

Univers EMS Application User Manual

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Univers EMS



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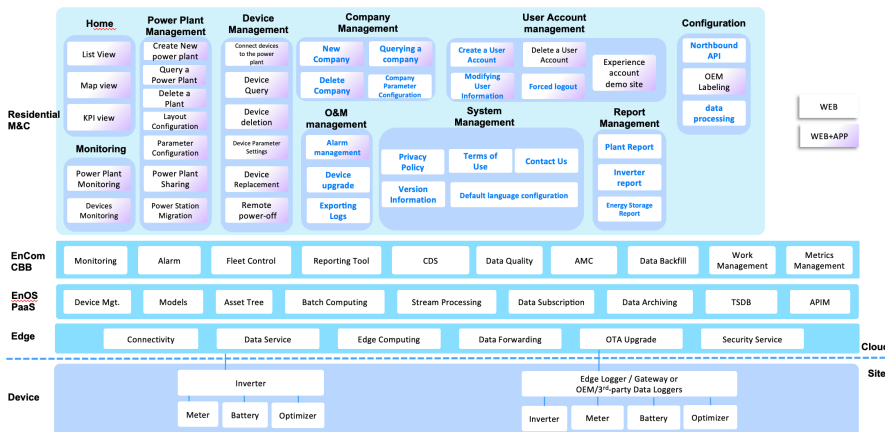
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1 About Univers

The Univers Application has a simple design and well-developed features, oriented towards the actual needs of household photovoltaic power stations in the operation process. It aims to solve business pain points faced by system integrators, companies, and end-users involved in household photovoltaics. The system provides powerful functions such as Centralized Monitoring, Power Station Monitoring, Power Station Management, Device Management, Operation and Maintenance Management, Company Management, and User Management.

1.1 Product Architecture

Technical Architecture



1.2 Target Users

System Admin

- Manage system level settings.
- Create and manage System Admin and Installer Admin accounts.
- Create and manage Level 2 company.

Installer Admin

- Create and manage Installer Admin and Installer accounts.
- Create and manage sub-company and sub-company admin.

Univers EMS



Installer

- Create and config PV sites.
- Connect devices.
- Operation & maintenance.
- Create and manage End User accounts.

End User

- Monitoring and control.

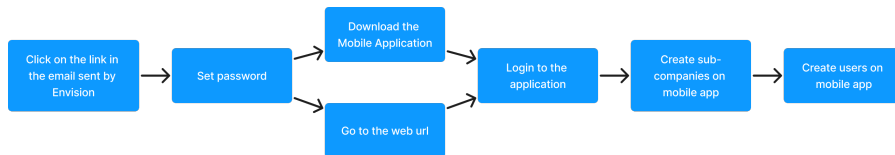
2 Getting Started

To get started on the Univers EMS Application, you can set up users, companies, power stations, and devices first. The detailed steps are described below.

2.1 Setting up Users & Companies

Envision will create an individual organization unit (OU) and a System Administrator Account for each original equipment manufacturer (OEM). The System Administrator Account is created based on the email and username provided by the OEM. A registration email will be sent to the provided email account, which contains a link to reset the password to login to the account.

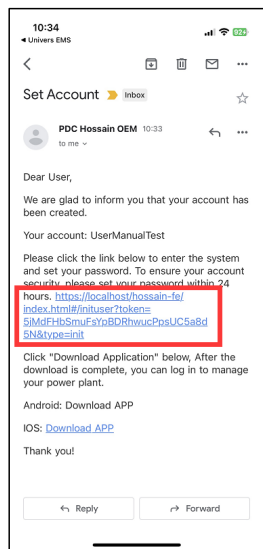
Here is the overall process for the initial setup:



2.1.1 Login to the Mobile Application

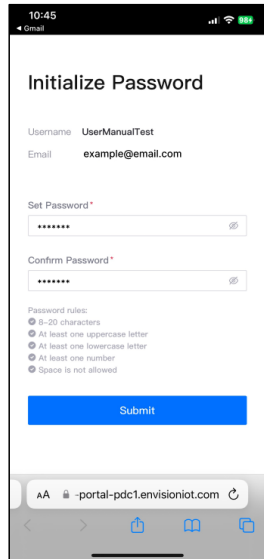
Step 1: Set your account.

1. Go to the email account that the user has provided.
2. Find the email that is named as Set Account.
3. Press the link to set the password. The password reset link is unique for each user.



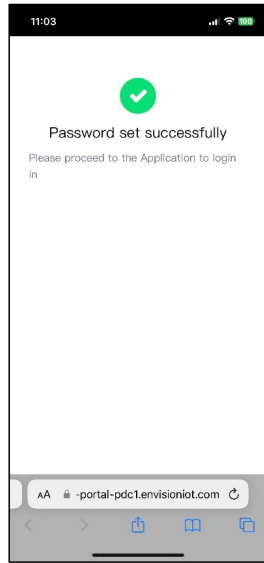
4. You will be redirected to the website to set your password.

批注 [KT1]: 链接点不开, 无法截图和下一步



5. Set and confirm the password.

6. Press **[Submit]** to complete the setting. You will see the display **Password Set Successfully**. Proceed to the next step.

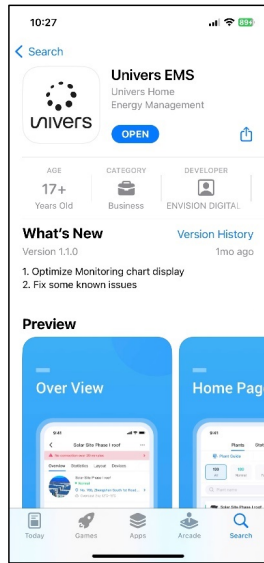


Univers EMS

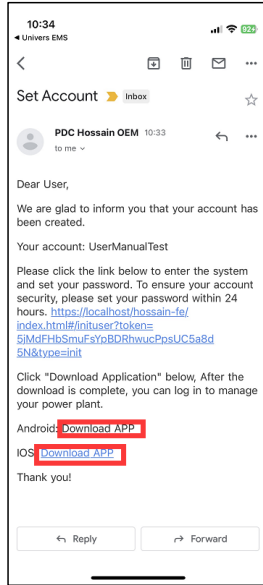


Step 2: Download the application.

1. You can download the mobile application Google Play for Android users or App Store for Apple users. The application name is Univers EMS as shown in Figure 2-4.

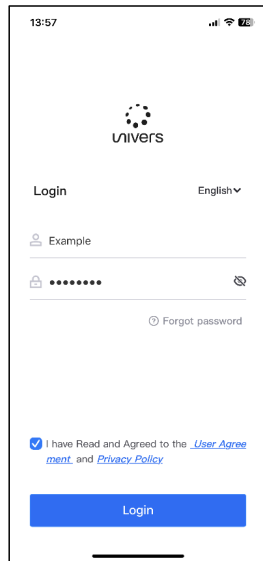


2. You can also download from the link provided in the Set Account email.



Step 3: Login using the System Administrator Account.

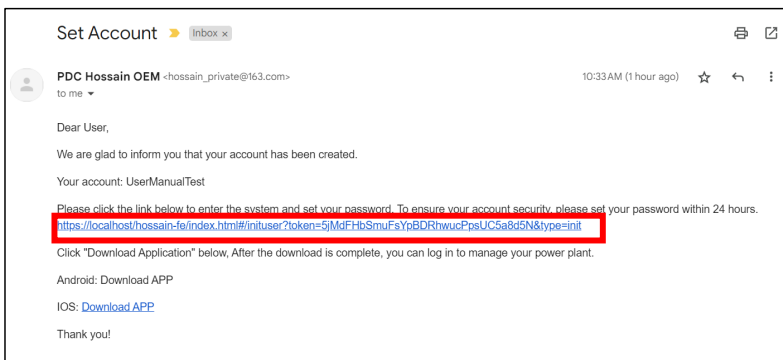
1. Enter the **username** and **password**.
2. Read and check the **box** to consent the User Agreement and Privacy Policy.
3. Press the **[Login]** button.



2.1.2 Login to the Web Application

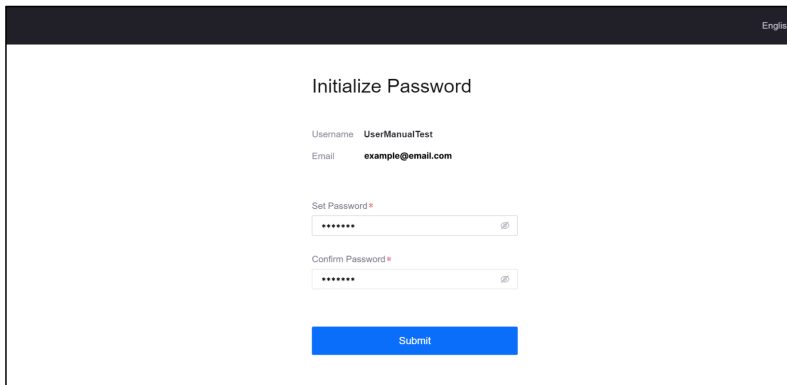
Step 1: Set your account (If you have not done it on your phone).

1. Go to the email account that the user has provided.
2. Find the email that is named as Set Account.
3. Press the link to set the password. The password reset link is unique for each user.



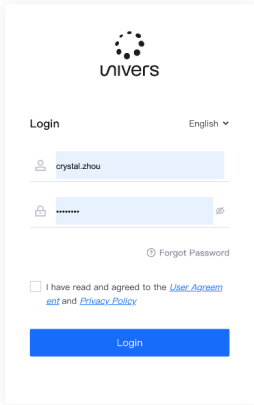
4. You will be redirected to the website to set your password.
5. Set and confirm the password.
6. Press **[Submit]** to complete the setting.

批注 [KT2]: 链接点不开, 无法截图和下一步



Step 2: Login to the web application.

1. Go to the link: home.istore.net.au
2. Enter the **username** and **password**.
3. Read and check the **box** to consent the User Agreement and Privacy Policy.
4. Click on the **[Login]** button.

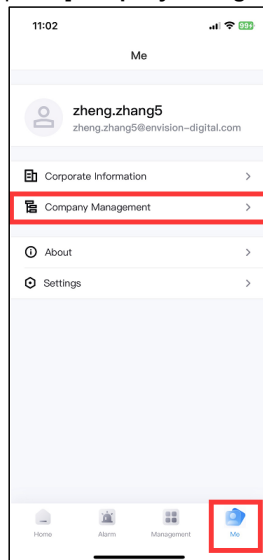


The screenshot shows the login interface for 'UNIVERS'. At the top, there is a logo consisting of a circle of dots above the word 'UNIVERS'. Below the logo, the word 'Login' is displayed on the left and 'English' with a dropdown arrow on the right. There are two input fields: the first contains the username 'crystal.zhou' and the second contains a masked password '*****'. Below the password field is a link for 'Forgot Password'. A checkbox is present with the text 'I have read and agreed to the [User Agreement](#) and [Privacy Policy](#)'. At the bottom, there is a blue 'Login' button.

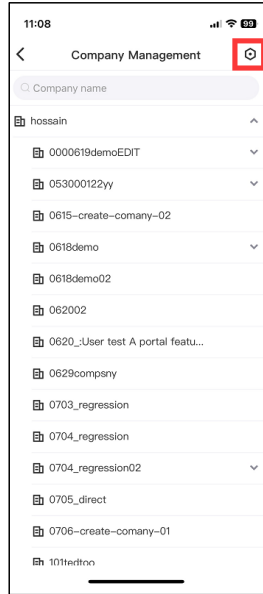
2.1.3 Create Sub-Company

Create more sub-company if needed.

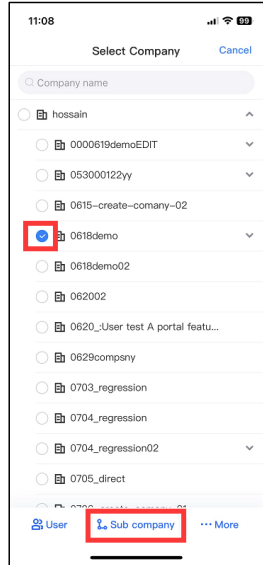
1. Go to **[Me]** page and press **[Company Management]**.



2. Press the **[Manage icon]** on the top right-hand corner.



3. Select a parent company that you want to add the sub-company to and press the **[Sub Company]** button on the bottom to add a sub-company to the selected parent company.



Univers EMS



4. Enter the **Company name**, **Username** and **User email**. This user account will automatically be installer admin for this company.
5. Press the **[More Information]** to enter the Company email, phone, website, and address if needed.
6. Press the **[Apply]** button to create the sub-company.

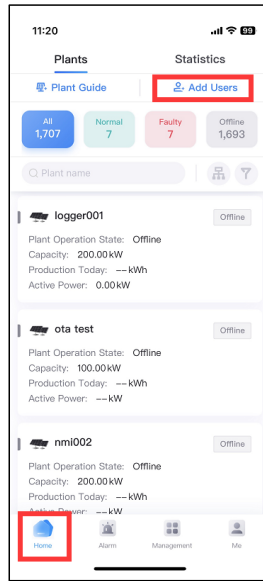
Note: Maximum four levels of company are allowed.

A screenshot of a mobile application interface for adding a sub-company. The screen is titled 'Add Sub-company' and shows a form with the following fields: 'Parent company' (0618demo), 'Company name *' (with a sub-label 'Company name'), 'Username *' (with a sub-label 'Username'), and 'User email *' (with a sub-label 'User email'). Below these fields is a 'More' dropdown menu. At the bottom of the screen are two buttons: 'Cancel' and 'Apply'.

2.1.4 Create User Account

Create more user accounts if needed.

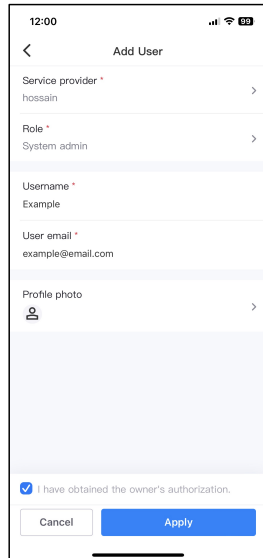
1. Go to **[Home]** page and press the **[Add Users]** button.



2.1.4.1 Create System Administrator

Pre-requisite: You are using a System Administrator account.

1. Service provider: select parent company (root node).
2. Role: select **[System admin]**.
3. Username: enter the **Username** for the user.
4. User email: enter the user's **email** address.
5. Profile photo: set the profile photo if needed.
6. Check the **[box]** to consent that you have obtained the owner's authorization.
7. Press the **[Apply]** button to create the account.



