

Dyness Web User Manual

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Introduction

- This document provides a comprehensive overview of common operations for the Dyness PC User.
- Prior to configuring parameters, it is essential to carefully read this manual along with the user manual for the corresponding model. Familiarize yourself with the product's features and characteristics, as incorrect grid parameter settings may result in the inability to connect to the grid or failure to comply with grid requirements, affecting power generation.
- This document may be subject to periodic updates; please refer to the official website for the latest version and additional product information.

Target Audience

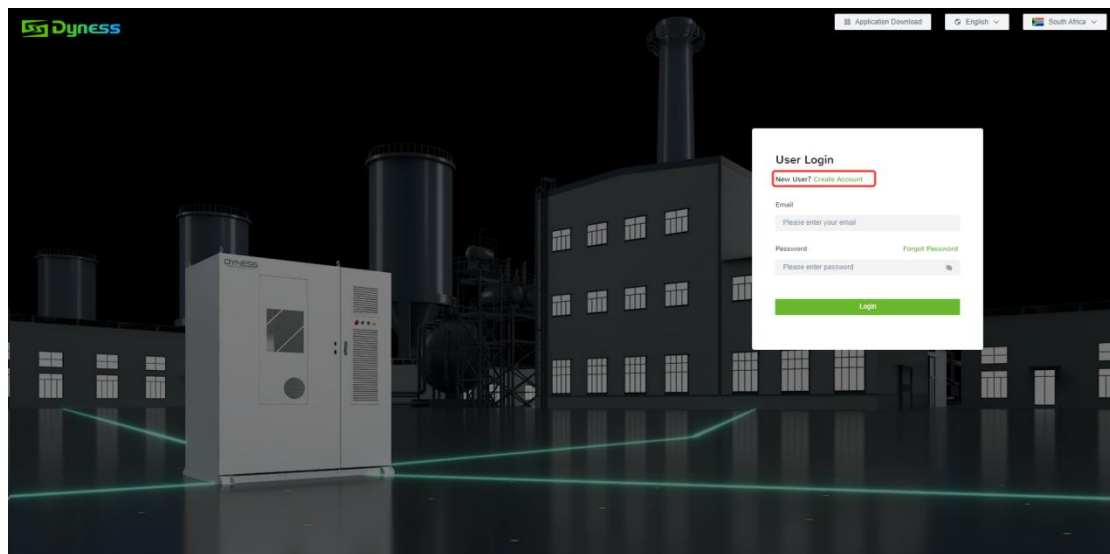
This document is intended solely for professionals who are familiar with local regulatory standards, electrical systems, and have undergone specialized training. These individuals should possess a thorough understanding of the relevant knowledge pertaining to this product.

Account Registration

Registration Method

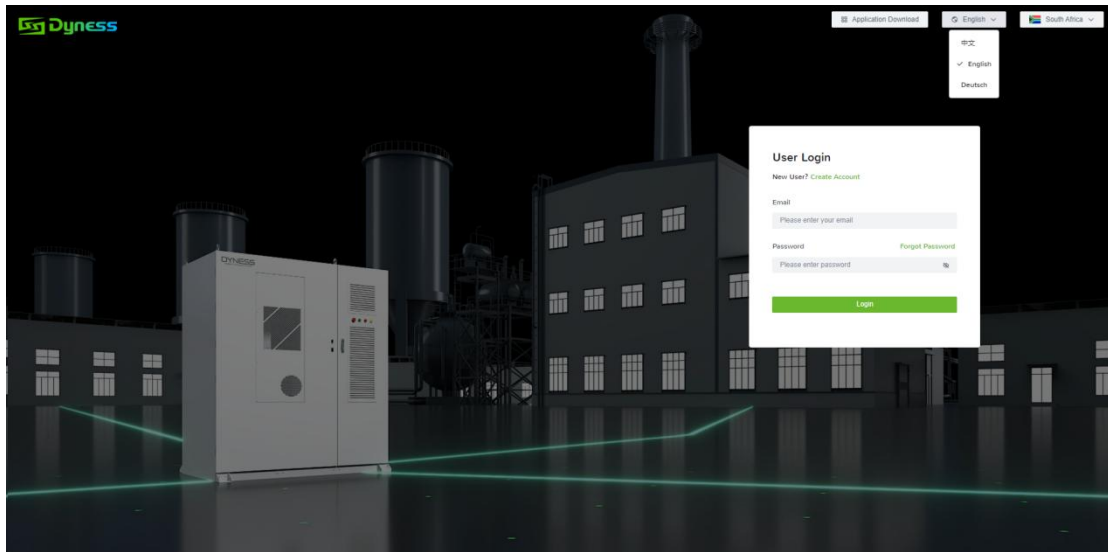
If you don't have a Dyness account, you can sign up by clicking on the 'Create Account' option on the login page.

Login address : <https://ems.dyness.com/login>



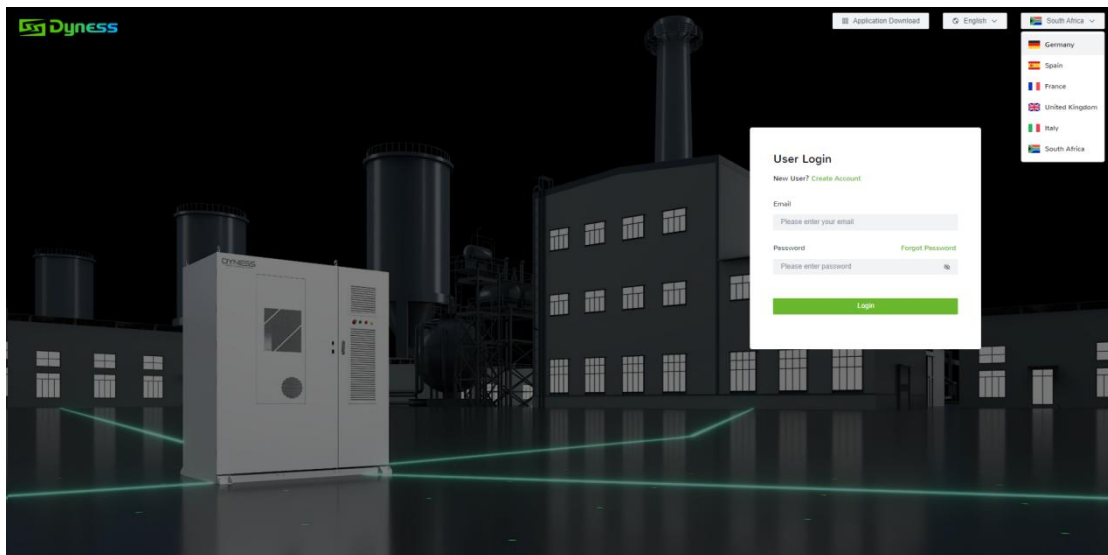
Language Settings

Adjust the system language according to your preferences or needs.



