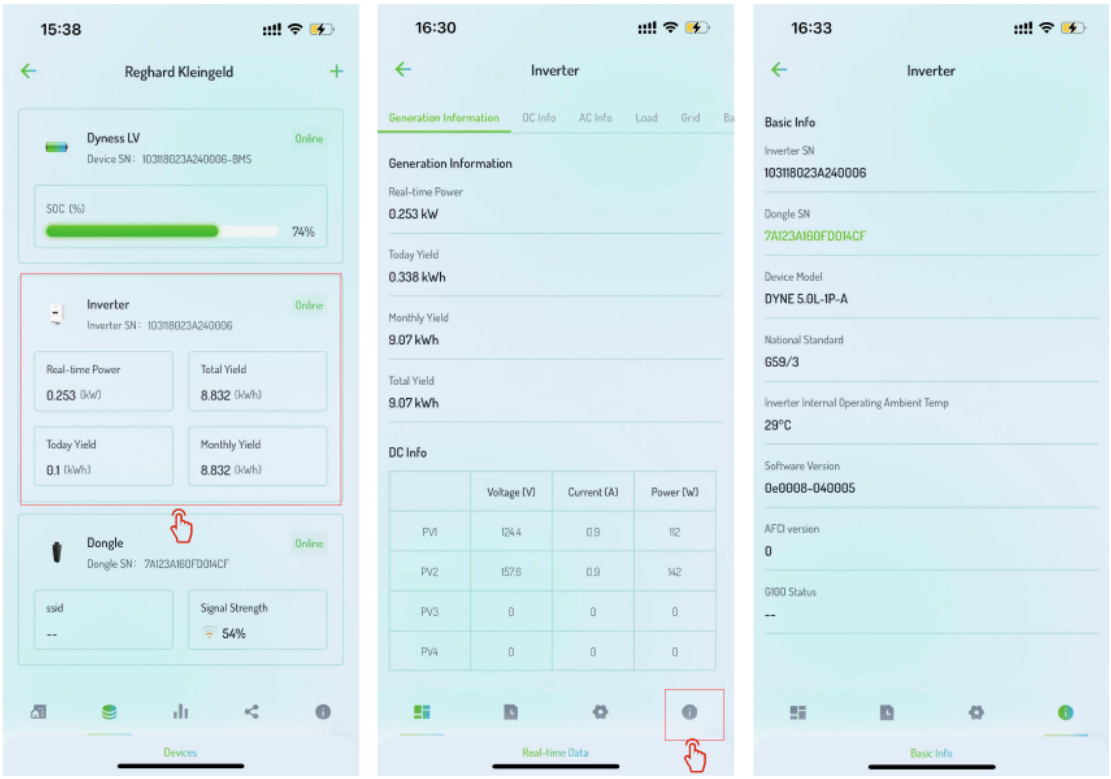


Smart Ports.

Smart ports can be used to configure data for devices such as backup systems, loads, and generators.

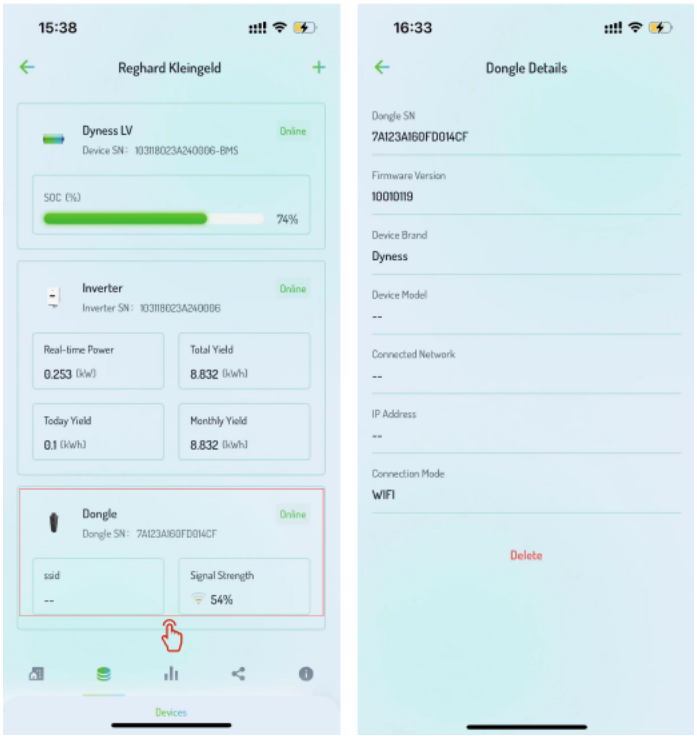


By switching tabs, you can access the inverter information page to view the basic information of the inverter.



Dongle

The collector device can directly view basic information by clicking.



Edit Device

Parameter Configuration

The current Dyness App only allows modifications to the basic information of energy storage devices. Access "Parameter Configuration" through the energy storage device details page. The configuration parameters vary depending on the device model.

JuniorBox Smart Load

You can enable the smart load in the JuniorBox settings interface.

（1）To enable the smart load, the following conditions must be met:

① All time-of-use settings must be turned off.

② The JuniorBox operating mode should be set to "Load Priority."

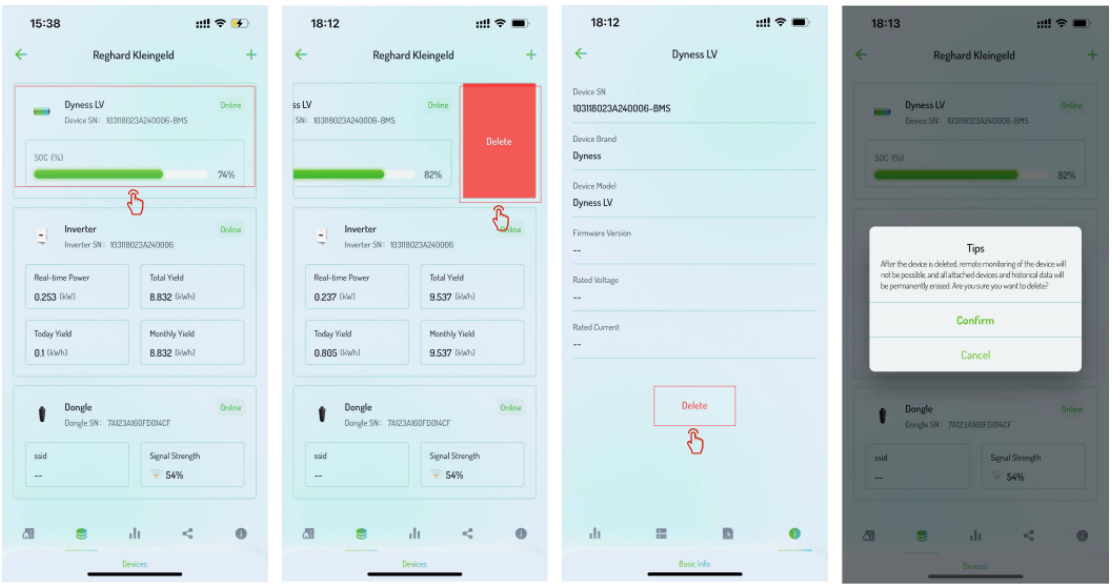
③ JuniorBox must be associated with a Shelly meter, with the phase correctly identified.

（2）If you're unsure which phase the JuniorBox is associated with, first select the linked meter and then perform a phase detection. Once the phase detection is successful, you can enable "Smart Load."

（3）After enabling Smart Load, the JuniorBox will adjust the battery discharge power limit in real-time based on the meter's power readings, minimizing both feed-in to the grid and grid power purchases.