12:00

Add User

Service provider *
hossain

Role *
System admin

Username *
Example

User email *
example@email.com

Profile photo

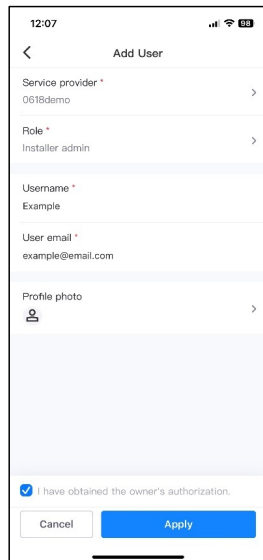
I have obtained the owner's authorization.

Cancel Apply

2.1.4.2 Create Installer Administrator

Pre-requisite: You are using a System Administrator/Installer Administrator account.

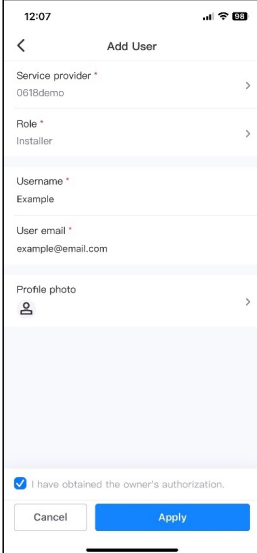
1. Service provider: select a sub-company.
2. Role: select **[Installer Admin]**.
3. Username: enter the **Username** for the user.
4. User email: enter the user's **email** address.
5. Profile photo: set the profile photo if needed.
6. Check the **[box]** to consent that you have obtained the owner's authorization.
7. Press the **[Apply]** button to create the account.



2.1.4.3 Create Installer

Pre-requisite: You are using a System Administrator/Installer Administrator account.

1. Service provider: select a sub-company.
2. Role: select **[Installer]**.
3. Username: enter the **Username** for the user.
4. User email: enter the user's **email** address.
5. Profile photo: set the profile photo if needed.
6. Check the **[box]** to consent that you have obtained the owner's authorization.
7. Press the **[Apply]** button to create the account.



2.1.4.4 Create End User

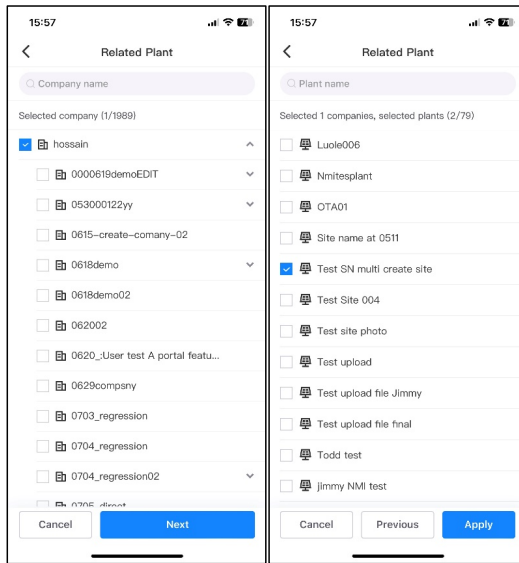
Pre-requisite: You are using a System Administrator/Installer Administrator/Installer account.

1. Service provider: select a sub-company.
2. Role: select **[User]**.

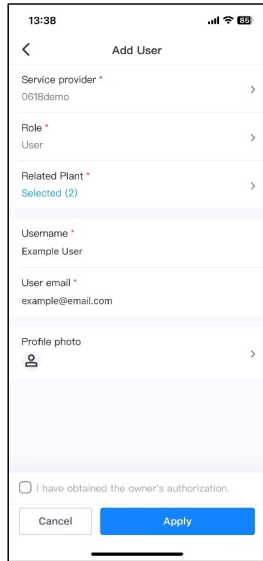
3. Related Power station: select the power station that can be monitored by this user.

3.1 Select the company first, you can select multiple companies.

3.2 Select the power station under the selected company, you can select multiple power stations.



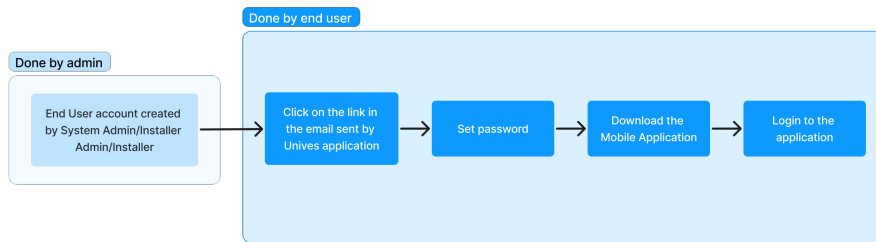
4. Username: enter the **Username** for the user.
5. User email: enter the user's **email** address.
6. Profile photo: set the profile photo if needed.
7. Check the **[box]** to consent that you have obtained the owner's authorization.
8. Press the **[Apply]** button to create the account.



The screenshot shows a mobile application interface for adding a user. At the top, the time is 13:38 and the title is 'Add User'. The form contains several fields: 'Service provider *' with the value '0618demo', 'Role *' with the value 'User', 'Related Plant *' with the value 'Selected (2)', 'Username *' with the value 'Example User', and 'User email *' with the value 'example@email.com'. There is a 'Profile photo' field with a person icon and a right arrow. At the bottom, there is a checkbox labeled 'I have obtained the owner's authorization.' which is currently unchecked. Below the checkbox are two buttons: 'Cancel' and 'Apply'.

2.2 Setting up End User

Here is the overall process for end user to login to Univers EMS:



2.2.1 Create End User Account

Pre-requisite: You are using a System Administrator/Installer Administrator/Installer account.

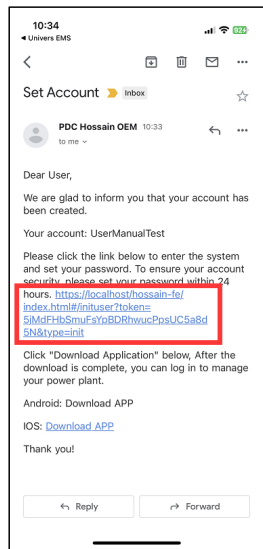
Refer to section [2.1.4.4 Create End User](#) for more details on how to create end user account.

2.2.2 End User Login

Pre-requisite: You are using an End User account.

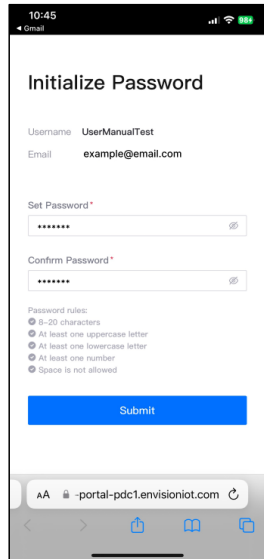
Step 1: Set your account.

1. Go to the email account which you have provided to admin to create your application account.
2. Find the email that is named as Set Account.
3. Press the link to set the password. The password reset link is unique for each user.



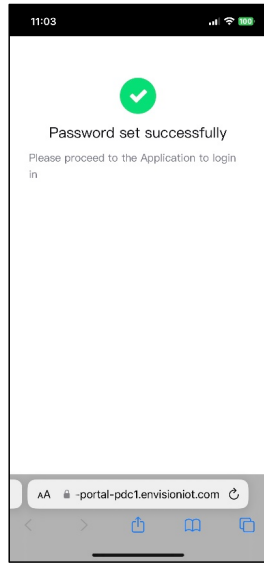
4. You will be redirected to the website to set your password.

批注 [KT3]: 链接点不开, 无法截图和下一步



5. Set and confirm the password.

6. Press **[Submit]** to complete the setting. You will see the display **Password Set Successfully**. Proceed to the next step.

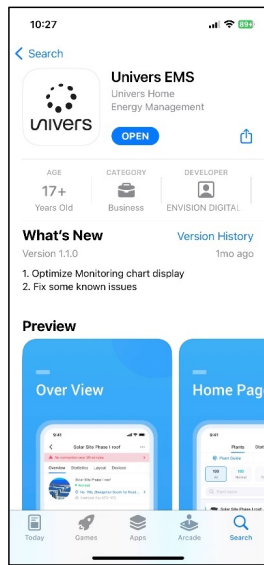


Univers EMS

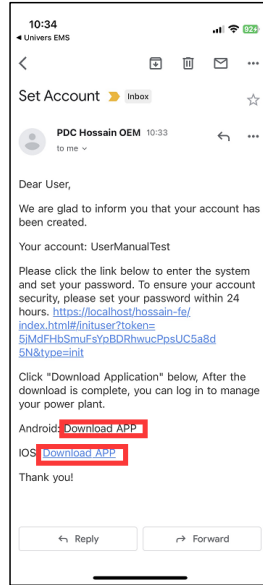


Step 2: Download the application.

1. You can download the mobile application Google Play for Android users or App Store for Apple users. The application name is Univers EMS as shown in Figure 2-17.

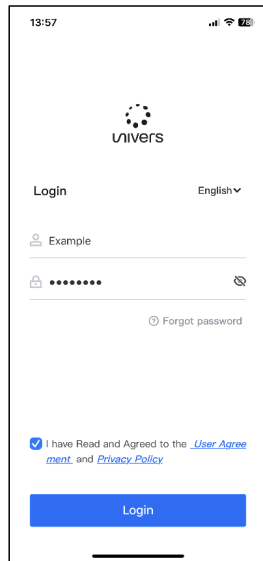


2. You can also download from the link provided in the Set Account email.



Step 3: Login using the User Account.

1. Enter the **username** and **password**.
2. Read and check the **[box]** to consent the User Agreement and Privacy Policy.
3. Press the **[Login]** button.

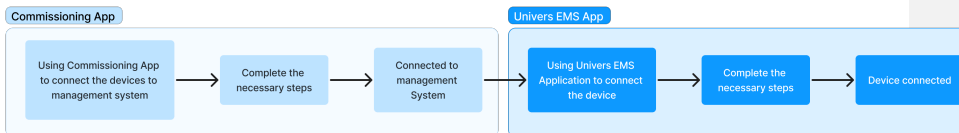


- You will be directed to the Home page where you can monitor your assigned power stations.



2.3 Setting up Power Stations & Devices

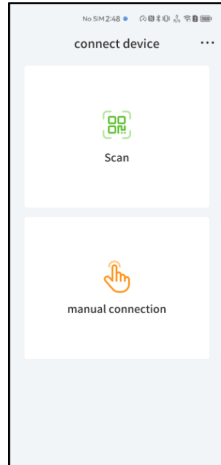
Here is the overall process to set up power stations and devices:



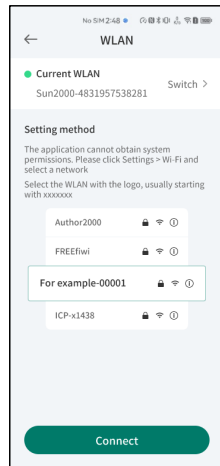
2.3.1 Set up on Commissioning App

To set up power stations and devices, user needs to use the mobile application **Commissioning App** to connect the device to the Univers EMS.

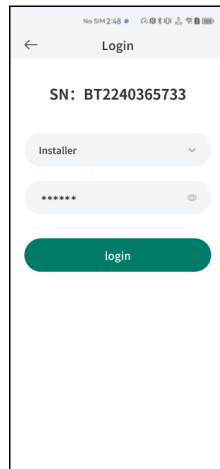
- Open the **Commissioning App**.
- Connect the device through **[Scan]** the QR code on the device or through **[manual connection]**.



3. **[Connect]** to the WLAN.



4. **[Login]** to the application.



5. Set up the device by following the steps in Figure 2-23.

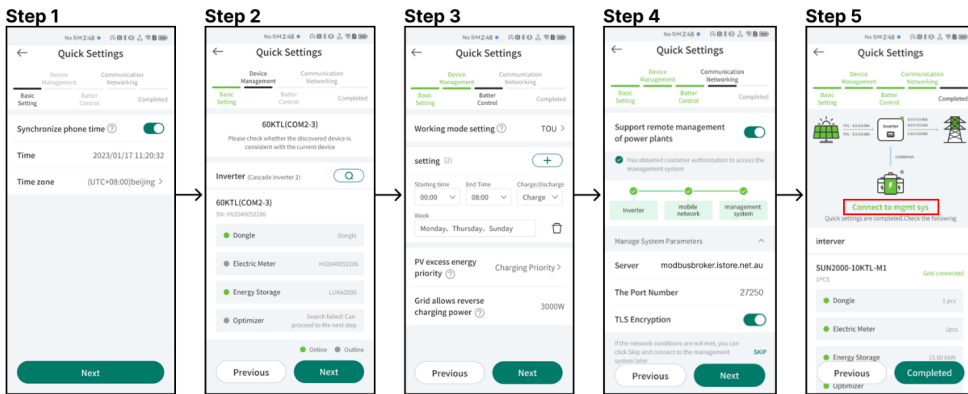
Note:

Step 4: The server is IP Address or Domain Name, please contact OEM to get this Server information, the Port Number is **27250**.

- If connection fail, please try Port Number is 27251, and Disable “TLS Encryption”

Step 5: The set up on Commissioning App is only completed the page is displayed with the **Connect to mgmt sys.**

modbusbroker.istore.net.au

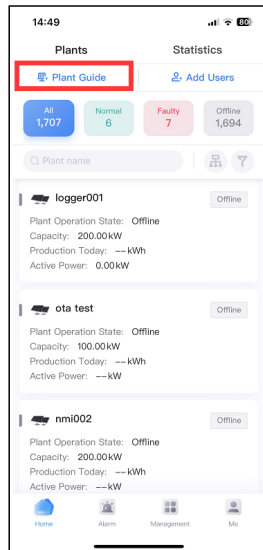


2.3.2 Set up on Univers EMS

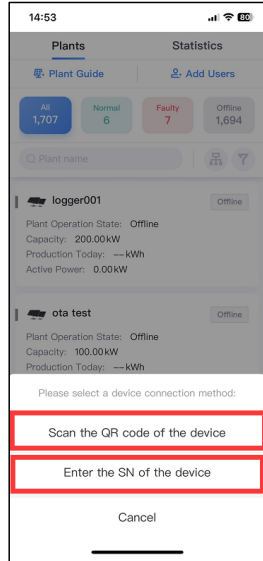
Pre-requisite: You need disconnect from device Wi-Fi first, make sure your phone is connected to a public network, and then enter the Univers app.