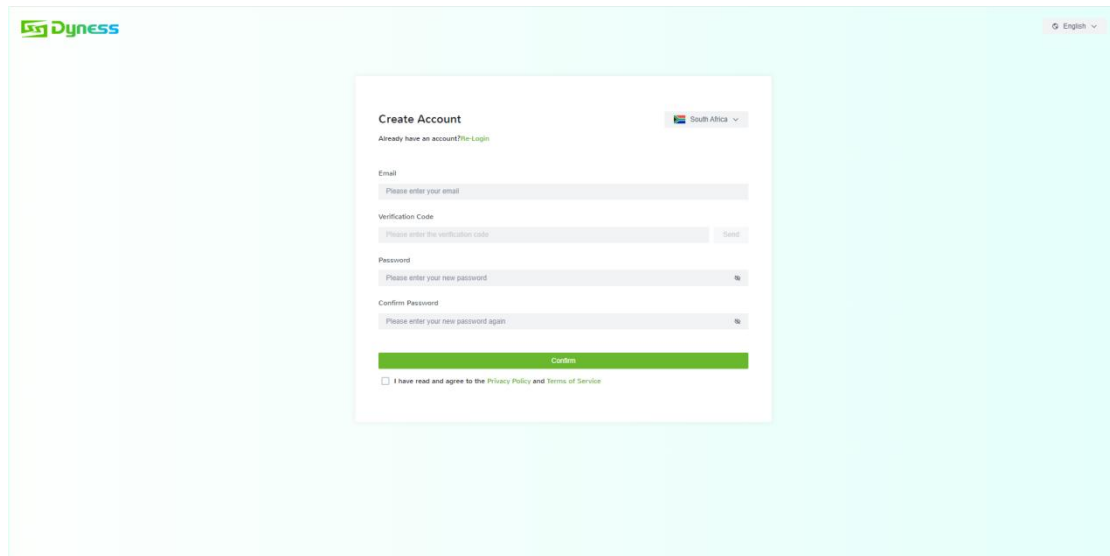
Country or Region

Select your actual location based on the current country or region.



Registration Process

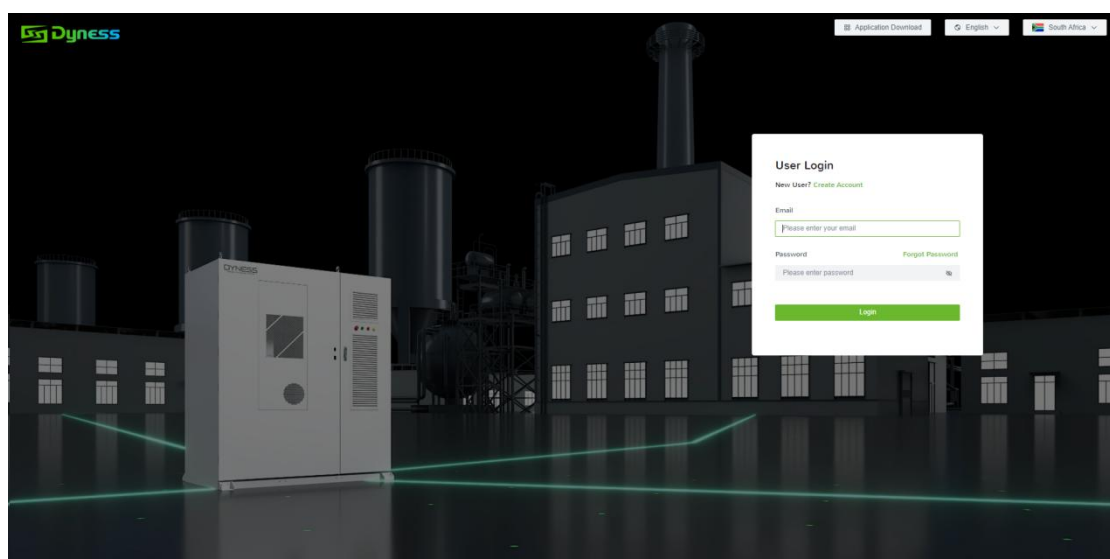
Complete the account registration by entering essential information such as email, verification code, password, and password confirmation.



Login and Logout

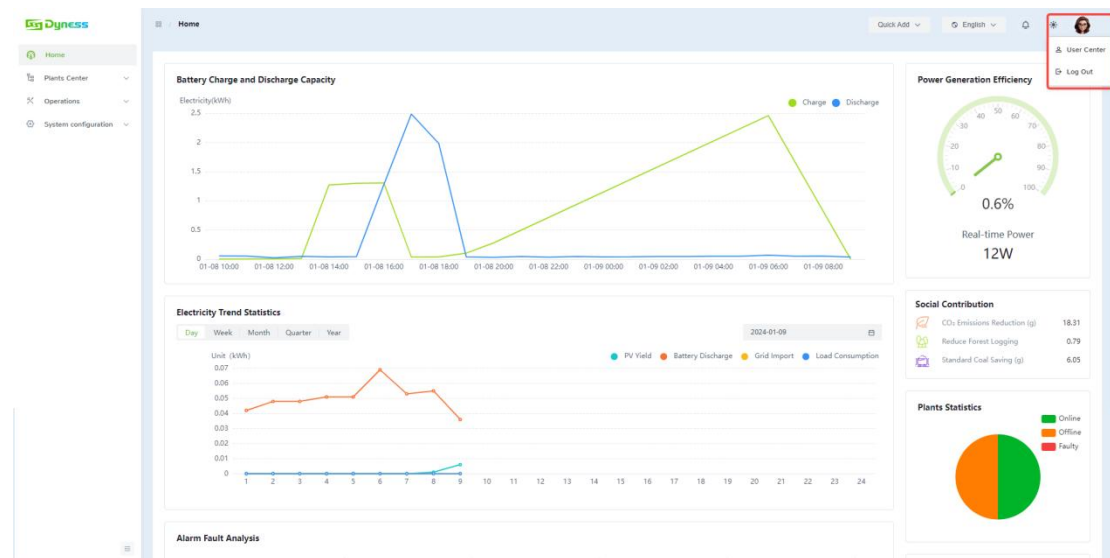
Login

- 1) Enter the login account [Note: This account must be an activated account].
- 2) Enter the login password [Note: The current password is the one set when the account was activated].
- 3) Click "Login" to access the system.



Logout

- 1) Click on the "Profile" in the upper right corner.
- 2) Choose "Log Out."