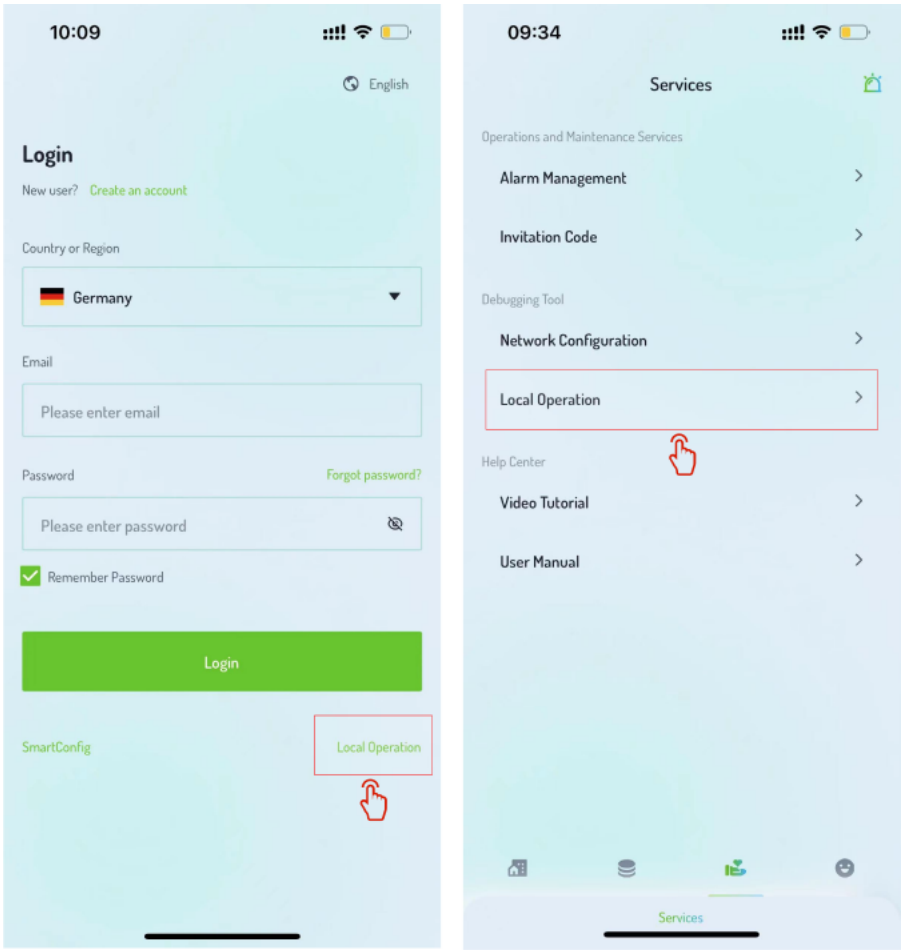
Device Deletion

Device Deletion Logic: The collector needs to delete the energy storage battery and inverter before deletion is possible; otherwise, deletion cannot proceed.
Methods for Deleting Devices:
Long press the device card and swipe left on the device list page.
Enter the device details page and click on basic information.

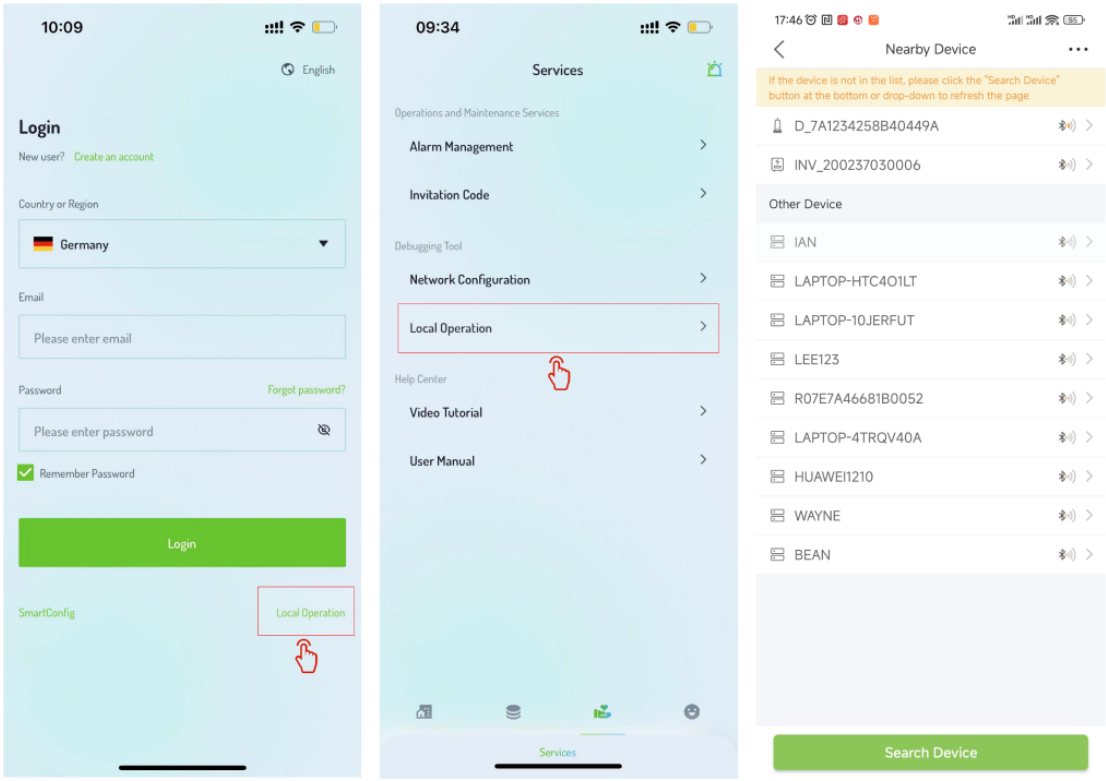


Inverter Local Debugging

Local Debugging Entrance

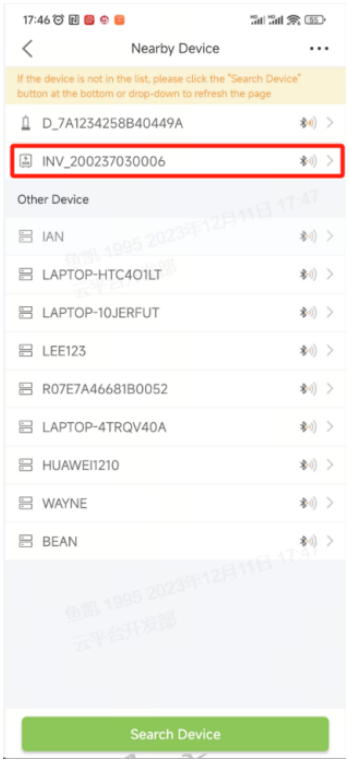


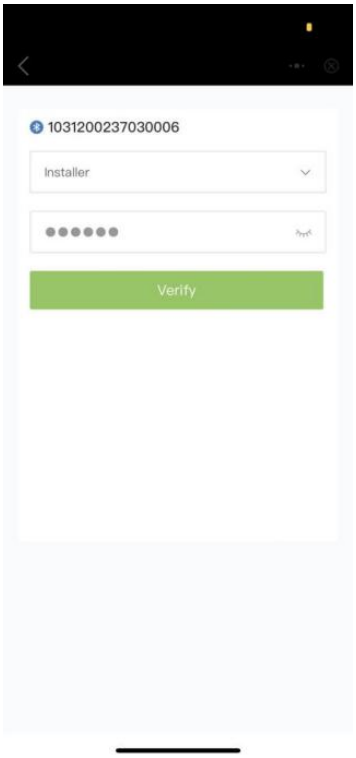
Bluetooth Login



Select Bluetooth Model

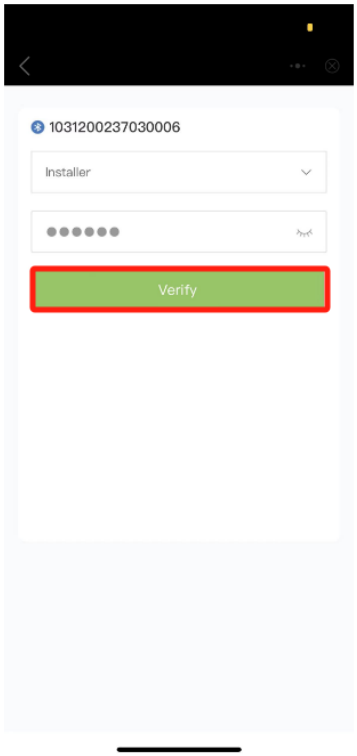
Due to the high-voltage powered state of the inverter device, changing parameter configurations requires professional personnel. Therefore, before performing device debugging, you need to input the operation account and password to ensure it is you who is conducting the operation.