After the setup is completed and successful on Commissioning App, you will have to set up the power station and device on the Univers EMS Mobile Application.

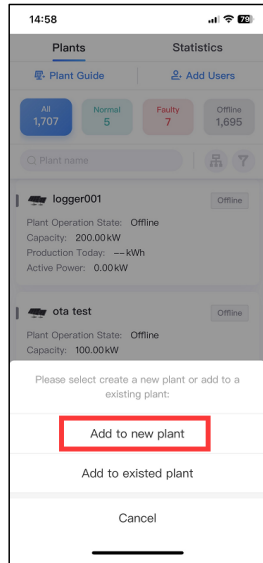
1. Go to **[Home]** page and press the **[Plant Guide]** button.



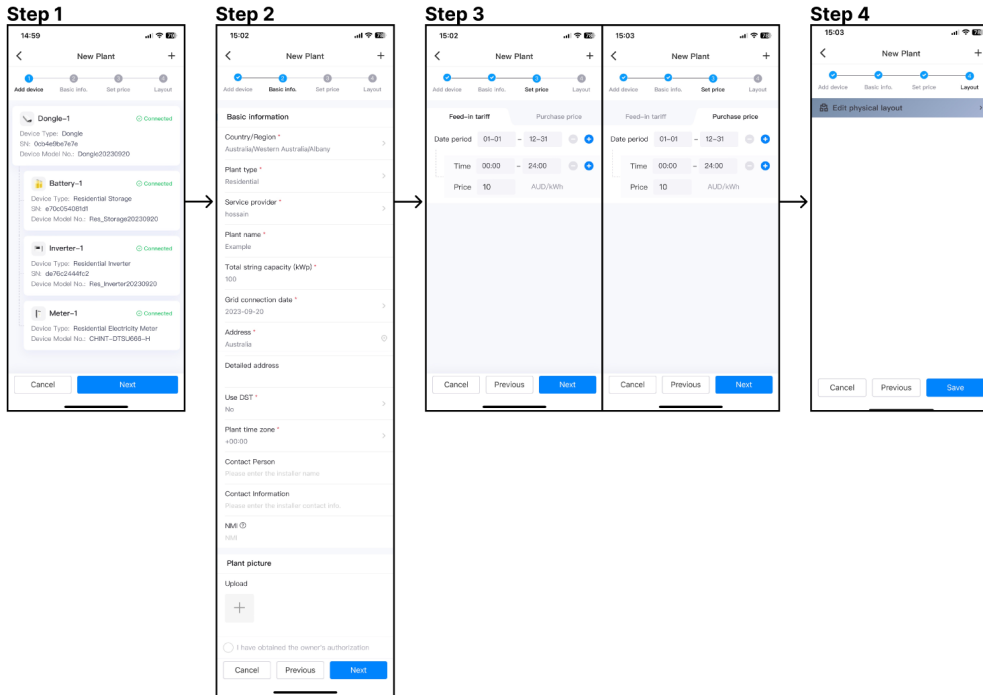
2. Connect the device through pressing **[Scan the QR code of the device]** or pressing **[Enter the SN number of the device]**.



3. After you have scanned the QR code or entered the SN of the device, press **[Add to new plant]** to add the device.



4. You will be directed New Plant station page to add in the devices to the new power station. Here are the steps:



Step 1: Add device.

1. Devices under a group of networking will be automatically connected, this process probably take a while.
2. Check the devices you have added in. When status of all devices is “Connected”, this step is finished.
3. Press [Next].

Step 2: Basic info.

1. Fill in the basic information of the new power station:
 - **Country/Region:** If you allow App access your location, App will automatically recognize corresponding Country/Region, Province and City and then you also could change manually. If you do not allow, you need select the respective country, province, and city.
 - **Power station type:** select the corresponding power station type, default is Residential.
 - **Service provider:** select a company that this power station belongs to and to add this new power station.

- **Power station name:** enter a power station name.
- **Total string capacity (kWp):** enter the total string capacity of the power station.
- **Grid connection date:** select a grid connection date, default date is today.
- **Address:** enter the address of this power station.
- **Use DST:** select whether you want to use DST.
- **Power station time zone:** App could automatically recognize time zone according to **Country/Region** and you also could manually select a time zone for the power station.
- **Contact Person(optional):** enter the installer name.
- **Contact Information(optional):** enter the installer contact information.
- **NMI(optional):** enter the NMI*.
*NMI is an eleven-character identifier assigned by Local Network Service Providers.
- **Power station picture(optional):** Upload a power station picture by pressing the + button.

2. Press **[Next]**.

Step 3: Set price.

1. Feed-in tariff: adjust the Date period and time if necessary and fill in the corresponding price.
2. Purchase price: adjust the Date period and time if necessary and fill in the corresponding price.
3. Press **[Next]**.

Note:

- There should be no overlap between the date segments, and it should cover the whole year from January 1st to December 31st. For each date segment, all time segments cannot overlap and must cover 00:00 to 24:00 of a day.
- This step could be skipped, and it support to configure in power station detailed page later, but if Electricity Price not been configured, Revenue will not be calculated.

Step 4: Layout.

1. If the power station is not equipped with an optimizer, you can press **[Submit]** to create the power station without setting the layout page.

5. After completing the four steps above, a message is displayed indicating that the power station is created successfully.

批注 [KT4]: 需要创建新站才可以截图



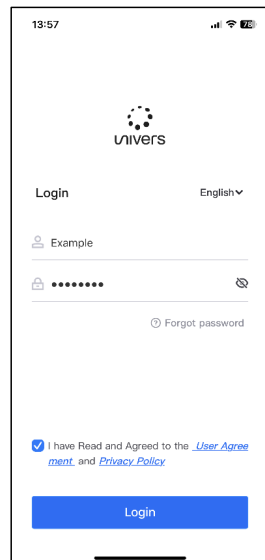
3 User Interface – Mobile Application

3.1 Login

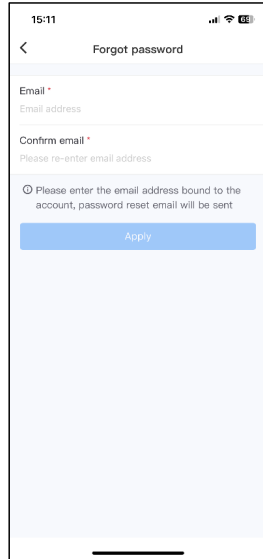
For first time user, if you are using a System Admin/Installer Admin/Installer account, please refer to the section [2.1.1 Login to the Mobile Application](#) for more information.

For End User to login for the first time, please refer to the section [2.2.2 End User Login](#) for more information.

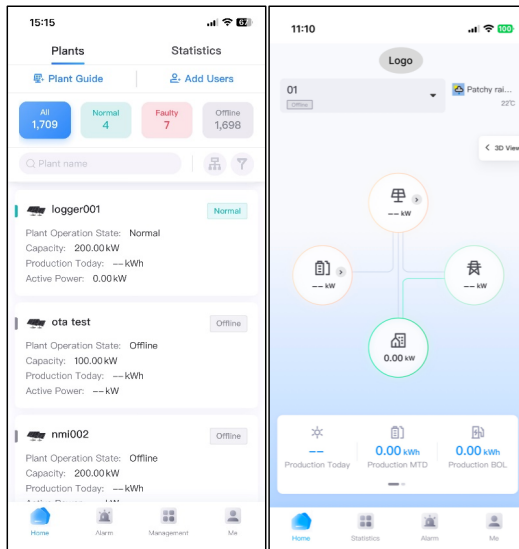
Univers EMS provides a login access page when you first opened the application. To log in to Univers EMS, enter your credentials (username, password) and check the **box** to consent the User Agreement and Privacy Policy.



If you forget the login password, click the 'Forget password' button to retrieve the password.



After logging, you will be directed to the Home page of Univers EMS where you can monitor your power stations.

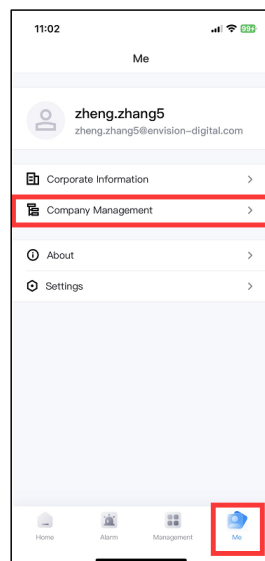


3.2 Company & User Management

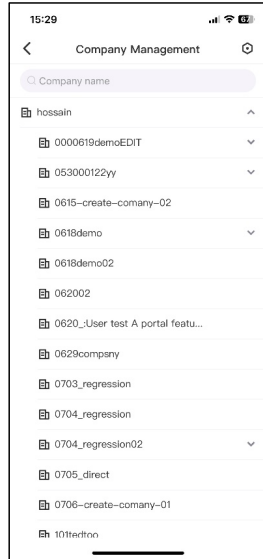
3.2.1 Company Management

Pre-requisite: You are using a System Admin/Installer Admin account.

Go to **[Me]** page and press **[Company Management]**.



You will be directed to the Company Management page. This page allows you to view, create, edit, and delete sub-company.

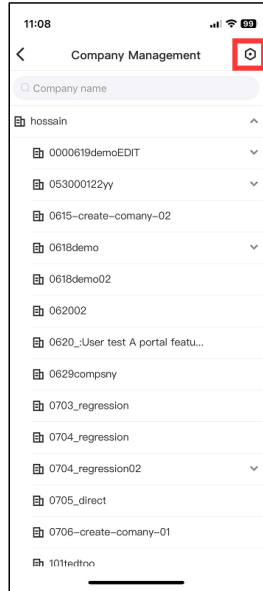


3.2.1.1 Create Sub-Company

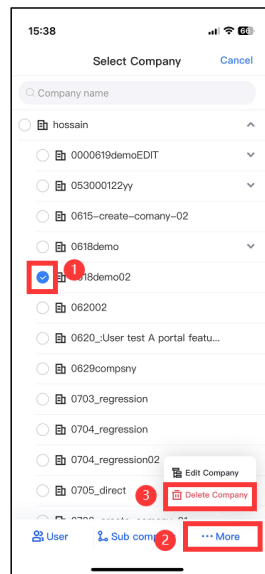
Please refer to the section [2.1.3 Create Sub-Company](#) for more information.

3.2.1.2 Delete Sub-Company

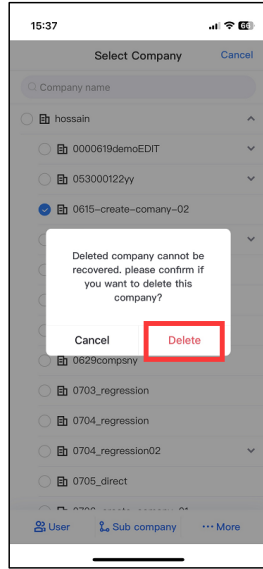
1. Press the **[Manage icon]** on the top right-hand corner.



2. Select a sub-company that you wish to delete and press the **[...More]** button on the bottom right-hand corner.
3. Press **[Delete Company]** button.

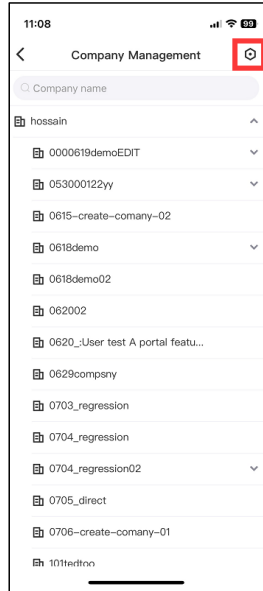


4. Press **[Delete]** on the pop-up window to confirm the deletion.

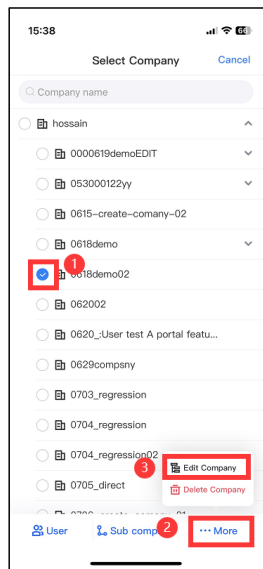


3.2.1.3 Edit Sub-Company

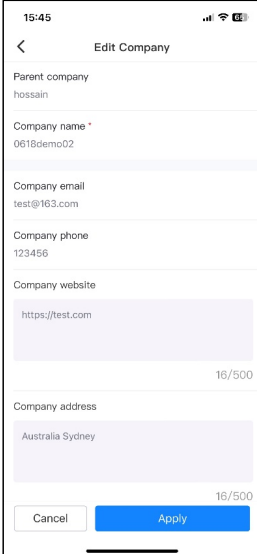
1. Press the **[Manage icon]** on the top right-hand corner.



2. Select a sub-company that you wish to delete and press the **[...More]** button on the bottom right-hand corner.
3. Press **[Edit Company]** button.



- You will be redirected to the Edit Company page where you can edit the company information such as the company name, email, phone, website, and address. Parent company is not editable.



15:45 Edit Company

Parent company
hossain

Company name*
0618demo02

Company email
test@163.com

Company phone
123456

Company website
https://test.com
16/500

Company address
Australia Sydney
16/500

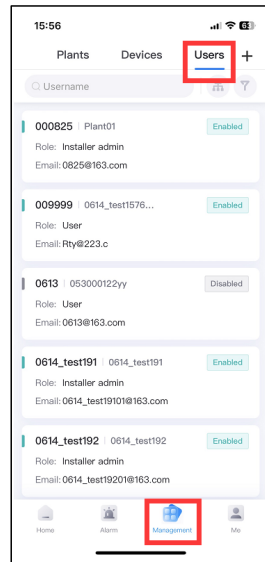
Cancel Apply

- Press **[Apply]** to save the changes.

3.2.2 User Management

Pre-requisite: You are using a System Admin/Installer Admin/Installer account. System Admin could manage all user accounts. Installer Admin could manage user accounts under his/her company and sub-company. Installer could manage user accounts that he/she created.

Go to the **[Management]** page and switch to the **[Users]** tab where you can view, create, disable, and delete user accounts, you can also reset password for the user account.