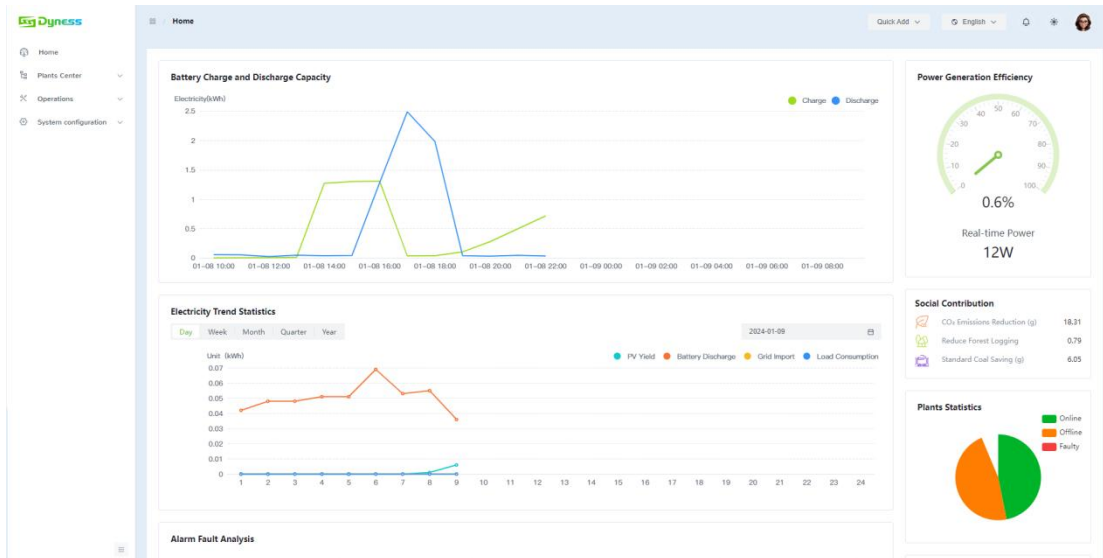


Home

Access the system homepage to view relevant statistical data and control the power station.

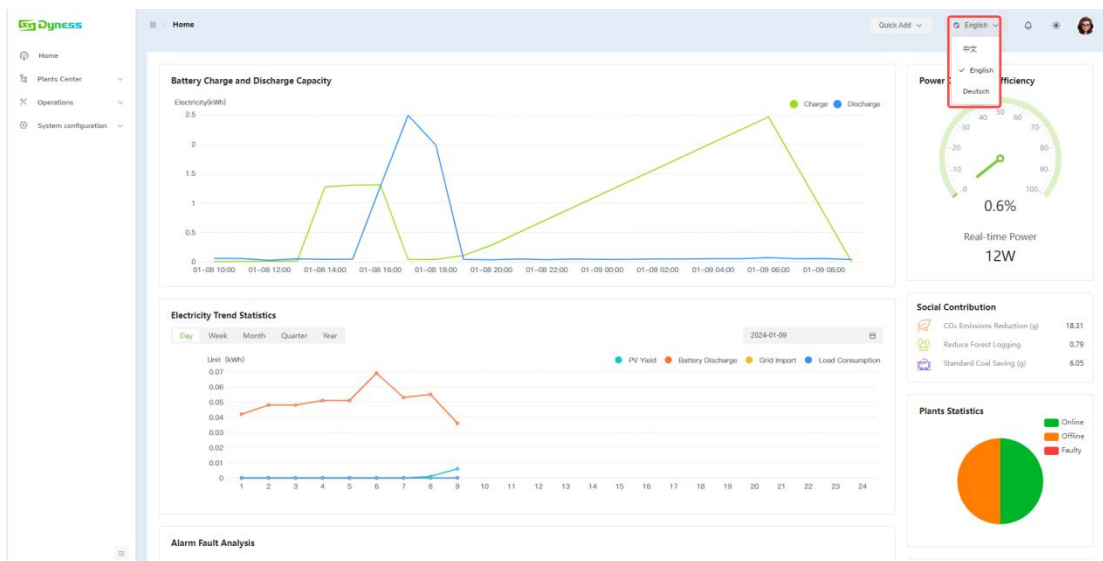
Data Statistics

Aggregate and display data from multiple dimensions, including power plants, equipment, generation efficiency, alerts, and social contributions



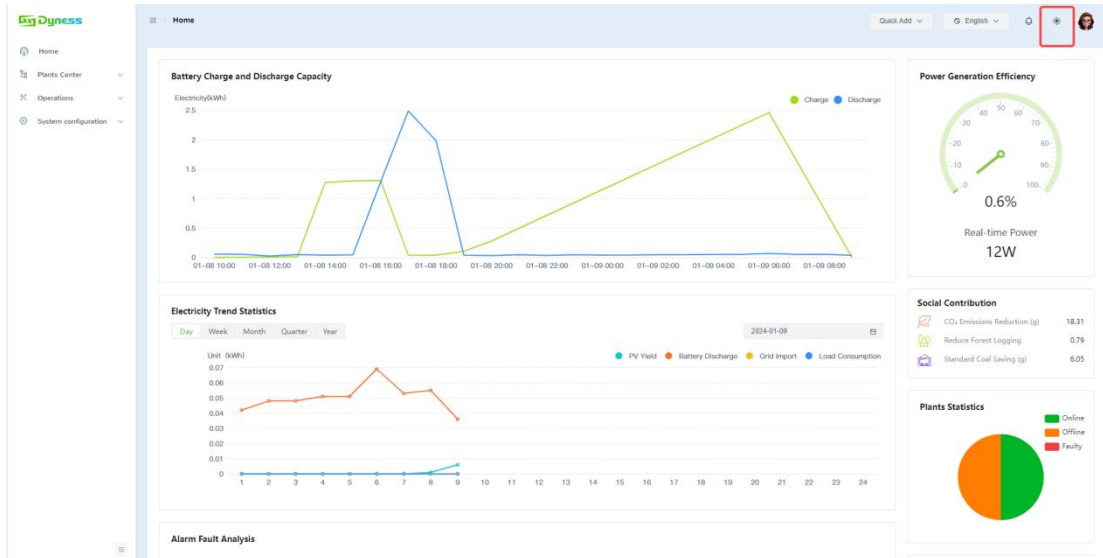
Language Mode

Adjust the system language according to your actual needs.