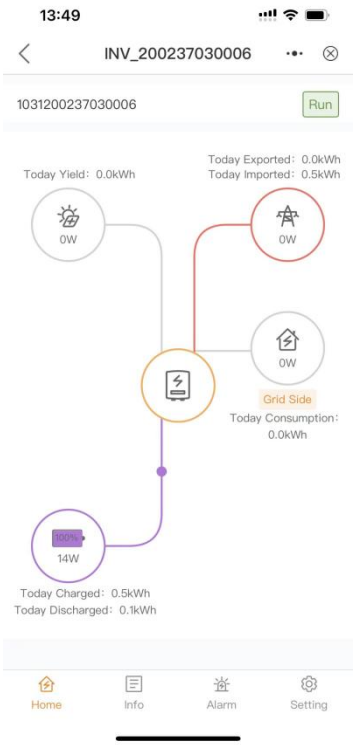




Home

The "Home" can display the working status of the photovoltaic system, today's production, today's grid import/export, today's battery charging/discharging, today's home power consumption, and today's GEN yield.
At the bottom of the interface, there are four sub-menus: **Home, Information, Alarms, and Settings.**

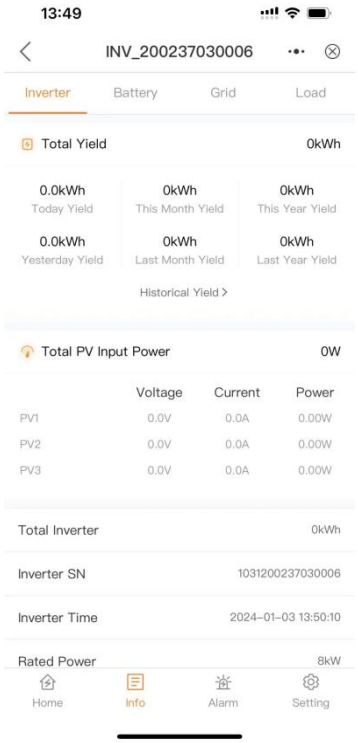


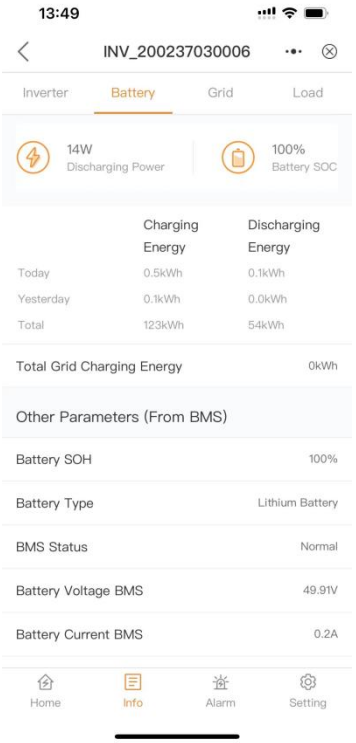


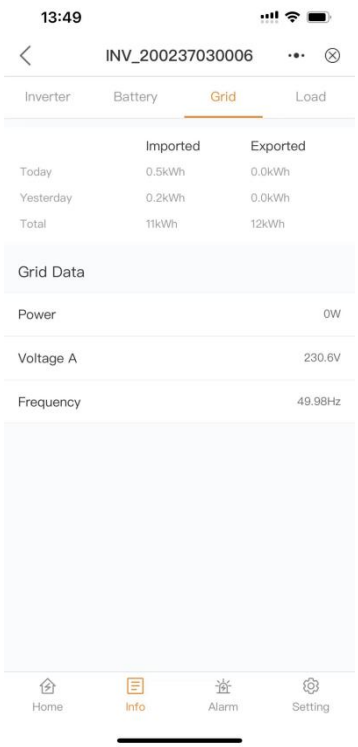
Information

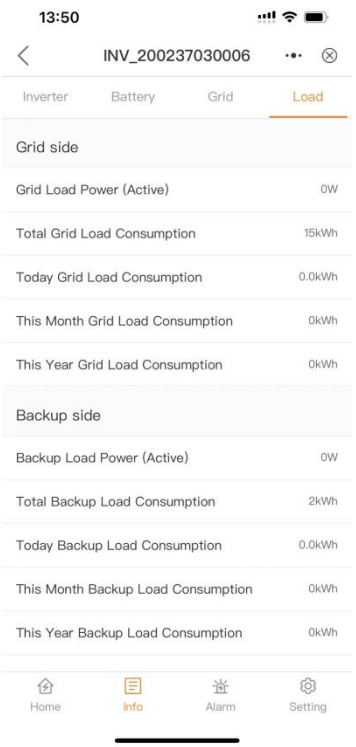
The "Information" page is divided into four tabs: **Inverter, Battery, Grid, and Load.**

Number	Parameter Name	Note
1	**Inverter**	Cumulative power generation, historical power, photovoltaic voltage, and inverter basic information (serial number, model, firmware version).
2	**Battery**	Battery model, status, battery voltage, and current.
3	**Grid**	Input power, output power, AC grid voltage, frequency, and ampere.
4	**Load**	Power consumption for home load and standby load.