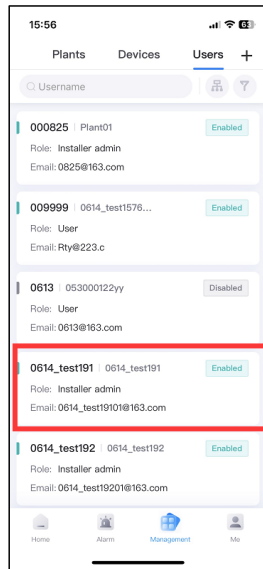


3.2.2.1 Create User Account

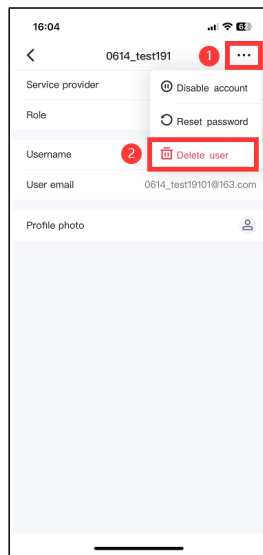
Please refer to the section [2.1.4 Create User Account](#) for more information.

3.2.2.2 Delete User Account

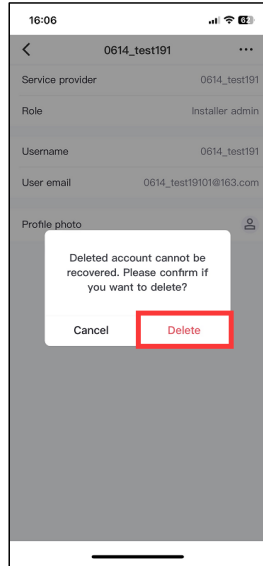
1. Choose a user account that you wish to delete and press on it.



2. You will be directed to the user information page, press the [...] button on the top right-hand corner.
3. Press **[Delete user]** button to delete the desired user account.

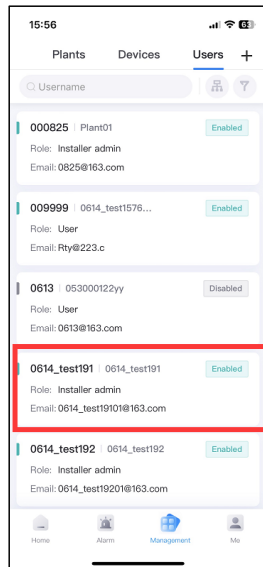


4. Press **[Delete]** on the pop-up window to confirm the deletion.

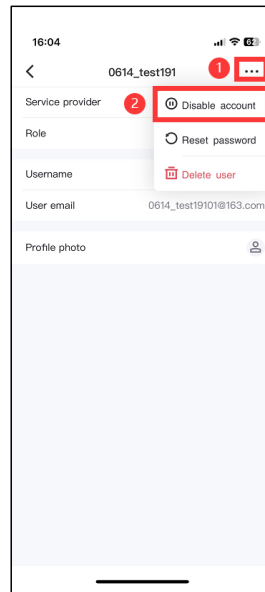


3.2.2.3 Disable User Account

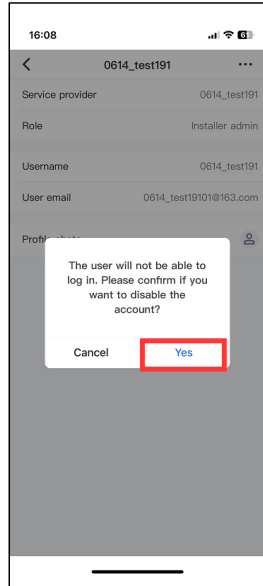
1. Choose a user account that you wish to disable and press on it.



2. You will be directed to the user information page, press the [...] button on the top right-hand corner.
3. Press [**Disable account**] button to disable the desired user account.

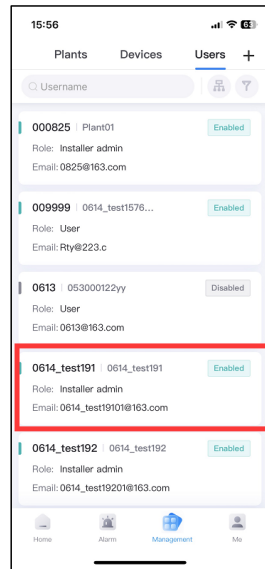


4. Press [**Yes**] on the pop-up window to confirm the disabling of the account. Disabled account is not able to login to the App.

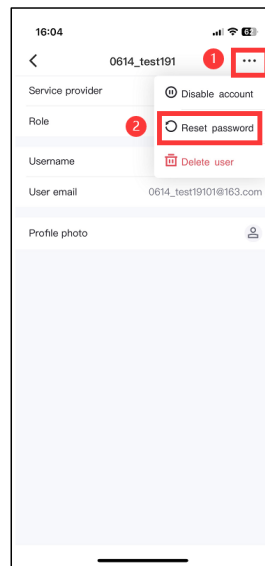


3.2.2.4 Reset Password

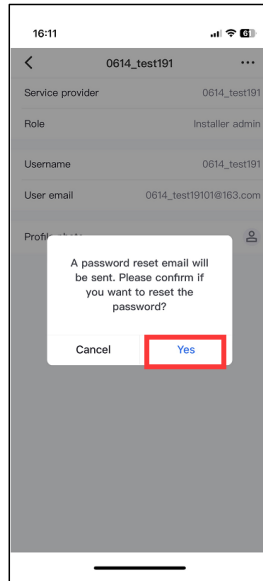
1. Choose a user account that you wish to reset the password and press on it.



2. You will be directed to the user information page, press the [...] button on the top right-hand corner.
3. Press **[Reset password]** button to reset the user's password.



4. Press **[Yes]** on the pop-up window to confirm the resetting of this user's password. A password reset email will be sent to this user's email account.



3.3 Power Station & Device Management

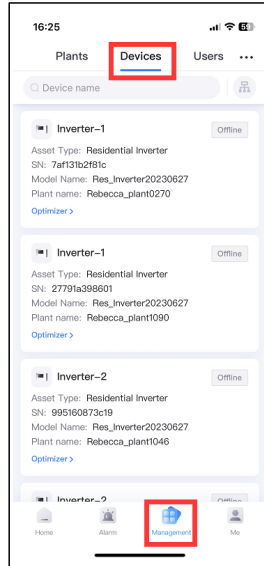
Pre-requisite: You are using a System Admin/Installer Admin/Installer account.

3.3.1 Connect Device & Set up Power Station

Please refer to the section [2.3 Setting up Power Stations & Devices](#) for more information.

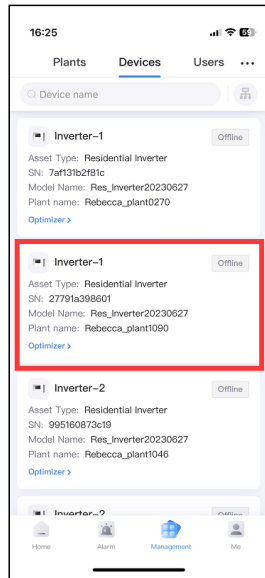
3.3.2 Device Management

Go to the **[Management]** page and switch to the **[Devices]** tab where you can create, remote control, and edit parameter settings for the devices.

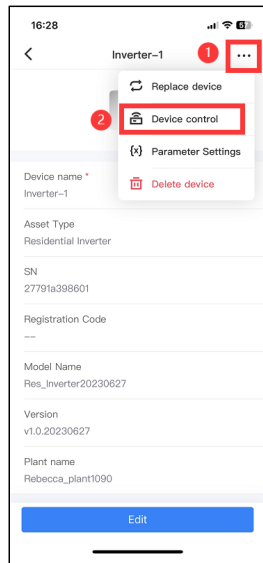


3.3.2.1 Device Remote Control

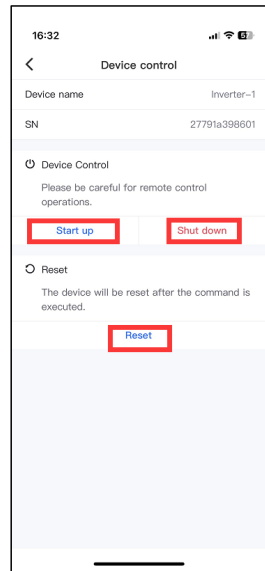
1. Go to the **[Management]** page and switch to the **[Devices]** tab.
2. Choose a device that you wish to control remotely.



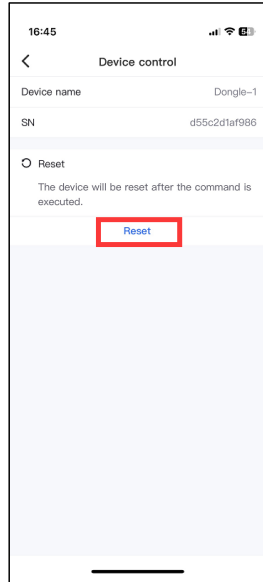
3. You will be directed to the device information page, press the [...] button on the top right-hand corner.
4. Press [**Device control**] button to control the device remotely.



5. You will be directed to the Device control page where you can select a mode for the desired device.



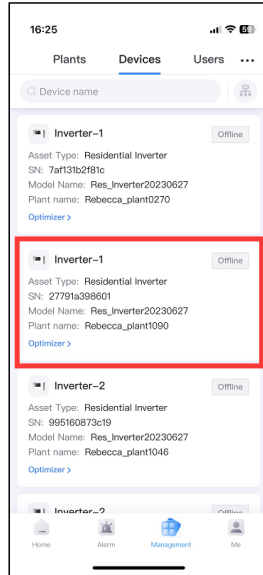
6. For **Inverter**, there are three control modes to the device:
- [Start up]**: Control the device to send the startup command.
 - [Shut down]**: Control the device to send the shutdown command.
 - [Reset]**: Control the device to send the reset command.



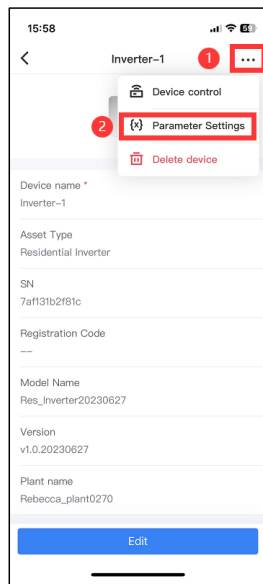
6. For **Dongle**, there is only one control mode to the device:
 - a. **[Reset]**: Control the device to send the reset command.
7. Choose a mode by pressing the desired mode button.
8. The device will be set to the desired mode.

3.3.2.2 Device Parameter Setting

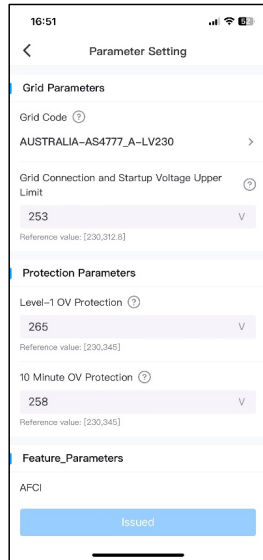
1. Go to the **[Management]** page and switch to the **[Devices]** tab.
2. Choose an Inverter or Dongle device that you wish to set the parameter.



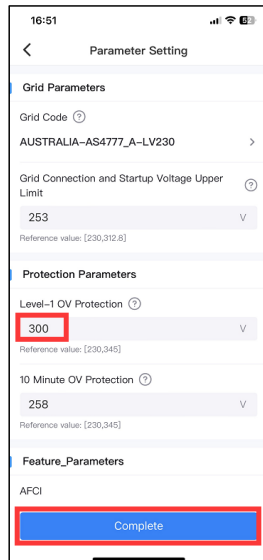
3. You will be directed to the device information page, press the [...] button on the top right-hand corner and then press **[Parameter setting]** button.



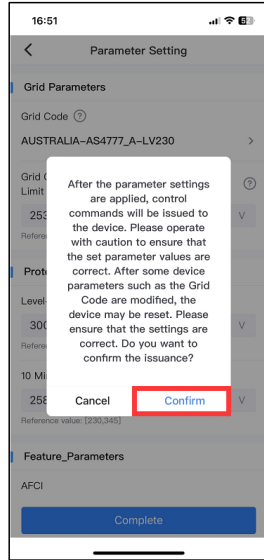
4. You will be directed to the Parameter Setting page where you can update the parameters of the selected device.



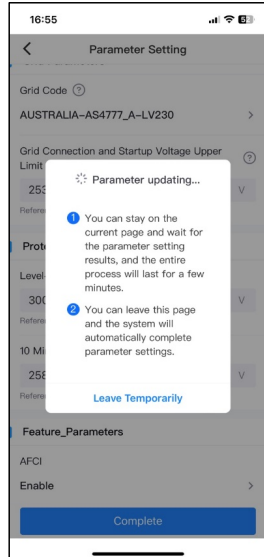
5. Update the preferred parameters and press **[Complete]**.



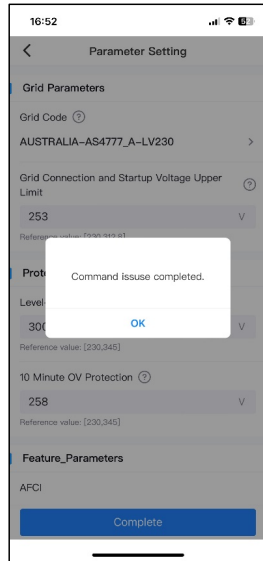
6. Double confirm the update by pressing the Confirm button.



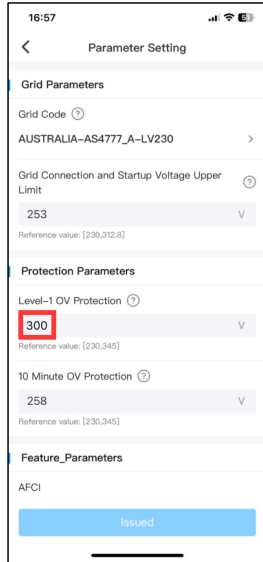
7. When the parameter is updating, the user can choose to:
a. wait on the current page or
b. leave temporarily and come back later to check the parameter.



- 8. If the user chooses to wait on the current page, the update will take a few minutes. After the parameter is updated, the pop-up window will show that the message: **Command issue completed** as shown below.

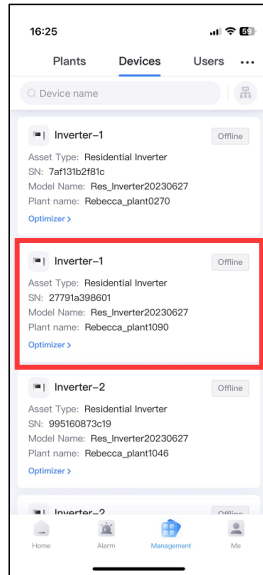


- 9. If the user chooses to leave temporarily, the user can come back to the parameter setting page later, the parameter will be updated.