System Style

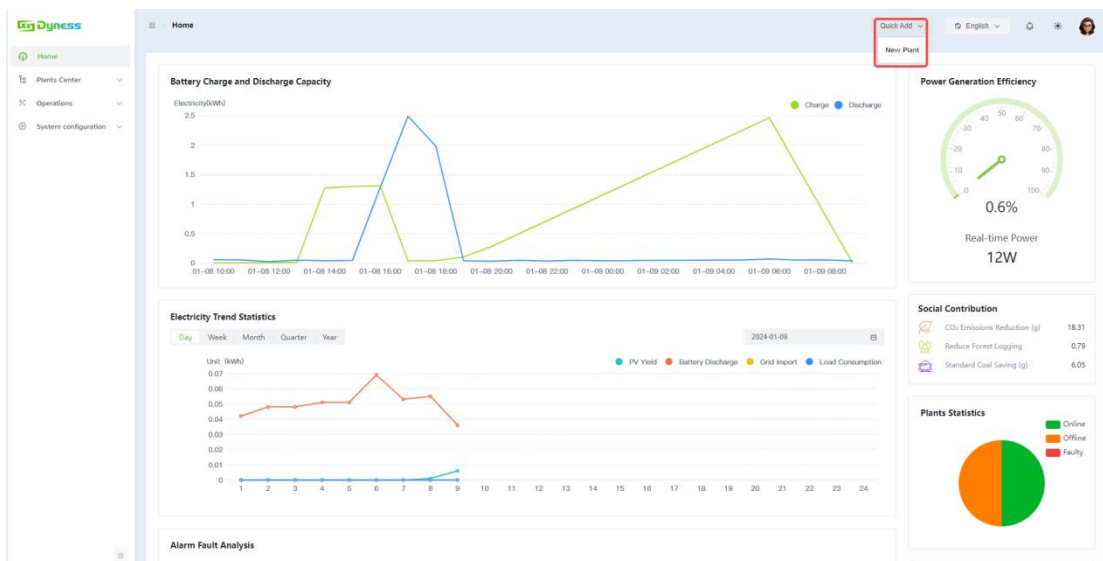
Adjust the system style according to your actual needs.



Quick Add

Here you can quickly create a new power station.

New Power Station: Click to enter the add page.



Power Station Center

By selecting the left-hand menu option [Power Station Center], you can access the power station management and device management pages. Here, you can view the power stations associated with the currently logged-in account:

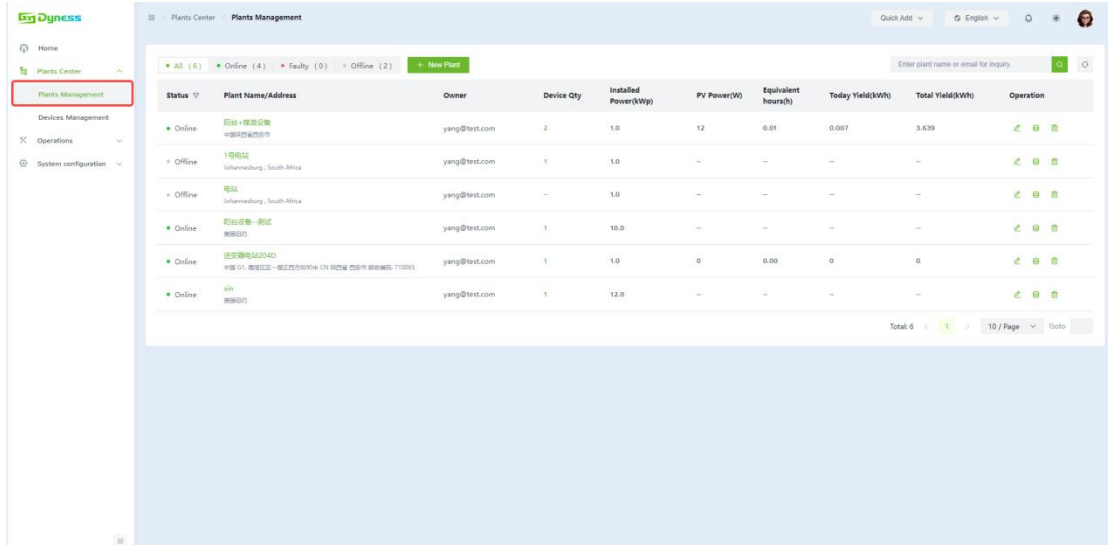
Power Station Management

Device Management



Plants Management

Upon entering the Power Station Management page, you can view a list of power stations associated with the currently logged-in account. Additionally, you have the capability to perform operations such as adding, deleting, and modifying power stations.

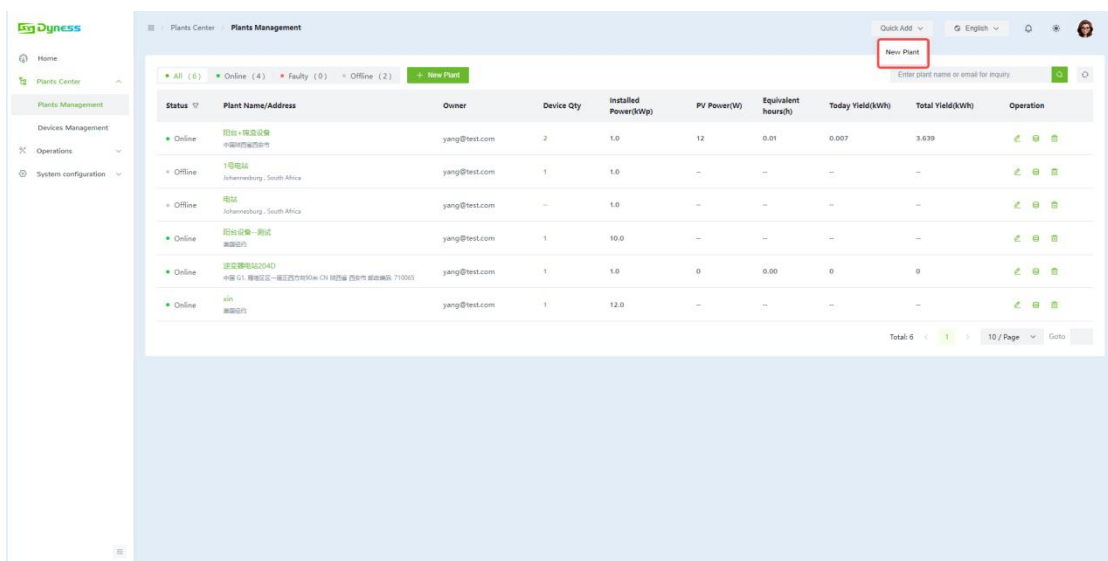


New Power Station

Enter the power station addition page.

Method 1: Click on [Power Station Center] - [Power Station Management] - [Create New Power Station] to access the power station addition page.

Method 2: Click on the top right corner of the page [Quick Add] - [Create New Power Station] to enter the power station addition page.



Complete Power Station Basic Information

Please follow the prompts to provide comprehensive power station information. Fields marked with an asterisk (*) are mandatory, and the more detailed information you provide, the more effectively you can manage the power station.

The screenshot shows the 'New Plant' form in the Esy Dyness system. The 'Installation Information' section includes a 'Plant Cover' image, a 'Plant Name' field, a 'System Type' dropdown (set to 'PV + Grid + Energy Storage + Load'), a 'Grid Connection Type' dropdown (set to 'Distributed surplus electricity grid connection'), a 'Plant Type' dropdown (set to 'Residential'), an 'Installed Date' field (set to '2024-01-08'), and an 'Installed Power(Wp)' field with a placeholder 'Please enter the installed power'. The 'Installation Location' section includes an 'Address' field (set to '65842XRG-X7'), a 'Detailed Address' field (set to '65842XRG-X74'), 'Plant Time Zone' (set to 'UTC+7:00'), 'Longitude' (set to '+88.824398'), and 'Latitude' (set to '3.987505'). Below these is a Google Maps view showing a red location pin. The 'Profit Formula Setting (based on 1kWh)' section includes fields for 'Standard Coal Saving (g)' (0.3295), 'CO₂ Emissions Reduction (g)' (0.997), 'Reduce Forest Logging' (0.043), 'Price' (0.4 EUR), and 'Total Cost' (EUR).