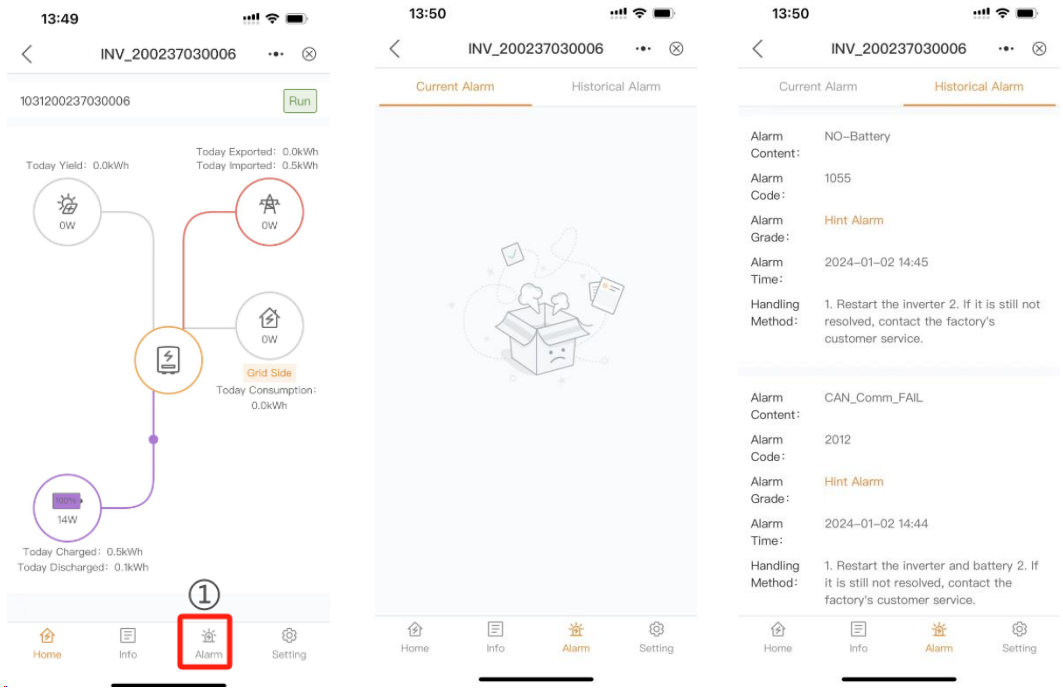






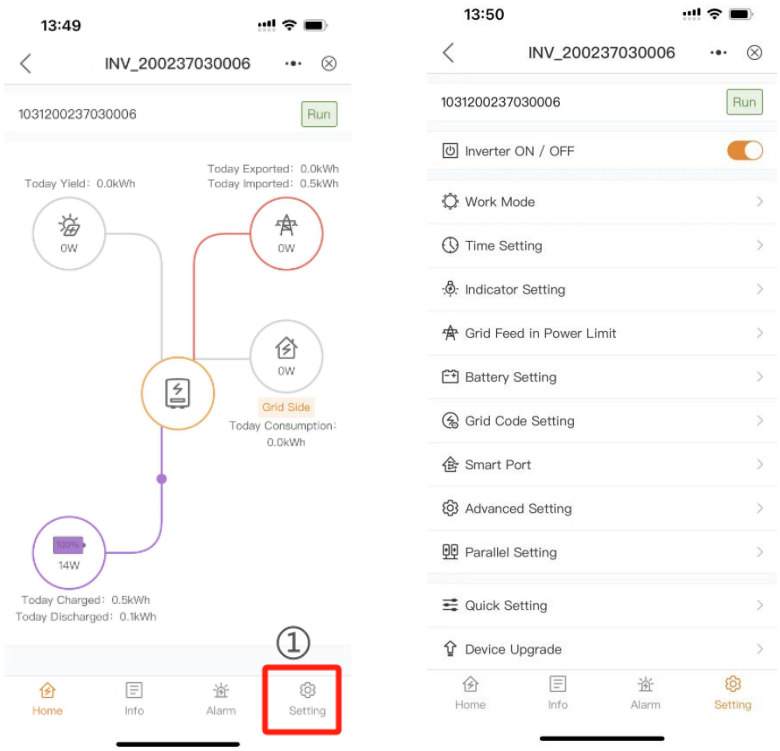
Alarms

You can enter the "Alarms" page by switching tabs and view current alarms as well as historical alarms.



Settings

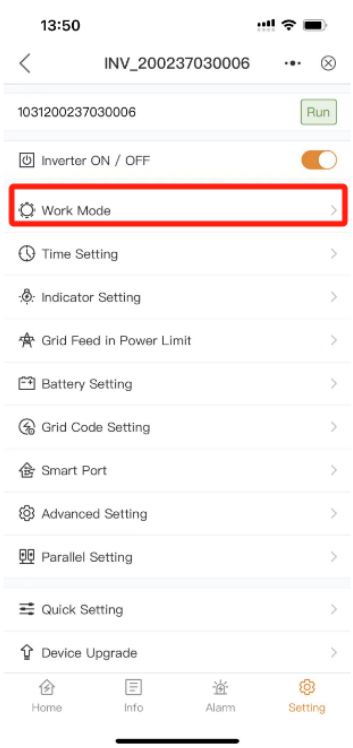
Switching tabs allows you to enter the inverter settings interface for configuring inverter parameters.

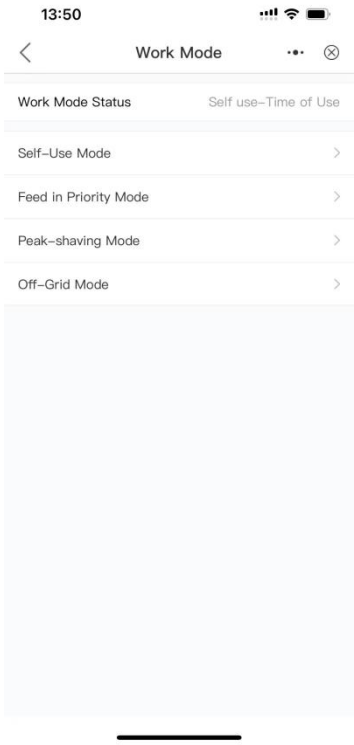


Operating Mode

Select the operating mode. The efficiency of power generation varies under different operating modes. Please set it according to the actual electricity usage in your local area.

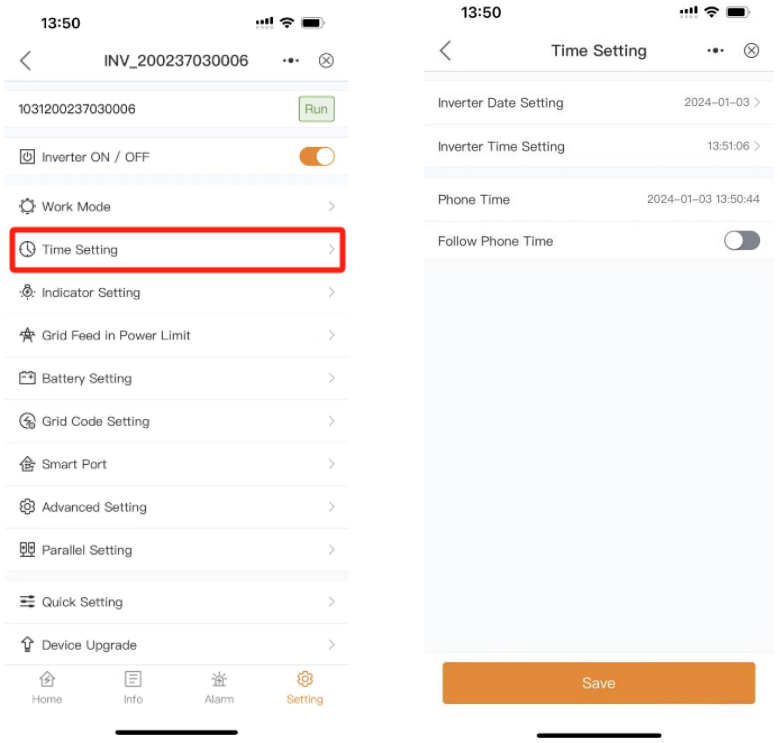
Number	Parameter Name	Note
1	Self-use Mode	The electricity generated by the photovoltaic system is used for self-consumption first. Any excess is used for charging, and if there is still surplus, it can be selectively fed into the grid.
2	Off-grid Mode	The photovoltaic system and the battery form a pure off-grid system, suitable for areas without a power grid.
3	Economic Mode	Based on the differences in grid prices during different time periods, set buying and selling electricity at different times. Use this function in accordance with local regulations.
4	Peak Shaving Mode	When the power consumption from the grid exceeds the peak value, the battery is prioritized for discharge.





Time Settings

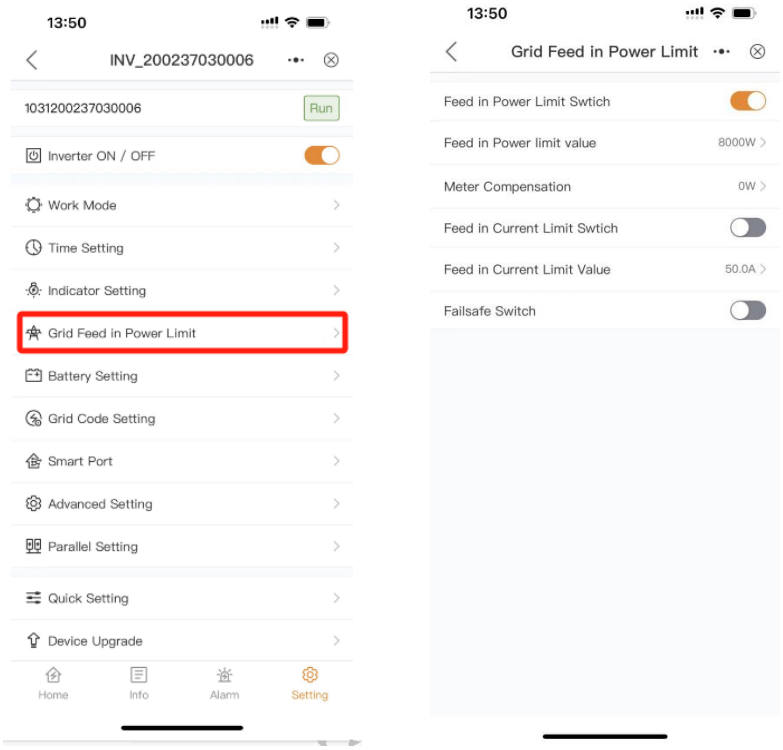
You can separately set the inverter time and date.
If you enable the switch to follow the mobile phone time, the inverter time will synchronize with the mobile phone time.