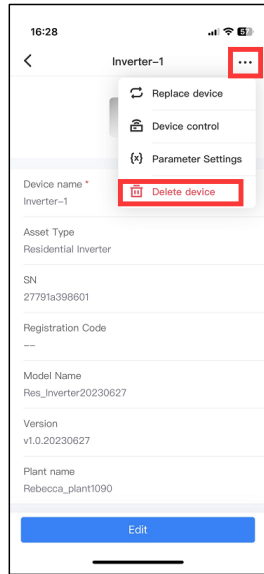


3.3.2.3 Delete Device

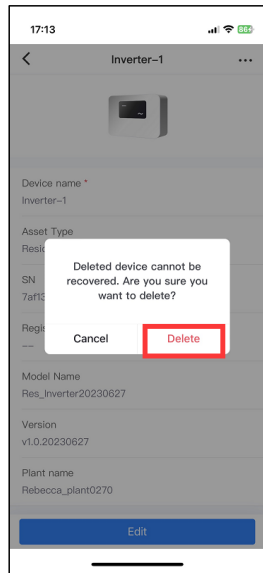
1. Go to the **[Management]** page and switch to the **[Devices]** tab.
2. Choose a device that you wish to delete.



3. You will be directed to the device information page, press the [...] button on the top right hand corner and then press **[Delete device]** button.

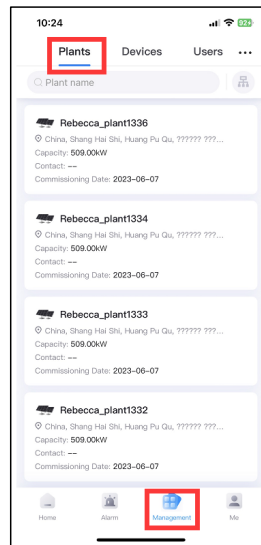


4. Press **[Delete]** on the pop-up window to confirm the deletion.



3.3.3 Power Station Management

Go to the **[Management]** page and switch to the **[Plants]** tab where you can create, edit, and delete power stations.



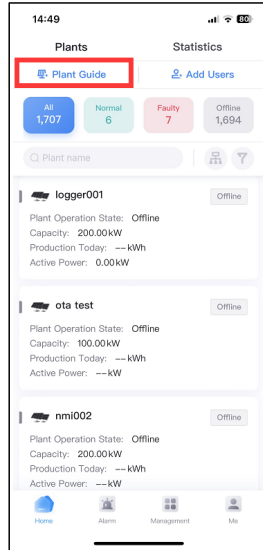
3.3.3.1 Add Device

Make sure you have connected the device through the Commissioning App. Please refer to the section [2.3.1 Set up on Commissioning App](#) for more information.

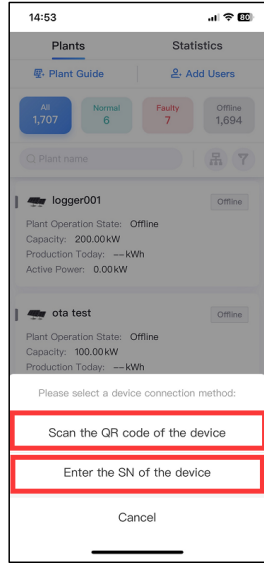
If you want to add the devices to a **new power station**, follow the instructions described in the section [2.3.2 Set up on Univers EMS](#).

If you want to add the devices to **an existing power station**, follow the steps described below:

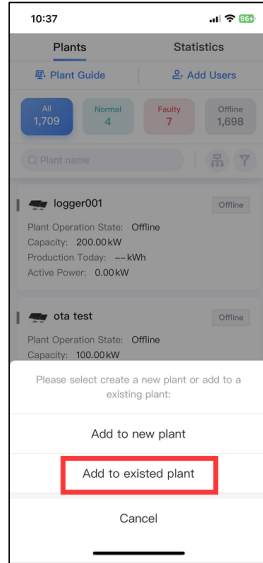
1. Go to **[Home]** page and press the **[Plant Guide]** button.



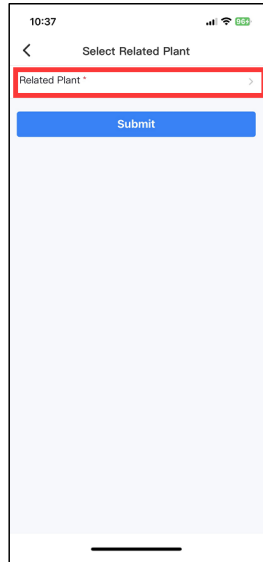
2. Connect the device through pressing **[Scan the QR code of the device]** or pressing **[Enter the SN number of the device]**.



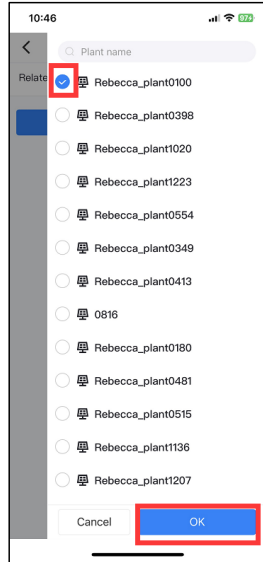
3. After you have scanned the QR code or entered the SN of the device, press **[Add to existed plant]** to add the device.



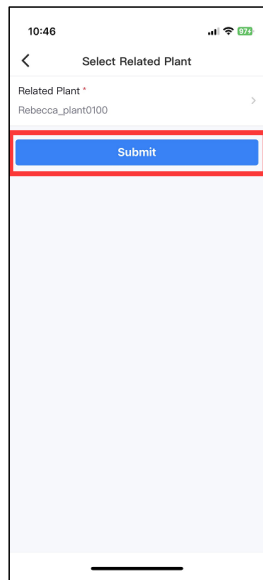
4. You will be directed to the Related Plant page where you need to choose a desired power station to add this device by pressing the **[Related Plant]**.



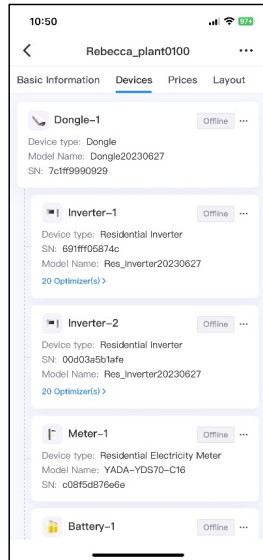
5. Select a power station and press **[OK]**.



6. Press **[Submit]** to complete adding the device.

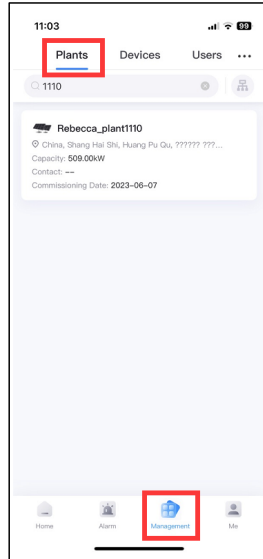


7. You will be directed to the Devices tab under the power station you have chosen, where you can see that the devices have been added to the desired power station.

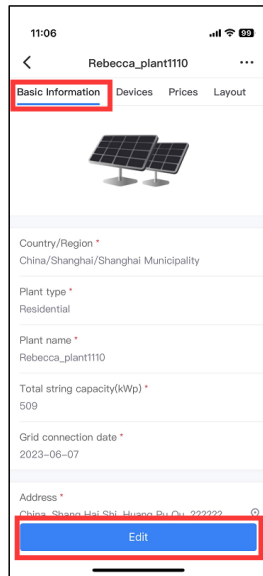


3.3.3.2 Edit Power Station

1. Choose a desired power station that you want to edit from the Plants tab on the Management page.



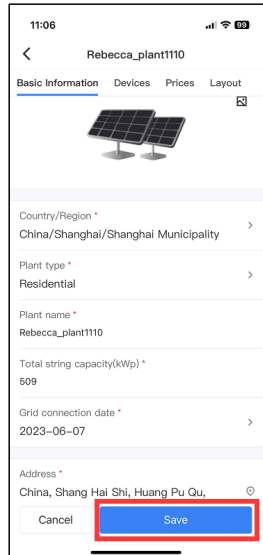
2. Press on the power station and you will be directed to the details page of the chosen power station.
3. Press on the [Edit] button under Basic Information tab if you want to edit the basic information of the power station.



4. Edit the relevant information:

- **Country/Region:** If you allow App access your location, App will automatically recognize corresponding Country/Region, Province, and City and then you also could change manually. If you do not allow, you need select the respective country, province, and city.
- **Power station type:** select the corresponding power station type.
- **Service provider:** select a company that this power station belongs to and to add this new power station.
- **Power station name:** enter a power station name.
- **Total string capacity (kWp):** enter the total string capacity of the power station.
- **Grid connection date:** select a grid connection date, default date is today.
- **Address:** enter the address of this power station.
- **Use DST:** select whether you want to use DST.
- **Power station time zone:** App could automatically recognize time zone according to **Country/Region** and you also could manually select a time zone for the power station.
- Contact Person(optional): enter the installer name.
- Contact Information(optional): enter the installer contact information.
- NMI(optional): enter the NMI*.
 - *NMI is an eleven-character identifier assigned by Local Network Service Providers.
- Power station picture(optional): Upload a power station picture by pressing the + button.


5. Press **[Save]**.



11:06

< Rebecca_plant1110

Basic Information Devices Prices Layout



Country/Region *
China/Shanghai/Shanghai Municipality >

Plant type *
Residential >

Plant name *
Rebecca_plant1110

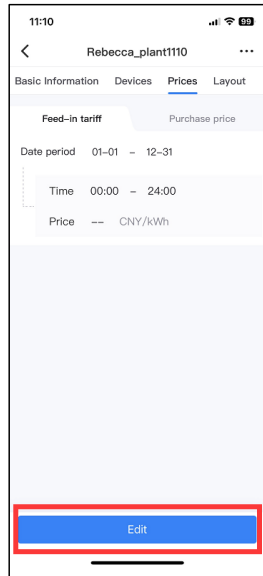
Total string capacity(kWp) *
509

Grid connection date *
2023-06-07 >

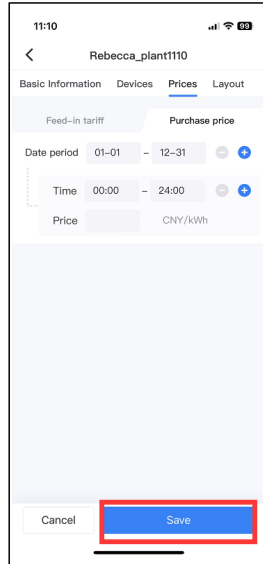
Address *
China, Shang Hai Shi, Huang Pu Qu, >

Cancel Save

6. You can edit the Prices as well by pressing **[Edit]** button under the Prices tab.

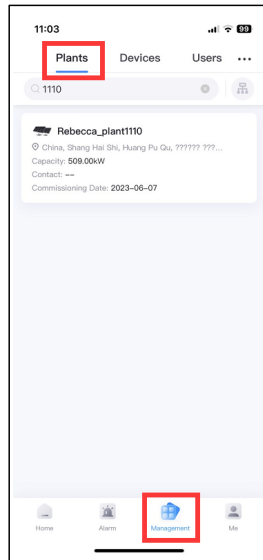


7. Edit relevant Feed-in tariff or Purchase price:
- Feed-in tariff: adjust the Date period and time if necessary and fill in the corresponding price.
 - Purchase price: adjust the Date period and time if necessary and fill in the corresponding price.
- Note: Feed in tariff and Purchase price will check the two electricity prices at the same time, and there should be no overlap. between the date segments, and it should cover the whole year from January 1st to December 31st. For each date segment, all time segments cannot overlap and must cover 00:00 to 24:00 of a day.
8. Press **[Save]**.

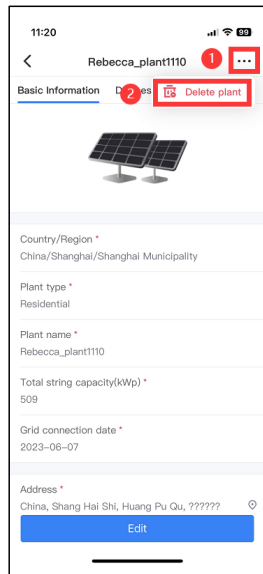


3.3.3.3 Delete Power Station

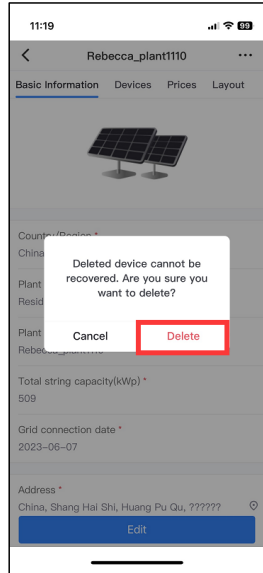
1. Choose a desired power station that you want to edit from the Plants tab on the Management page.



2. Press on the power station and you will be directed to the details page of the chosen power station.
3. Press on the [...] button on the top right-hand corner and press **[Delete plant]**.