Installation Information

Please complete the installation information for the power station as per the prompts: power station cover, power station name, system type, grid connection type, power station type, installation date, and installed capacity.

This screenshot is identical to the one above, but with a red rectangular box highlighting the 'Installation Information' section. This section contains the 'Plant Cover' image, 'Plant Name' field, 'System Type' dropdown, 'Grid Connection Type' dropdown, 'Plant Type' dropdown, 'Installed Date' field, and 'Installed Power(Wp)' field.

Installation Location

You can input relevant information for completion: address, detailed address, power station time zone, longitude, and latitude. Alternatively, you can directly click on the power station location on the map, and the system will automatically fill in the remaining information for you.

The screenshot shows the 'New Plant' configuration page in the Dyness system. The 'Installation Location' section is highlighted with a red box. It contains the following fields:

- * Address: Enter address
- * Detailed Address: Enter detailed address
- * Plant Time Zone: 01:00 12:00
- Longitude: 0
- Latitude: 0
- A Google Maps interface for selecting a location.

Below the map, the 'Profit Formula Setting (based on 1kWh)' section is visible, containing:

- * Standard Coal Saving (g): 0.3295
- * CO₂ Emissions Reduction (g): 0.997
- * Reduce Forest Logging: 0.043
- * Price: 0.4 EUR
- * Total Cost: Numbers only EUR

Set Revenue Formula

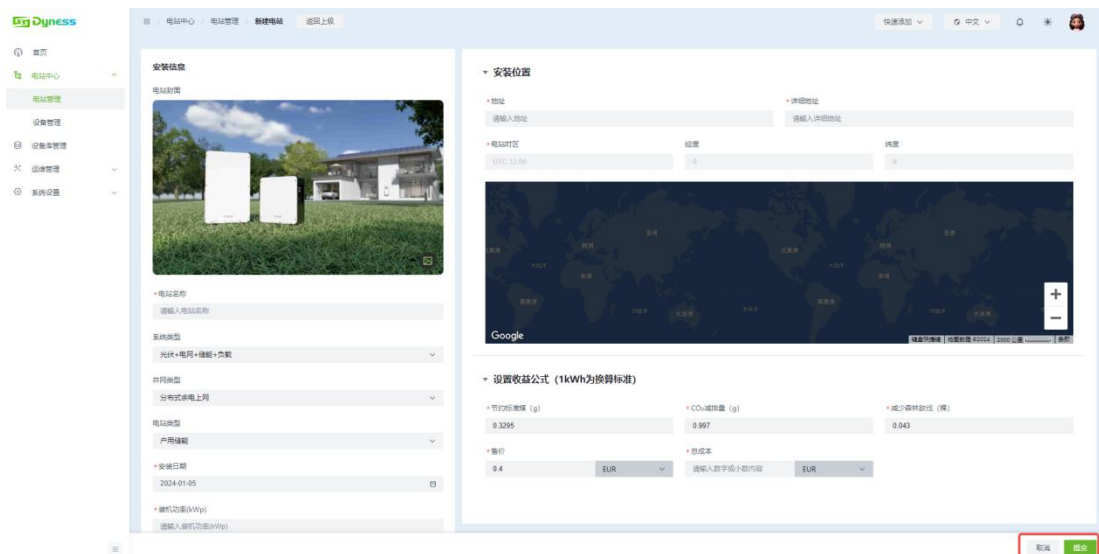
You need to input specific values based on actual information. This will affect the system's revenue calculation, so please confirm carefully.

This screenshot is identical to the one above, showing the 'New Plant' configuration page. The 'Profit Formula Setting (based on 1kWh)' section is highlighted with a red box. The values in this section are:

- * Standard Coal Saving (g): 0.3295
- * CO₂ Emissions Reduction (g): 0.997
- * Reduce Forest Logging: 0.043
- * Price: 0.4 EUR
- * Total Cost: Numbers only EUR

Completion of Creation

After completing the power station information, please click the "Submit" button in the bottom right corner of the page to finish the creation process.

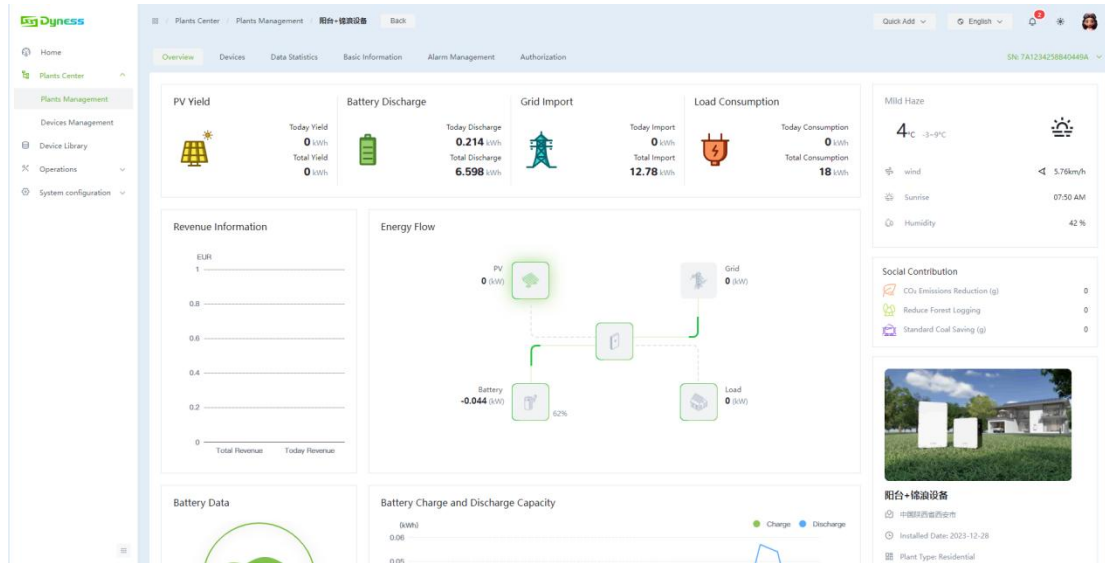


Power Station Details

By clicking on the "Power Station Name," you can enter the power station details page to view an overview of the power station. Additionally, you can switch between pages to view other power station information, such as:

Overview

On the Power Station Overview page, you can view information such as charging and discharging power, energy consumption, revenue, and social contribution.