Grid-Feed Power Limitation

Number	Parameter Name	Note
1	Grid-Feed Power Limitation Switch	This switch is used to enable/disable the system's grid-feed control function.
2	Grid-Feed Power Limitation Value	Set the maximum allowable grid-feed power limit at the grid-connection point.
3	Grid-Feed Current Limitation Switch	This switch is used to enable/disable the system's grid-feed current control function.
4	Grid-Feed Current Limitation Value	Set the maximum grid-feed current limit at the grid-connection point.
5	FailSafe Switch	This switch is used to enable/disable the fail-safe function. If communication with the meter is lost, the inverter will report.

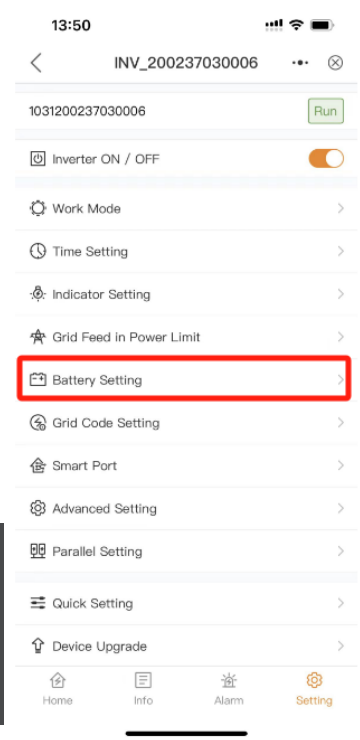
6	Meter Compensation	Set the EPM hard flow-back power (only applicable to Australia).



Battery Settings

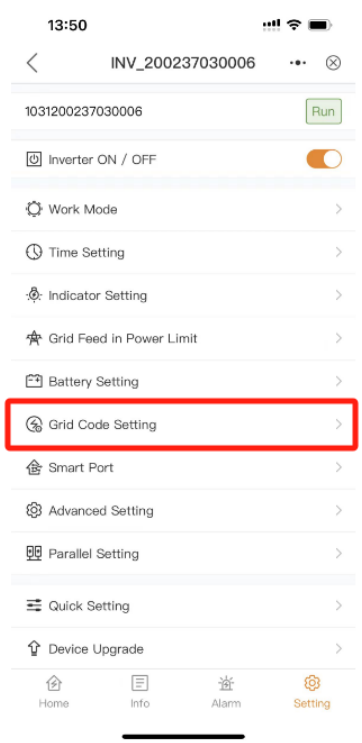
Number	Parameter Name	Note
1	Battery Model	Set the current battery model connected to the inverter.
2	Over-Discharge SOC	When the battery's state of charge (SOC) reaches the over-discharge SOC, the inverter will stop discharging the battery.
3	Overcharge SOC	Due to self-discharge phenomena, the battery SOC may fall below the over-discharge SOC value. When the overcharge SOC is reached, the inverter will automatically charge the battery to prevent it from entering sleep mode.
4	Battery Treatment Switch	Used to enable/disable the battery treatment SOC. During periods of insufficient solar power generation, the battery may remain at a low SOC for an extended period. The battery treatment function will charge the battery to the target SOC.

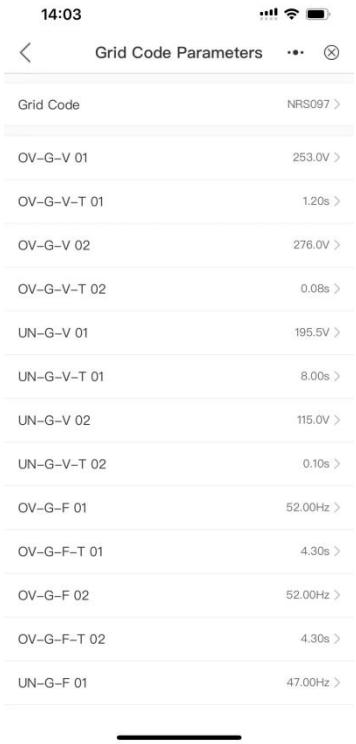
5	Battery Treatment SOC	Target SOC value for the battery treatment function.
6	Grid Power Dynamic Adjustment	This switch is used to enable/disable dynamic adjustment of grid power during forced charging. When the switch is turned on, the inverter will dynamically force charge the battery while maintaining the "maximum grid power during forced charging" at the grid connection point.
7	Overcharge Power Limit Setting	Sets the maximum allowable grid power for forced charging the battery.
8	Night Energy Saving Mode	This switch is used to enable/disable the energy-saving function. When the battery SOC reaches the over-discharge SOC at night, the inverter will shut off the battery circuit to avoid battery power consumption.
9	Manual Battery Wake-up Switch	Manual wake-up function. The inverter will charge the battery port to the wake-up voltage level, then protect for a period of time to wake the battery from sleep mode.
10	Manual Battery Wake-up Voltage	Manual wake-up voltage setting.



Grid Standard Settings

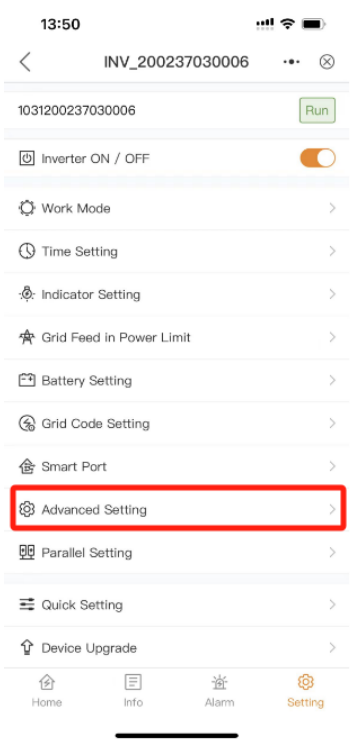
Grid Code Setting: Please select the relevant grid code to meet local requirements.