4. Press **[Delete]** on the pop-up window to confirm the deletion.



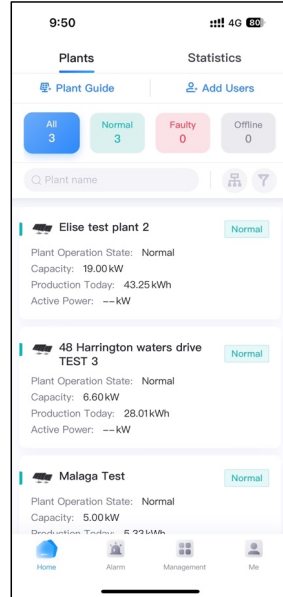
3.4 Power Station & Device Monitoring

3.4.1 Power Station Monitoring

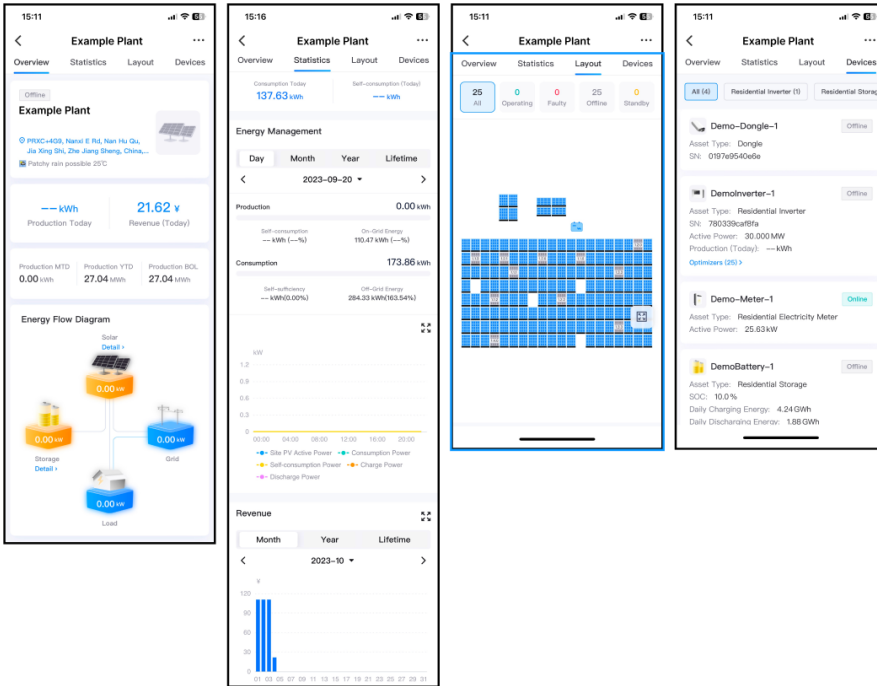
Pre-requisite: You are using a System Admin/Installer Admin/Installer account.

3.4.1.1 Single Power Station Monitoring

1. On **[Home]** page under **[Plants]** tab, view the list of power stations under the user.



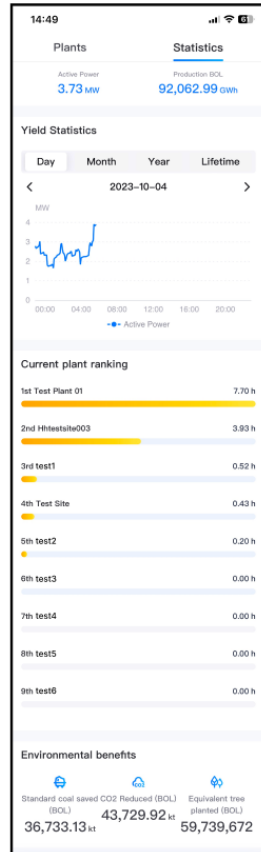
2. Press onto a power station, enter the power station details page which consists of 4 tabs:



- **[Overview]:** view the basic information of the power station and the display of the energy flow diagram.
- **[Statistics]:** view the statistics data and chart display under the power station.
- **[Layout]:** view the layout under power station (when there are no optimizers under the power station, this tab is not displayed, you can skip this step)
- **[Devices]:** view the list of devices under the power station.

3.4.1.2 Cross Power Station Monitoring

1. On **[Home]** page under **[Statistics]** tab, view cross power station statistics data.



- **[Overall Statistics]:** view Active Power and Production BOL data.
- **[Yield Statistics]:** view overall power station Active Power displayed in Day/Month/Year/Lifetime.
- **[Current plant ranking]:** view power station ranking across all power stations under the user. Ranked by Equivalent Yield.
- **[Environmental benefits]:** view Standard coal saved (BOL), CO2 Reduced (BOL) and Equivalent tree planted (BOL).

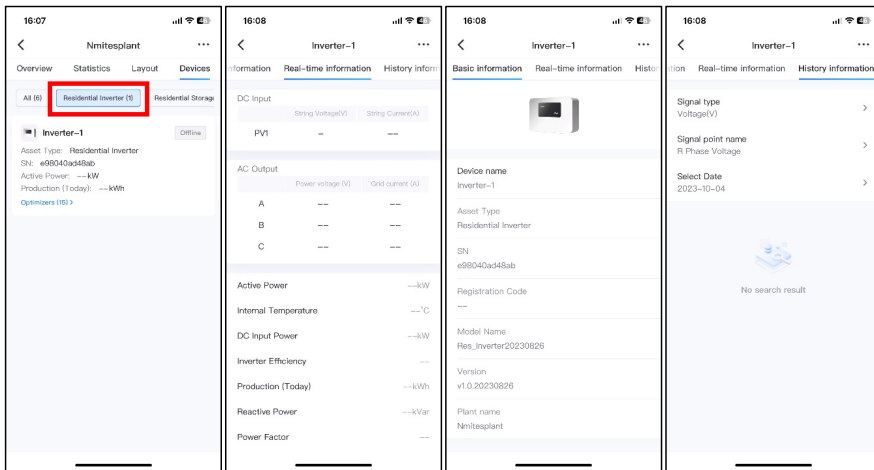
3.4.2 Device Monitoring

Pre-requisite: You are using a System Admin/Installer Admin/Installer account.

1. Go to **[Home]** page **[Plants]** tab, choose and press on a power station to enter the power station details.

2. Switch to **[Devices]** tab to view the list of devices.

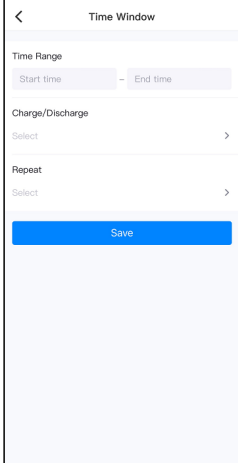
3.4.2.1 Inverter



- a. Press the device type **[Residential Inverter]** at the top of the list, click the device card. You will be directed to the **[Real-time information]** tab on the inverter details page to view the Inverter real-time information data display.
- b. Switch to **[Basic information]** tab to view the Inverter basic information data display.
- c. Switch to **[History information]** tab, select the signal point type and name, and view the history information chart.

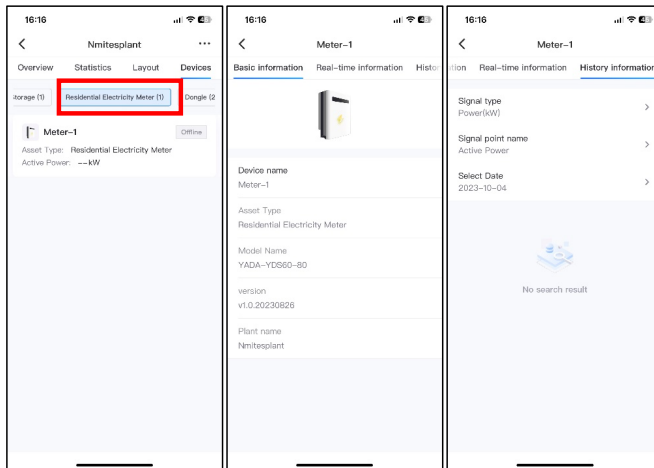
3.4.2.2 Storage

The screenshots illustrate the storage management interface in the Univers EMS application. The top row shows the site overview with a highlighted 'Residential Storage' device, the 'Battery-Demo5' real-time information page, and the 'Energy Storage Unit' details page. The bottom row shows the 'Energy Storage Unit' configuration dialog, the 'Battery-Demo5' parameter settings page, and the 'Parameter Setting' configuration page.



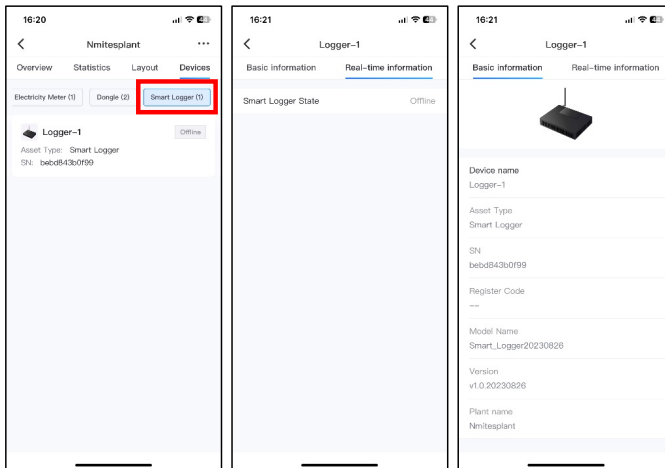
- a. Press the device type **[Residential Storage]** at the top of the list, click the device card. You will be directed to the **[Real-time information]** tab on the storage details page and view the interface content display. The following KPI will be displayed:
 - 1) Storage Working Mode
 - 2) Bus Voltage
 - 3) SOC
 - 4) Daily Charging Energy
 - 5) Daily Discharging Energy
 - 6) Active Power
 - 7) **[Energy Storage Unit]**
- d. Click **[Energy Storage Unit]** tab to view the storage basic information data display for each storage unit. Switch Energy Storage Unit to view the basic information data for desired energy storage unit.
- e. Hold on the **[Real-time Information]** to enter the **[Parameter Setting]** page to modify the parameters of the Energy Storage Unit and **[EMS Control]**.
- f. Under **[TOU Mode]**, click **[Add]** to add new **[Time Window]** and control mode.

3.4.2.3 Electricity Meter



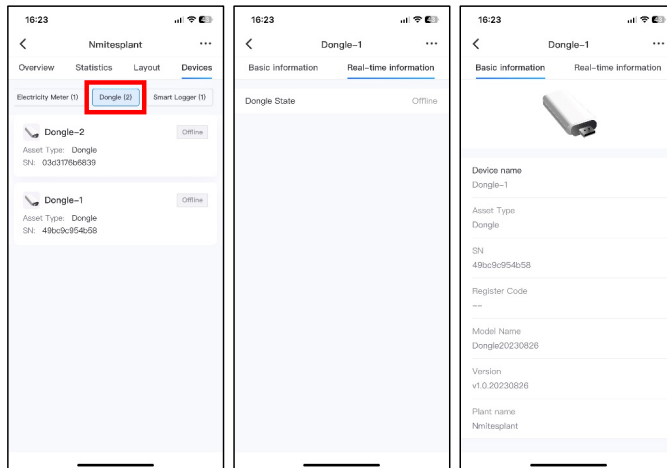
- a. Press the device type **[Residential Electricity Meter]** at the top of the list, click the device card. You will be directed to the **[Real-time information]** tab on the electricity meter details page and view the interface content display.
- g. Switch to **[Basic information]** tab to view the electricity meter basic information data display.
- h. Switch to **[History information]** tab, select the signal point type and name, and view the history information chart.

3.4.2.4 Smart Logger



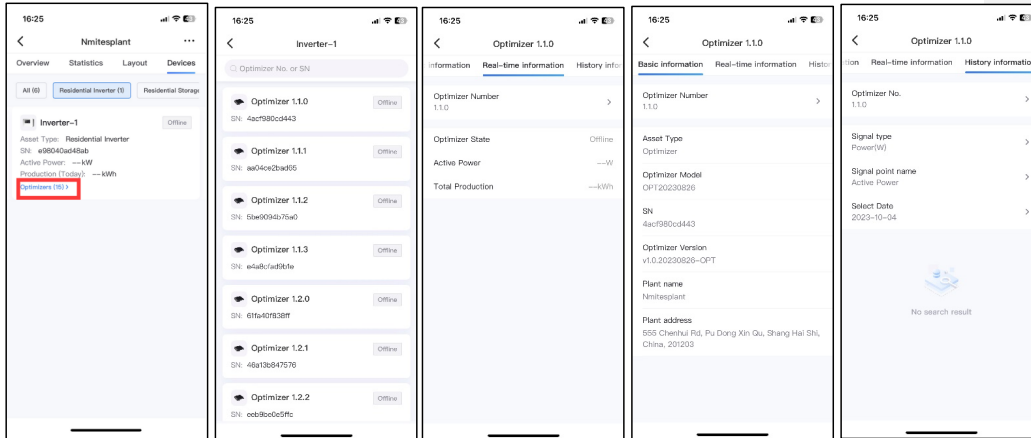
- Press the device type **[Smart Logger]** at the top of the list, click the device card. You will be directed to the **[Real-time information]** tab on the smart logger details page and view the interface content display.
- Switch to **[Basic information]** tab to view the smart logger basic information data display.

3.4.2.5 Dongle



- Press the device type **[Dongle]** at the top of the list, click the device card. You will be directed to the **[Real-time information]** tab on the dongle details page and view the interface content display.
- Switch to **[Basic information]** tab to view the dongle basic information data display.

3.4.2.6 Optimizer



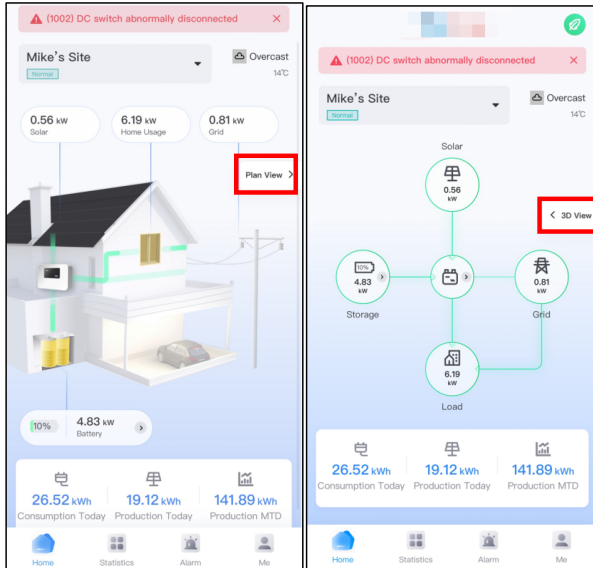
- a. Optimizers are placed under the Inverter card, enter the Optimizers list of the inverter, and view the list data display.
- b. Press an optimizer in the list, you will be directed to the **[Real-time information]** tab on the optimizer details page and view the interface content display.
- c. Switch to **[Basic information]** tab to view the electricity meter basic information data display.
- d. Switch to **[History information]** tab, select Optimizer No. and view its history information chart.