Devices

On the current page, you can view information about devices associated with the power station.

You can also perform operations such as deleting, editing, and viewing details of the associated devices.

The 'Devices Information' page displays a table with the following data:

Device SN	Device Name	Device Model	Update Time
1031200237030006-BMS	DLS.OC	DLS.OC	2024-01-09 09:45:20 UTC+08:00
807E7A4668180052-BMS	JuniorBox	JuniorBox	2024-01-09 09:48:04 UTC+08:00
1031200237030006	3120	3120	2024-01-09 09:45:20 UTC+08:00
7A1234258840445A	--	--	2024-01-09 09:40:20 UTC+08:00

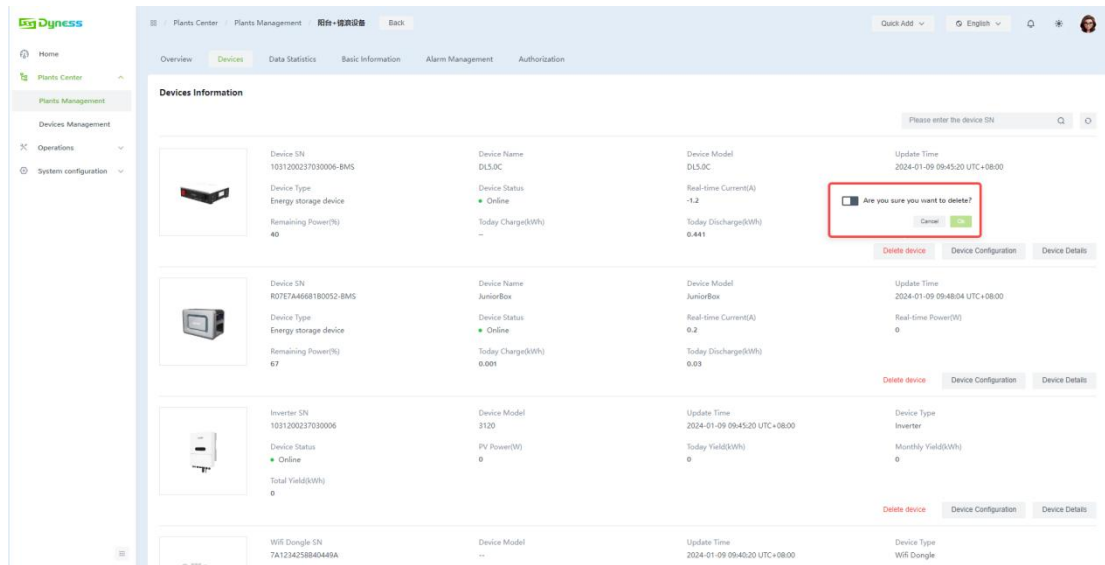
Each device entry includes a 'Delete device' button, a 'Device Configuration' button, and a 'Device Details' button. The first two buttons are highlighted with a red box in the image.

Delete Device

Click the "Delete" button to delete a device.

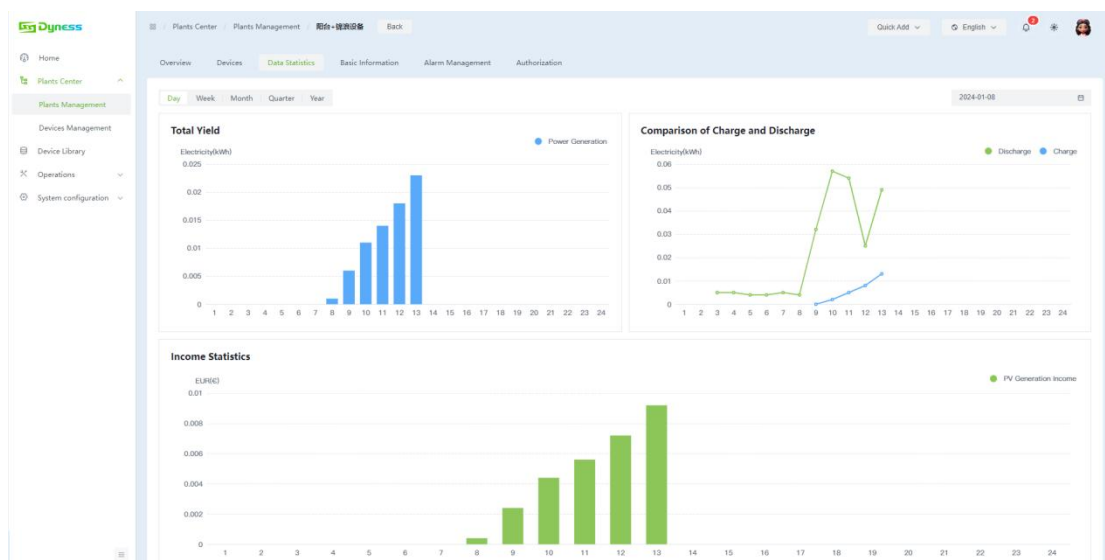
Note: Clicking the delete button will prompt a confirmation in a pop-up window.

After deletion, all data information for the current device will be cleared.



Data Statistics

On the data statistics page within the power station details, you can view statistical information such as total power generation, cumulative charge-discharge comparison, and revenue comparison.



Basic Information

On the current page, you can view basic information about the power station, including station details, installation location, and revenue information settings.

The screenshot shows the 'Basic Information' page in the Dyness web interface. The page is divided into three main sections:

- Plant Information:** Includes a plant cover image, plant name (阳光+储能设备), system type (PV + Grid + Energy Storage + Load), grid connection type (Distributed surplus electricity grid connection), plant type (Residential), installed date (2023-12-28), and installed power (1.0 MWp).
- Installation Location:** Shows the address (中国陕西省西安市), detailed address (西安市), plant time zone (UTC+8:00), longitude (108.954094), and latitude (34.262614). A map of Xi'an, China, is displayed below the location details.
- Profit Formula Setting (based on 1kWh):** Displays three metrics: Standard Coal Saving (g) at 0.3295, CO₂ Emissions Reduction (g) at 0.997, and Reduce Forest Logging at 0.043. The price is listed as € 0.4 and the total cost as € 1.

Alarm Management

The device alarm list displays information such as alarm level, type, content, and time. By clicking on the alarm content associated with the device serial number (SN), you can enter the real-time data page for the device to view detailed information.