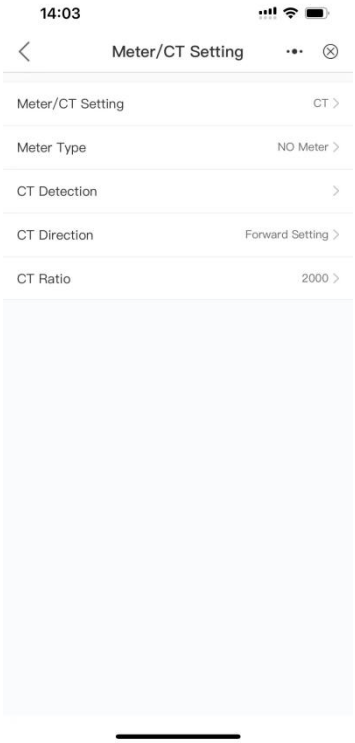




Advanced Settings

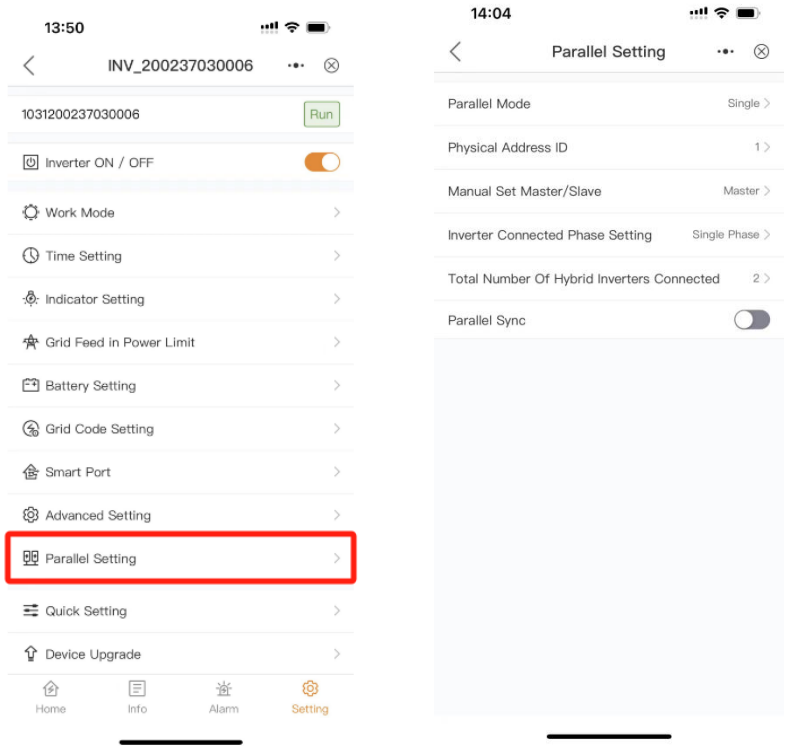
Number	Parameter Name	Note
1	Meter/CT Settings	Options
2	Meter Type and Installation Position	Meter Type: Set the type of smart meter used in the system. Meter Installation Position: Set the installation position of the smart meter used in the system.
3	CT Direction	Change the effective direction of CT
4	CT Ratio	Change the ratio of CT





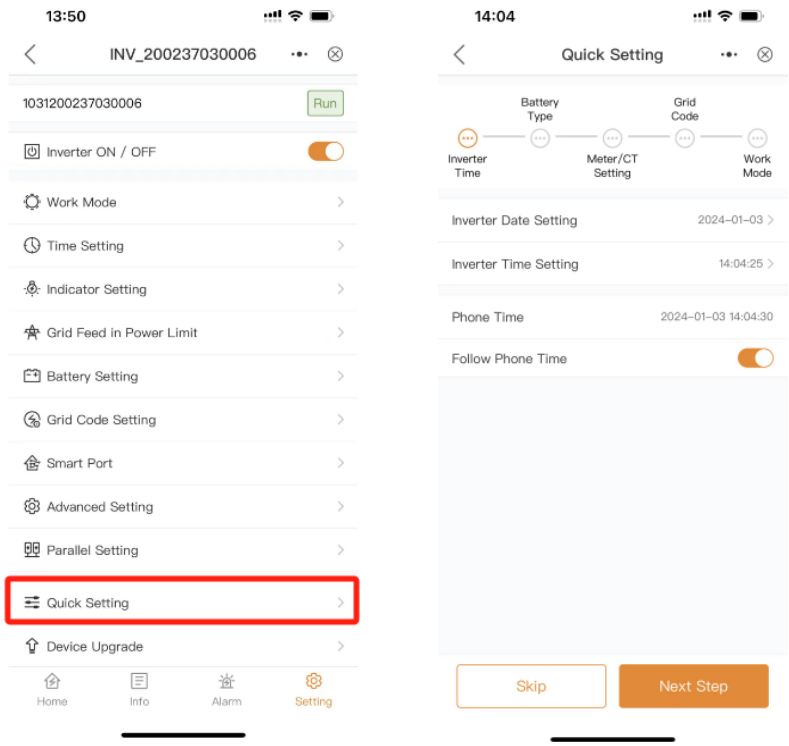
Parallel Connection Settings

Number	Parameter Name	Note
1	Single Unit/Parallel Unit Settings	Set the inverter to operate in single unit mode or parallel unit mode.
2	Physical Address ID	Set the physical address during parallel operation.
3	Manual Setting of Master/Slave	Manually set whether the inverter is a master or a slave in parallel operation.
4	Inverter Connection Phase Setting	Set which phase the inverter is connected to.



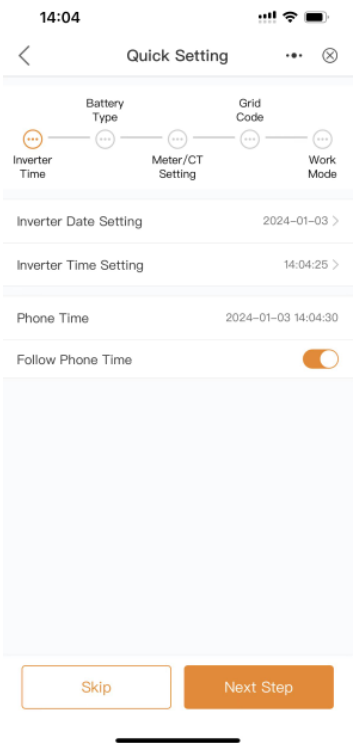
Quick Settings

If you are debugging the inverter for the first time, you need to perform quick settings first. After completing this operation, you can change these settings later: **Inverter Time > Battery Model > Meter Settings > Grid Code > Operating Mode**



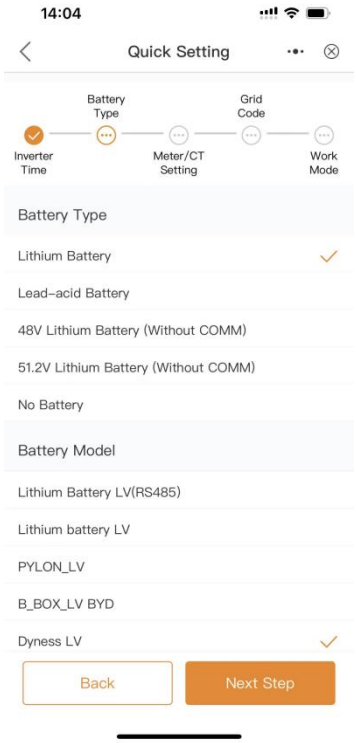
Inverter Time

You can set the inverter time and date separately.
If you enable the switch to follow the mobile phone time, the inverter time will synchronize with the mobile phone time.



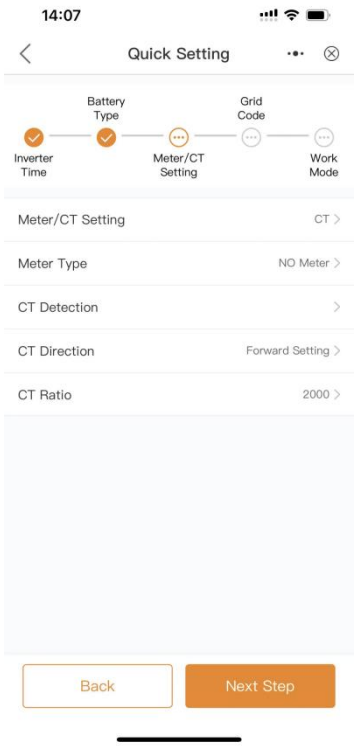
Battery Model

Battery Model: Select the battery model connected to the inverter. This choice must be based on the actual battery model connected to the inverter. If there is temporarily no connected battery, please select "No Battery" to avoid potential alarm codes.