3.4.3 End User Power Station & Device Monitoring

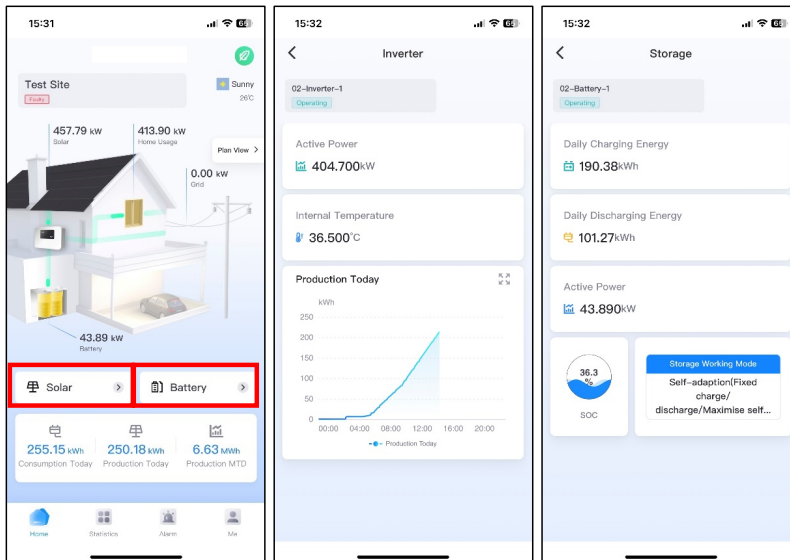
Pre-requisite: You are using an End User account.

3.4.3.1 Home Page

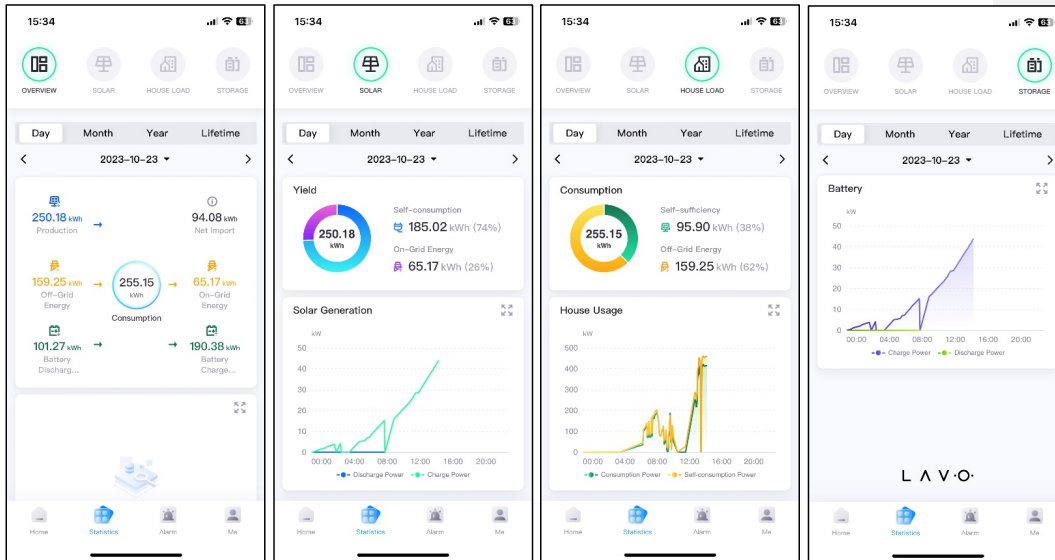
1. View residential asset data on the 3D or Plan View, you can toggle the 3D View/Plan View button to view the energy flow diagram.



2. Press the asset to view the individual asset information.



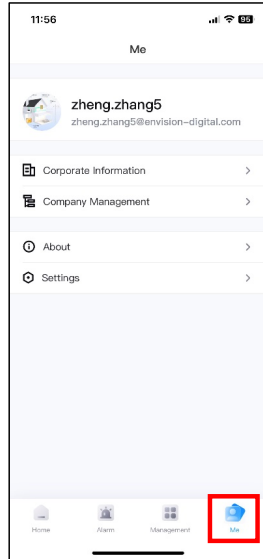
3.4.3.2 Statistics Page



1. Press **[Overview]** to view the overall statistics data such as production, net import, off-grid energy, on-grid energy, battery discharging power and battery charging power at different time dimensions.
2. Press **[SOLAR]** to view the statistics data for solar production, switch the dimensions of day/month, year, and life period to view the photovoltaic data at different time dimensions.
3. Press **[HOUSE LOAD]** to view the statistics data for house load, switch the dimensions of day/month, year, and life period to view the load data at different time dimensions.
4. Press **[STORAGE]** to view the statistics data for battery, switch the dimensions of day/month, year, and life period to view the storage data at different time dimensions.

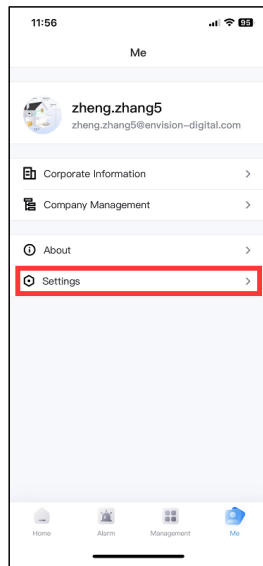
3.5 Account & System Management

Account and system can be managed on the Me page as shown below:

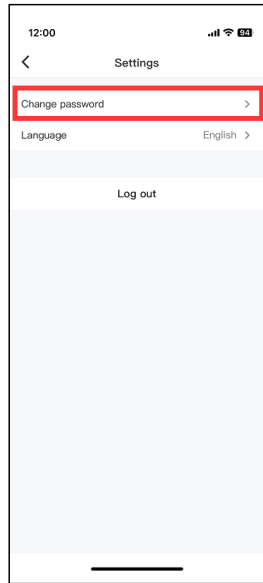


3.5.1 Edit Password

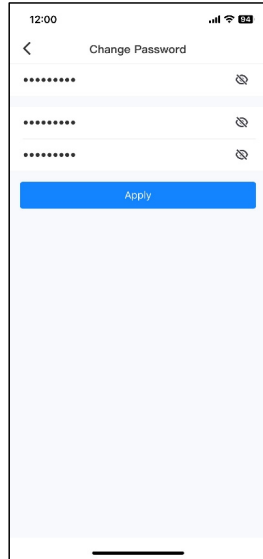
1. On **[Me]** page, press **[Settings]**.



2. Press **[Change Password]**.

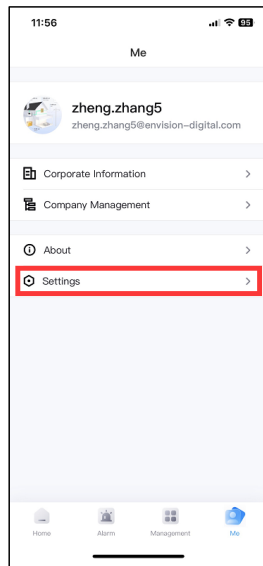


3. You will be directed to Change Password page.
4. Enter your old password.
5. Enter and confirm your new password.
6. Press **[Apply]** to change the password.

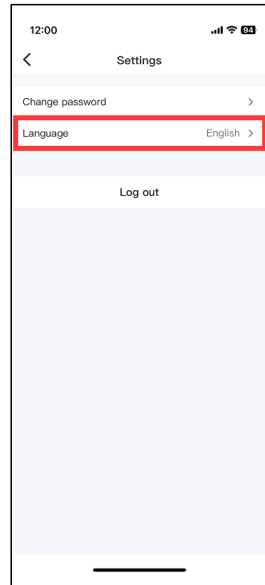


3.5.2 Switch Language

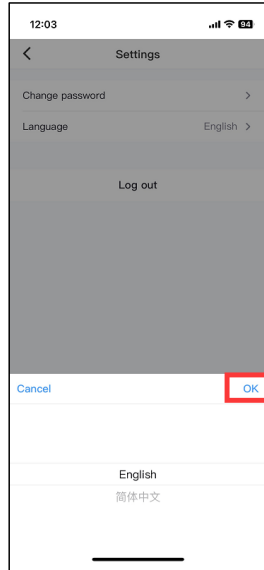
1. On Me page, press **[Settings]**.



2. Press **[Language]**.

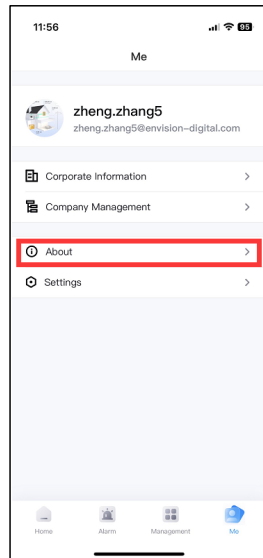


3. Swipe to choose a desired language. Univers EMS supports English and Chinese languages currently.
4. Press [OK] to confirm the switching of language.

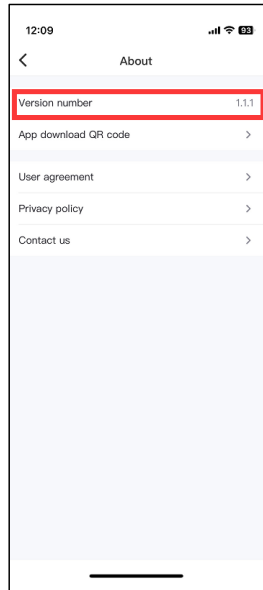


3.5.3 Check System Information

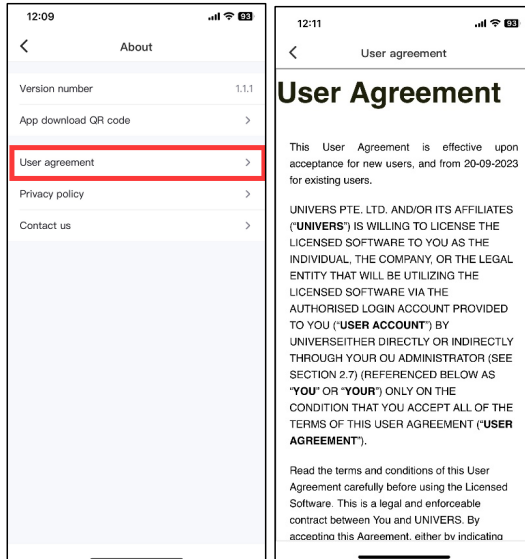
1. Go to **[Me]** page and press **[About]**.



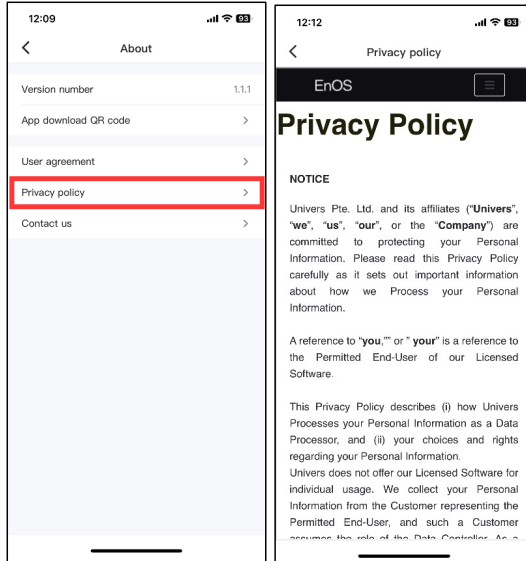
2. Version number is shown on the first line on the About page.



3. Press [User Agreement] and you will be directed to the User Agreement page.



4. Press [**Privacy Policy**] and you will be directed to the Privacy Policy page.

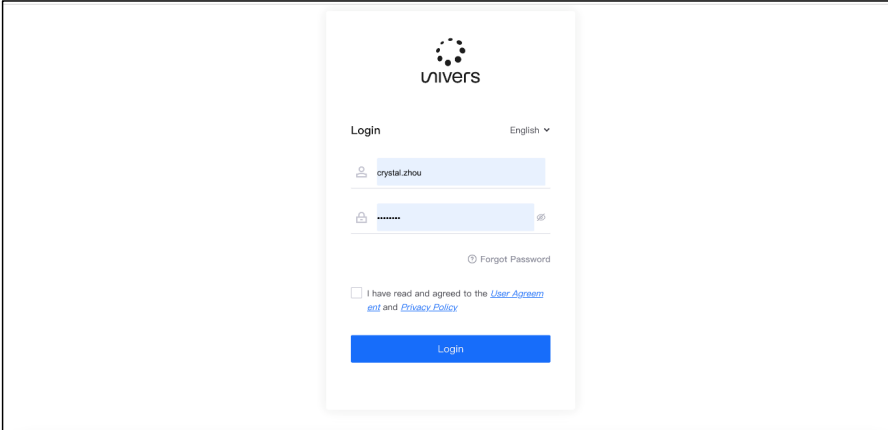


4 User Interface – Web Application

4.1 Login

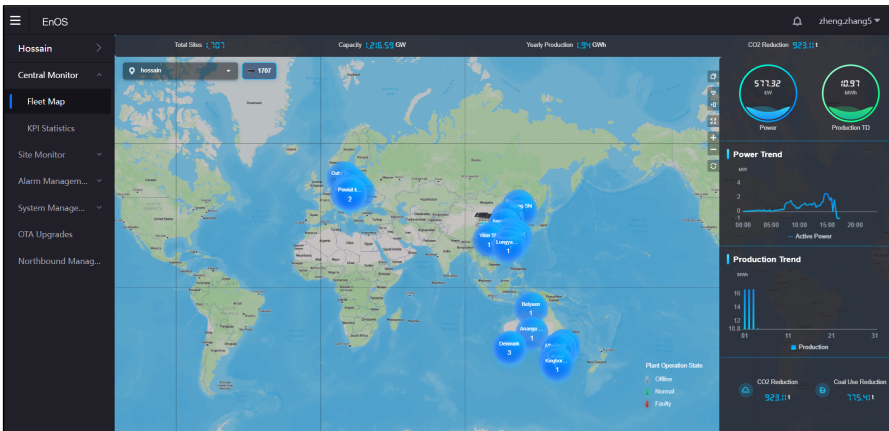
For first time user, if you are using a System Admin/Installer Admin/Installer account, please refer to the section [2.1.2 Login to the Web Application](#) for more information.

Univers EMS Web portal provides a login access page when you first opened the application. To log in to Univers EMS, enter your credentials (username, password) and check the **box** to consent the User Agreement and Privacy Policy.



If you forget the login password, click the **[Forget password]** button to retrieve the password.

After logging, you will be directed to the Fleet Map page under the Central Monitor of Univers EMS where you can monitor your power stations.