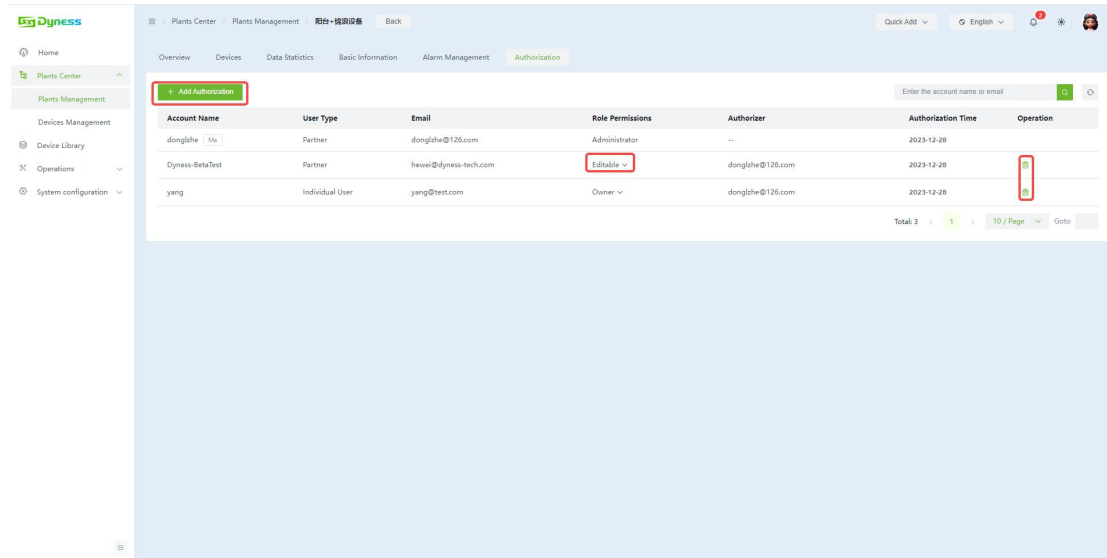
The screenshot shows the 'Alarm Management' page in the Dyness web interface. The page displays a table of alarm events with the following columns: SN, Alarm Level, Alarm Type, Event code, Event Content, Start time, End time, and Operation. The table contains three rows of data:

SN	Alarm Level	Alarm Type	Event code	Event Content	Start time	End time	Operation
101100227030006	1	Alarm	1015	NO-Grid	2024-01-06 16:34:23 UTC+08:00	2024-01-06 16:37:44 UTC+08:00	
101100227030006	1	Alarm	2012	CAN_Comm_FAIL	2023-12-28 15:54:15 UTC+08:00	2023-12-28 15:57:28 UTC+08:00	
101100227030006	3	Faulty	1077	Soft-run-Tout	2023-12-28 15:49:59 UTC+08:00	2023-12-28 15:52:29 UTC+08:00	

The table also includes a search bar at the top right and a pagination bar at the bottom right showing 'Total: 3' and '1 / Page'.

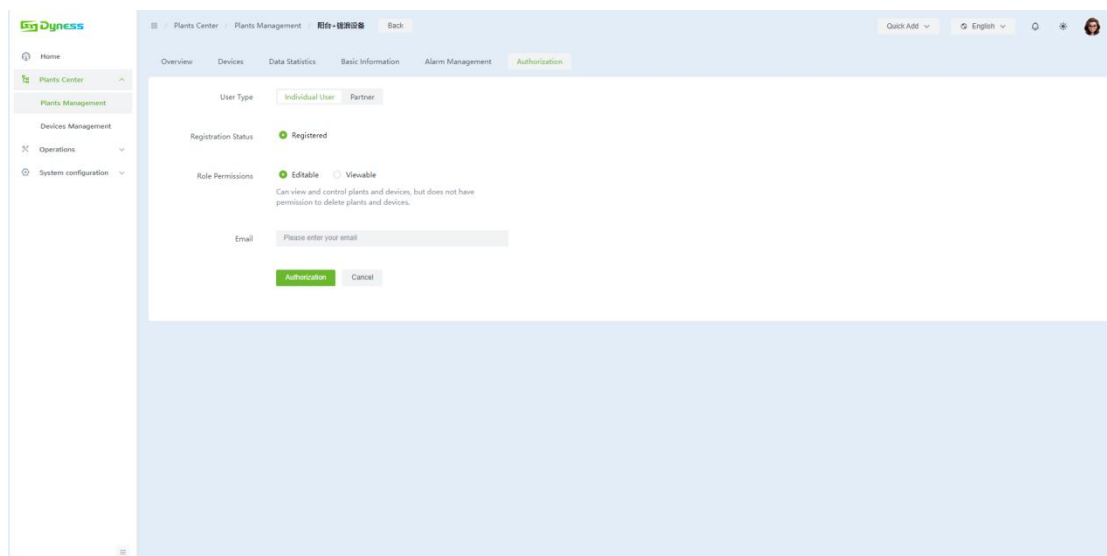
Authorization

On this page, you can view all authorization information for the power station, including user types, role permissions, and time. Additionally, you can perform operations to add, delete, or modify user authorization information.



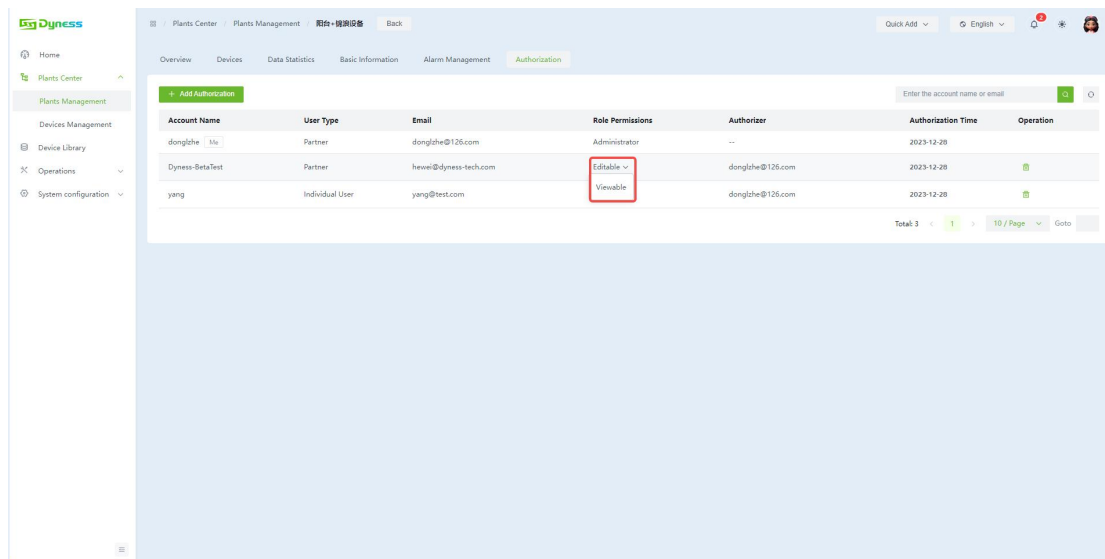
Add Authorization

By adding authorization, you can grant access to the current power station to any user. The user will then have the role permissions you granted: Registered Users: Authorization can be added by searching with the email.



Edit Authorization

If you need to modify the role permissions for a specific authorized user, click on the role button in the role permissions section to switch permissions. Note: Changing the authorized permissions for a user only affects the account you granted authorization to. Unauthorized users cannot modify authorizations.