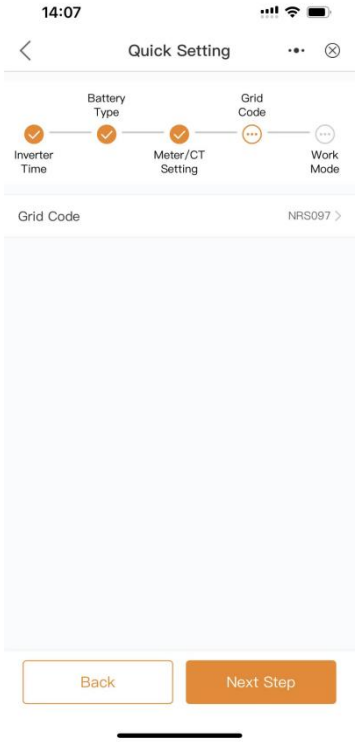
Meter/CT Settings

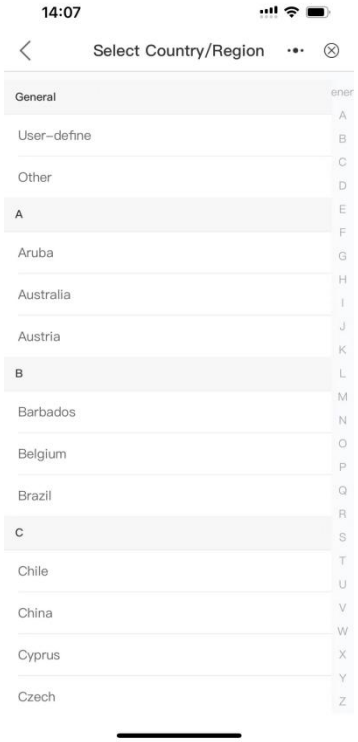
Meter Settings: Set the meter type and meter location. It is recommended to install the meter at the grid connection point of the system and then select "Meter in the Grid". If there is temporarily no connected meter, please select "No Meter" to avoid alarms.



Grid Code

Grid Code: Please select the grid code according to the local grid requirements.

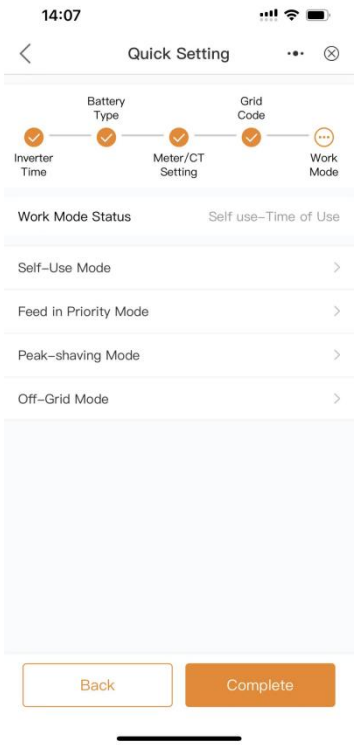




Operating Mode

Operating Mode: This is the energy storage operating mode. The first priority for all modes is to use available PV power to support home loads. Different modes determine the second priority or use of surplus PV power. Select the desired mode, then click the switch to turn on the mode. If enabled, the switch will be displayed in orange.

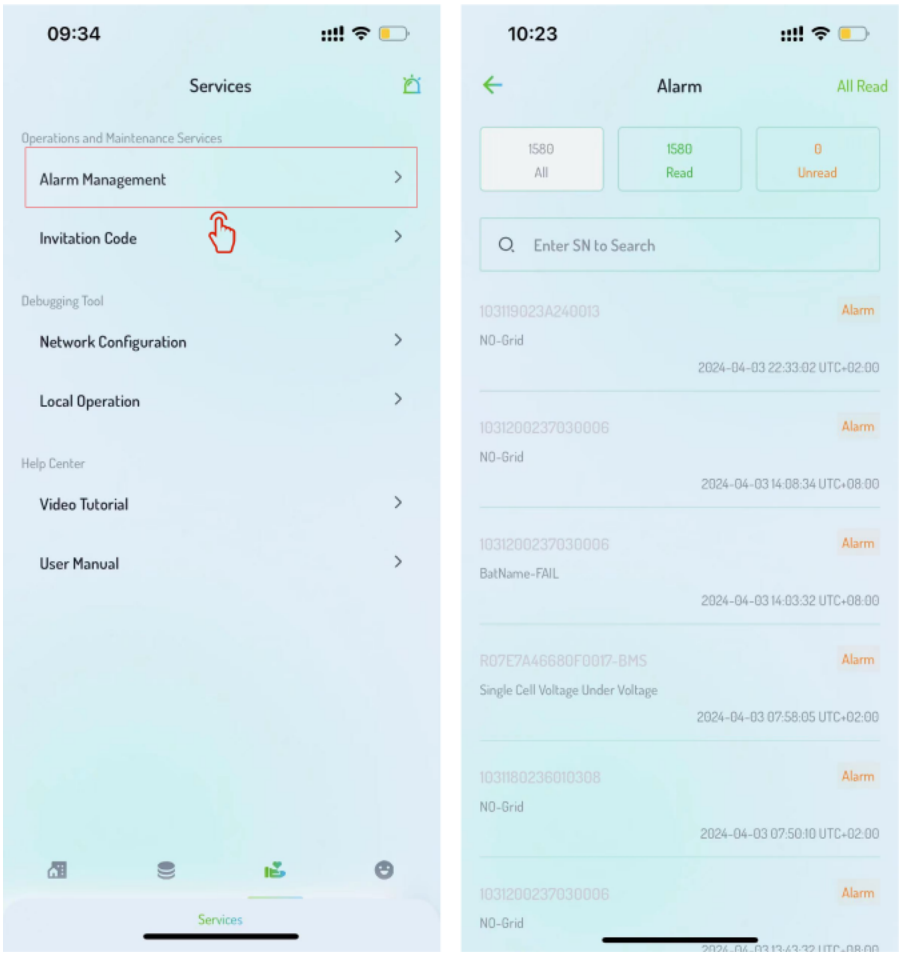
Number	Parameter Name	Note
1	Self-use Mode	The electricity generated by the photovoltaic system is used for self-consumption first. Any excess is used for charging, and if there is still surplus, it can be selectively fed into the grid.
2	Off-grid Mode	The photovoltaic system and the battery form a pure off-grid system, suitable for areas without a power grid.
3	Economic Mode	Based on the differences in grid prices during different time periods, set buying and selling electricity at different times. Use this function in accordance with local regulations.
4	Peak Shaving Mode	When the power consumption from the grid exceeds the peak value, the battery is prioritized for discharge.