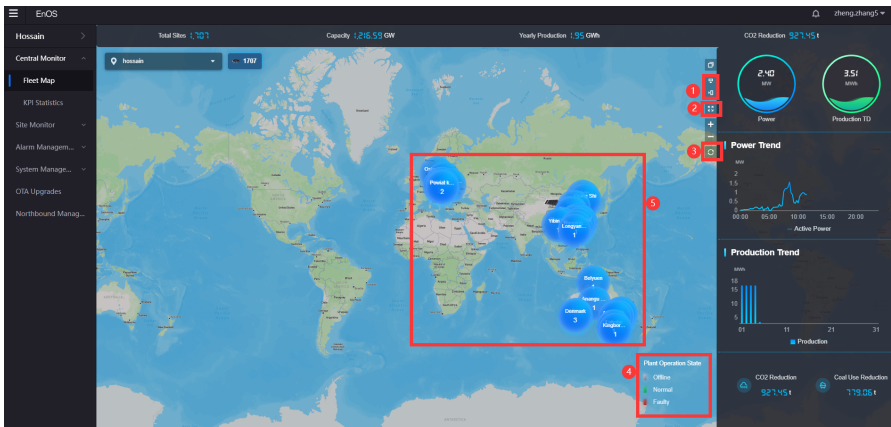
4.2 Central Monitor

4.2.1 Fleet Map

In the left pane, click **[Central Monitor]** and **[Fleet Map]** to access the Fleet Map interface. The Fleet Map interface shows a satellite world map, displaying the geographical distribution of power stations and key statistical indicators.

The following section introduces the operations on the Fleet Map interface:

- Move up and down the scroll wheel of the mouse to zoom in or out of the map page.
- Press and hold the left mouse button to drag the map to any position on the page.



Function 1: Click the Collapse button to show or hide the indicator bar on the right. The indicator bar shows the key indicators such as Power, Production Today, Power Trend, CO₂ Reduction, and Coal Use Reduction.

Function 2: Click the icon to collapse the navigation and menu bar to display the fleet map in full screen.

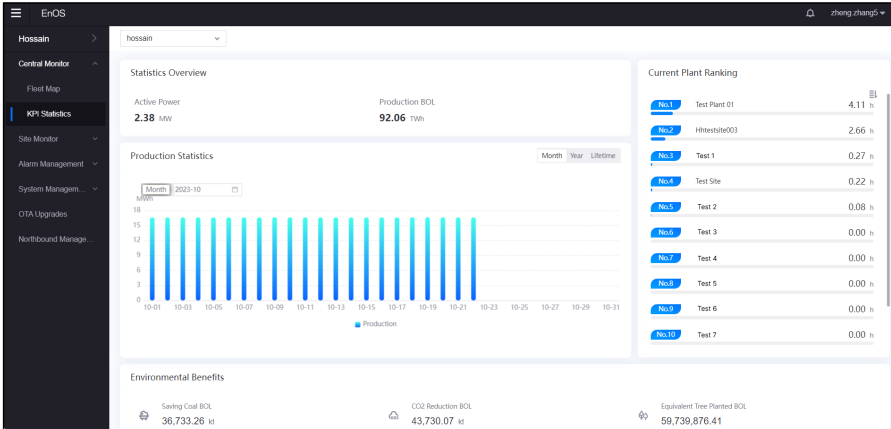
Function 3: Click the Reset button to restore the map display range, and by default display all power plant map ranges within the user's permission range.

Function 4: In the monitoring mode, the site icons are distinguished by different colours to indicate the health status. In the presentation mode, the site icons are shown in blue.

Function 5: Click a site icon to show the detailed information and KPIs.

4.2.2 KPI Statistics

The KPI Statistics page can be accessed from the left menu panel **[Central Monitor] – [KPI Statistics]**.



This page provides a Statistics Overview for users to cross monitor all the power stations under the user. This page displays the Statistics Overview, Production Statistics, Current Plant Ranking and Environmental Benefits. The user can view Production Statistics over a desired time by choosing the desired Month/Year/Lifetime.

4.3 Site Monitor

4.3.1 Site List

The Site List page is accessed from left menu panel [Site Monitor] – [Site List].

批注 [CZ5]: 会展示用户有权限的电站

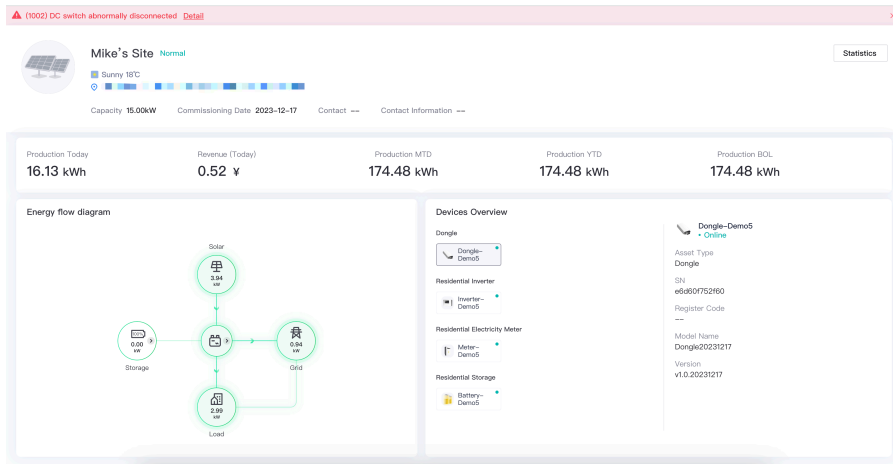
Site Name	Plant Operation State	Capacity (kW)	Production Today (kWh)	Revenue (Today)	Active Power (kW)	Action
001	Offline	20.00	--	--	--	Overview PH V.
001	Offline	100.00	--	--	--	Overview PH V.
01	Offline	0.00	--	--	--	Overview PH V.
002	Offline	2000.00	--	--	--	Overview PH V.
003	Offline	100.00	--	--	--	Overview PH V.
555	Offline	5.00	--	0.00	0.00	Overview PH V.
0816	Offline	600.00	--	--	88.40	Overview PH V.
49494	Offline	2000.00	--	--	--	Overview PH V.
0529001	Faulty	5.00	--	--	0.00	Overview PH V.
0530001	Offline	5.00	--	--	--	Overview PH V.
0608001	Offline	5.00	--	--	--	Overview PH V.
0626_033	Offline	509.00	--	--	--	Overview PH V.
Summary		SUM: 1216593.53	SUM: 3451.67	FX: 61213.02	SUM: 2445.02	

This page is designed to show the summary of asset operation for all the sites within the user's authority, in terms of operation state, capacity, production, revenue, and active power.

Function 1: Click on one of the states to filter the sites by the operation state.

Function 2: Click the title of each parameter to sort the sites.

Function 3: Click the **[Overview]** to monitor details of the chosen site. This New Tab will open:



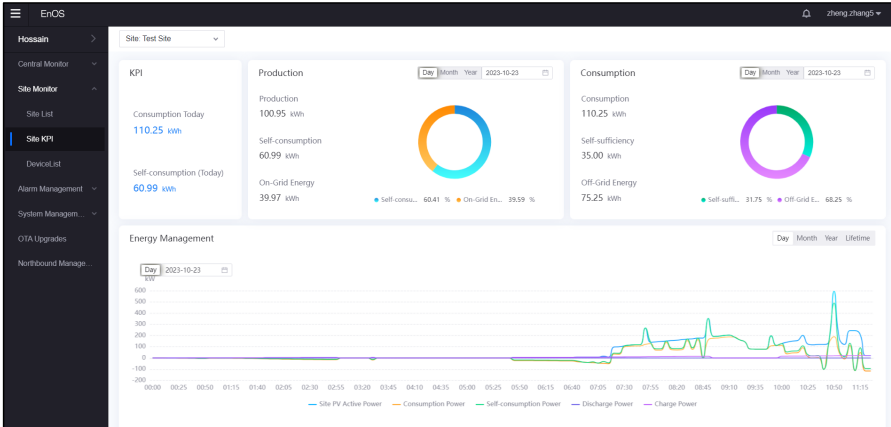
You can monitor the details of the site such as the energy flow diagram and the devices overview. Click on the device to view the details of the device.

Function 4: Click the **[KPI View]** to be redirected to the Site KPI page of the chosen site.

4.3.2 Site KPI

The Site KPI page can be accessed from left menu panel **[Site Monitor] – [Site KPI]**.

批注 [C26]: 换一张截图



This page displays key KPI indicators of the power station such as Production, Consumption, Energy Management, Revenue and Environmental Benefits of the chosen site. You can toggle the Day/Month/Year/Lifetime and choose a desired time to view the real-time and historical data.

4.3.3 DeviceList

The DeviceList page can be accessed from left menu panel [Site Monitor] – [DeviceList].

Filters: Site All (1707), Device Type Resident, Device All (4031)

Residential Inverter Name	SN	Inverter State	Active Power (kW)	Production (Today) (kWh)	Action
02-Inverter-1	18a590b18b1	Standby	287.00	98.94	Details
02-Inverter-2	18c4c348e2	Offline	5.40	--	Details
235Inverter-1	128414b83885	Offline	20.00	--	Details
APP0taTestInverter1	--	Offline	--	--	Details
APP0taTestInverter10	--	Offline	--	--	Details
APP0taTestInverter11	--	Offline	--	--	Details
APP0taTestInverter12	--	Offline	--	--	Details
APP0taTestInverter13	--	Offline	--	--	Details
APP0taTestInverter14	--	Offline	--	--	Details
APP0taTestInverter15	--	Offline	--	--	Details
APP0taTestInverter16	--	Offline	--	--	Details
APP0taTestInverter17	--	Offline	--	--	Details
APP0taTestInverter18	--	Offline	--	--	Details

Total: 4031 | Page: 10 / 100

This page provides the operating data and key indicators of each device accessed to the system in the power station. The detail page provides device data details to help you to monitor efficiently.

In the DeviceList page, you can view all types of equipment. You can select the power station to view through the asset tree at the top of the page.

Function 1: Choose the site that you want to monitor.

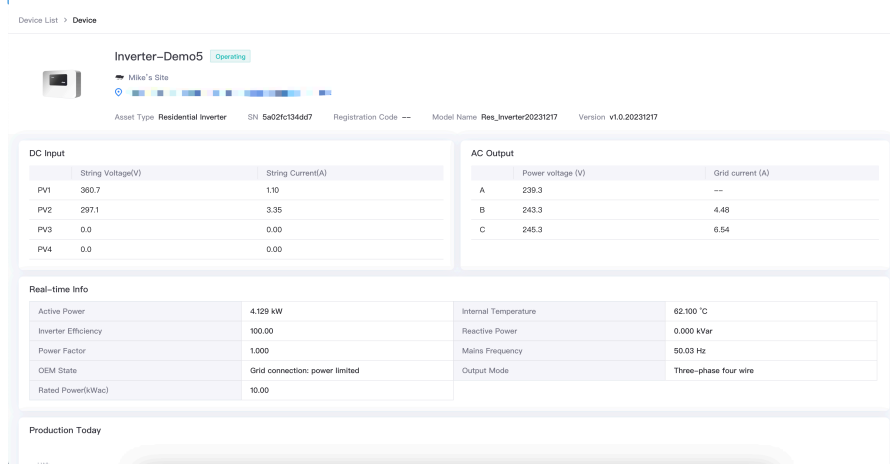
Function 2: Choose the device type that you want to monitor.

Function 3: Choose the device that you want to monitor.

Function 4: Choose the device state by clicking one of the states.

Function 5: Click **[Details]** to open the device details page:

批注 [CZ7]: 换有数据的截图

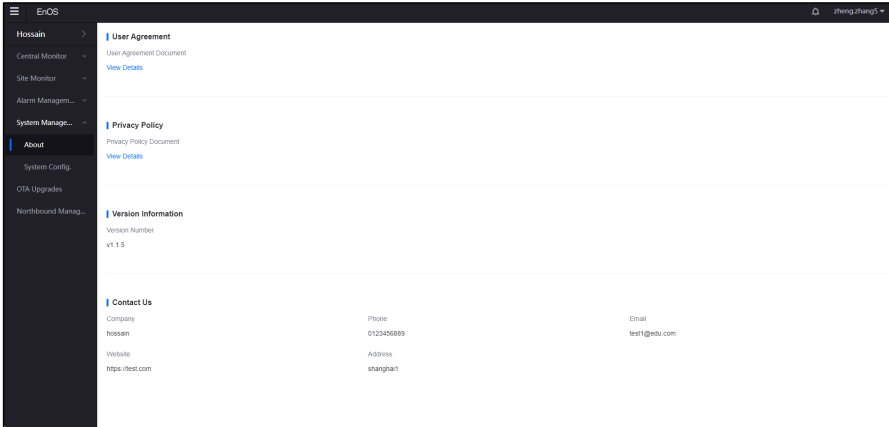


This window displays the detailed data of the device.

4.4 System Management

4.4.1 About

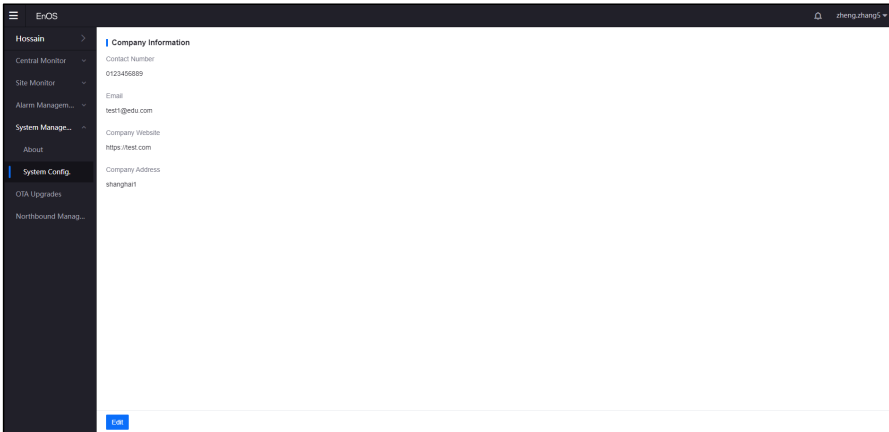
The About page can be accessed from the left menu panel **[System Management]** – **[About]**.



This page displays the User Agreement and Privacy Policy. You can view them by clicking the **[View Details]** under each individual section. This page also allows user to check Version Information and Contact information.

4.4.2 System Config

The System Config page can be accessed from the left menu panel **[System Management]** – **[System Config]**.



This page displays your company information such as contact number, email, website, and address. You can edit the information by clicking the **[Edit]** button at the bottom of the page.

Univers EMS



This page displays different types of devices where you can add, download, upgrade and delete a firmware.

Function 1: Switch between different tabs for different devices.

Function 2: Add a new firmware by clicking the **[+ New]** button and this window will be displayed