Service Center

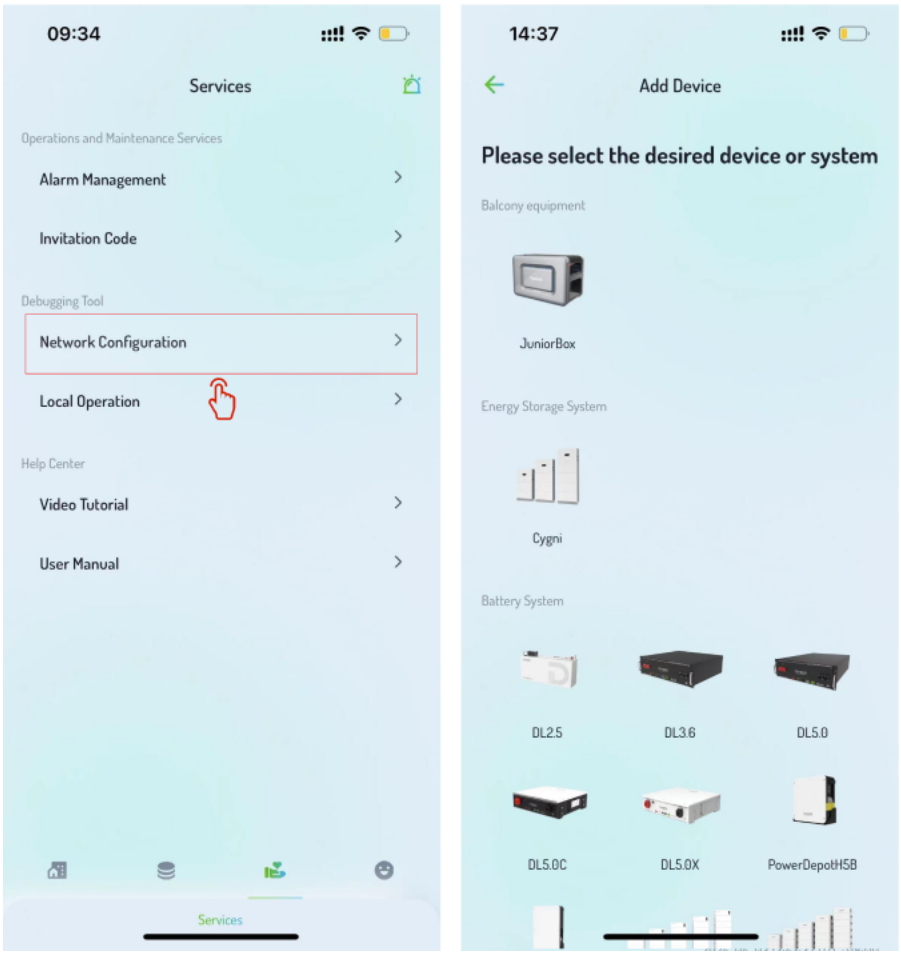
Alarm Management

You can view all device alarm information.



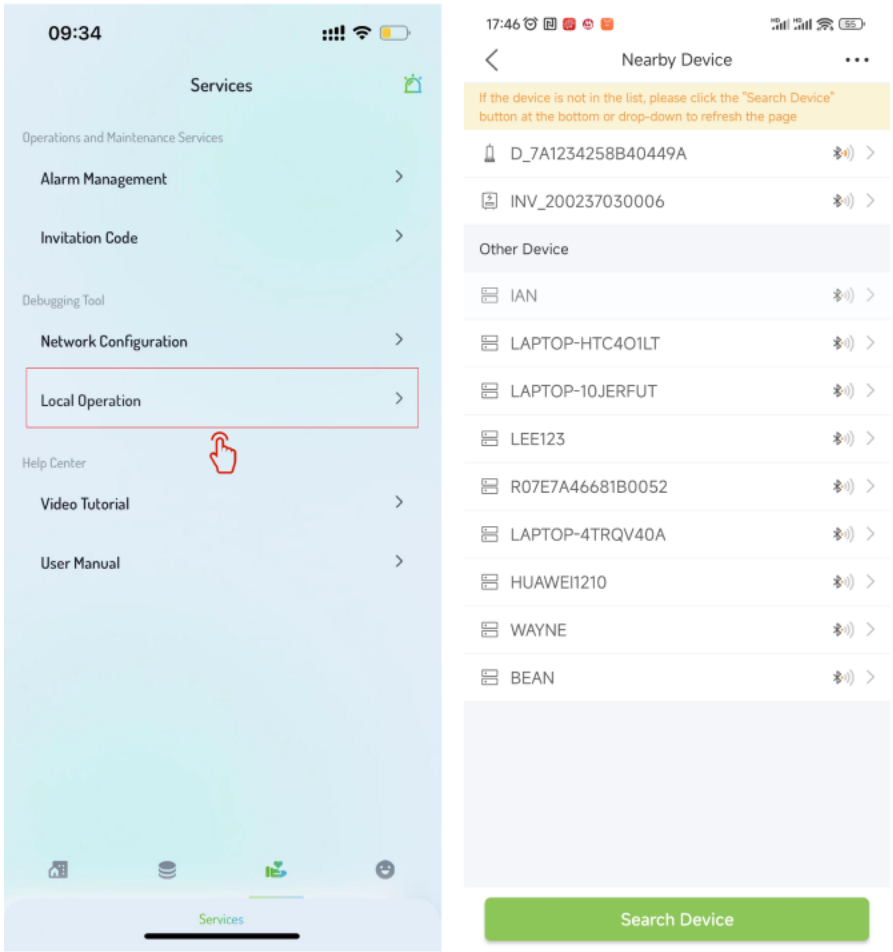
Quick Network Setup

Click on "**Quick Network Setup**".
Select the networking product.
Start the device networking process.
Bluetooth scans nearby devices, click on the device name.
Enter the networking process.



Local Debugging

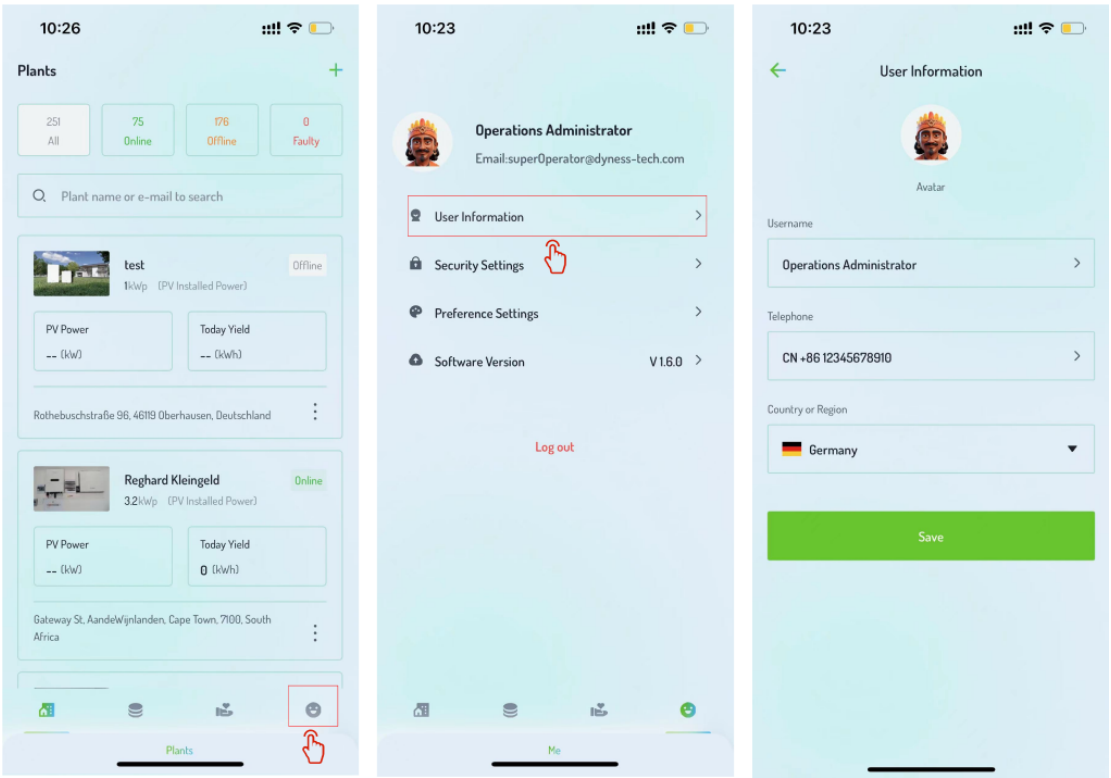
Click on "**Near-End Debugging**".
Select the debug product model.
Enter the operation password and click on the next step.
Enter the debugging center.



Account Center

User Information

Log in to the Dyness App, cli k on the **"My"** tab.
Click on "User Information" to enter the user information modification interface.
Follow the on-screen prompts to modify information such as avatar,username, phone number, country or region, etc. Click **"Save"** to confirm the changes.



Security Settings

(1) Verify Email: The verified email is used for password recovery.

(2) Password Reset: Resetting the password can enhance account security in case of password leaks or prolonged periods without password changes.