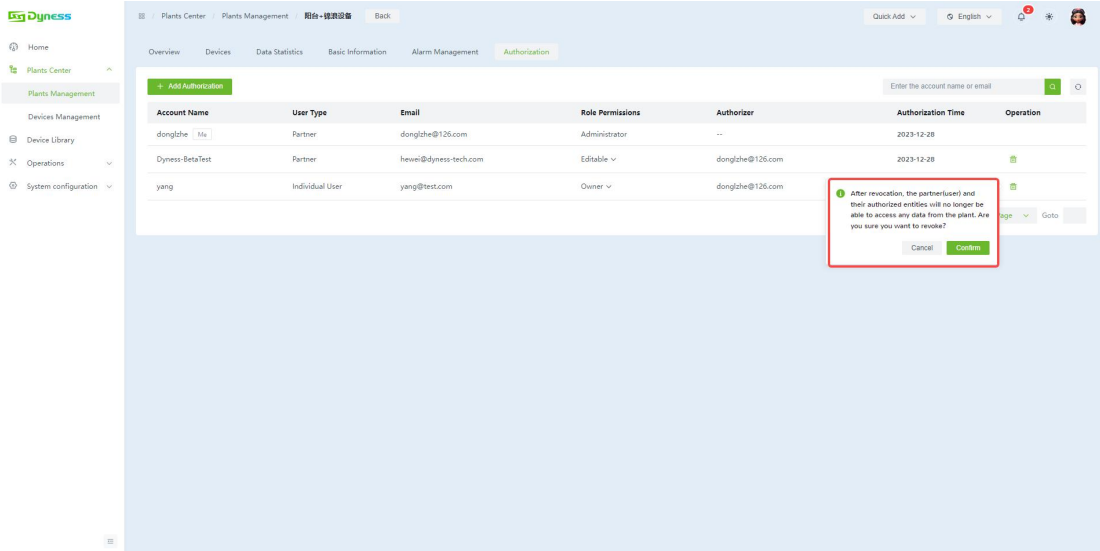


Account Name	User Type	Email	Role Permissions	Authorizer	Authorization Time	Operation
dongzhe	Partner	dongzhe@126.com	Administrator	--	2023-12-28	
Dyress-BetaTest	Partner	hewei@dyress-tech.com	Editable Viewable	dongzhe@126.com	2023-12-28	
yang	Individual User	yang@test.com		dongzhe@126.com	2023-12-28	

Revoke Authorization

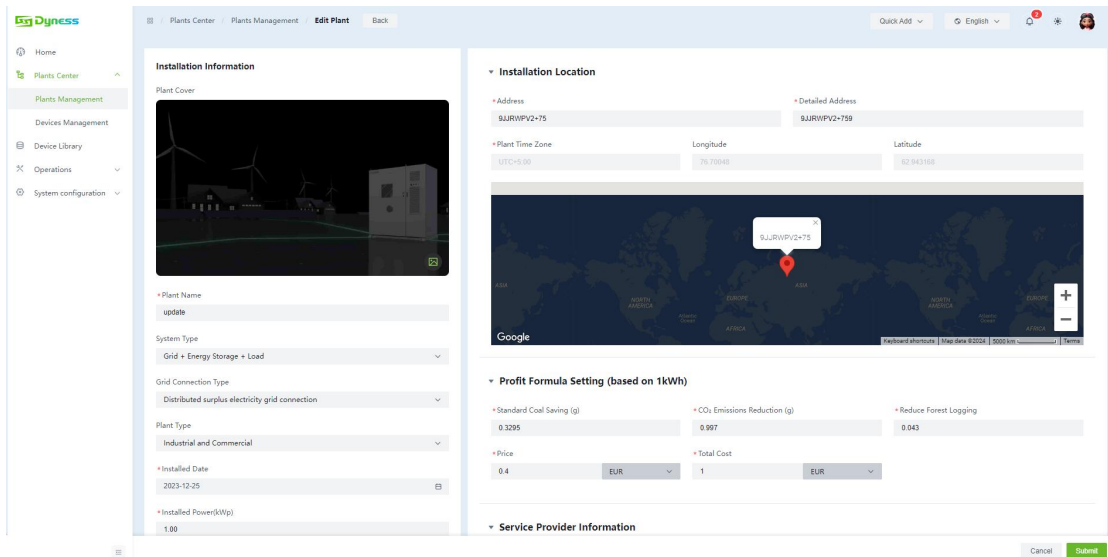
If you need to revoke authorization for a specific authorized user, you can click the delete button in the action column.

Note: Revoking authorization only affects users to whom you granted authorization. Unauthorized users cannot revoke authorization.



Edit Power Station

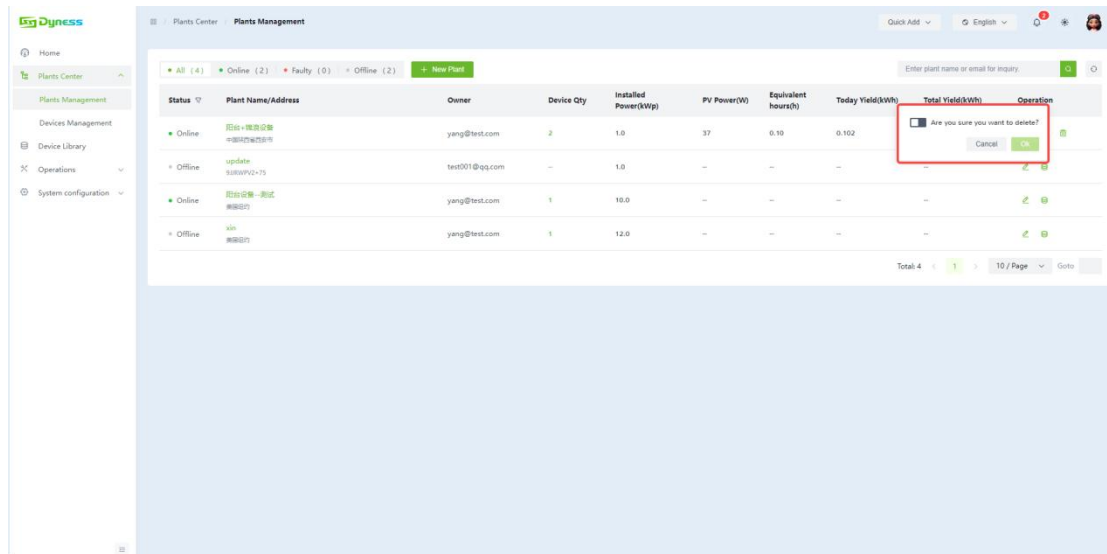
By clicking the button, you can enter the power station editing page. Here, you can edit the basic information of the selected power station, including installation information, installation location, and revenue formula settings.



Delete Power Station

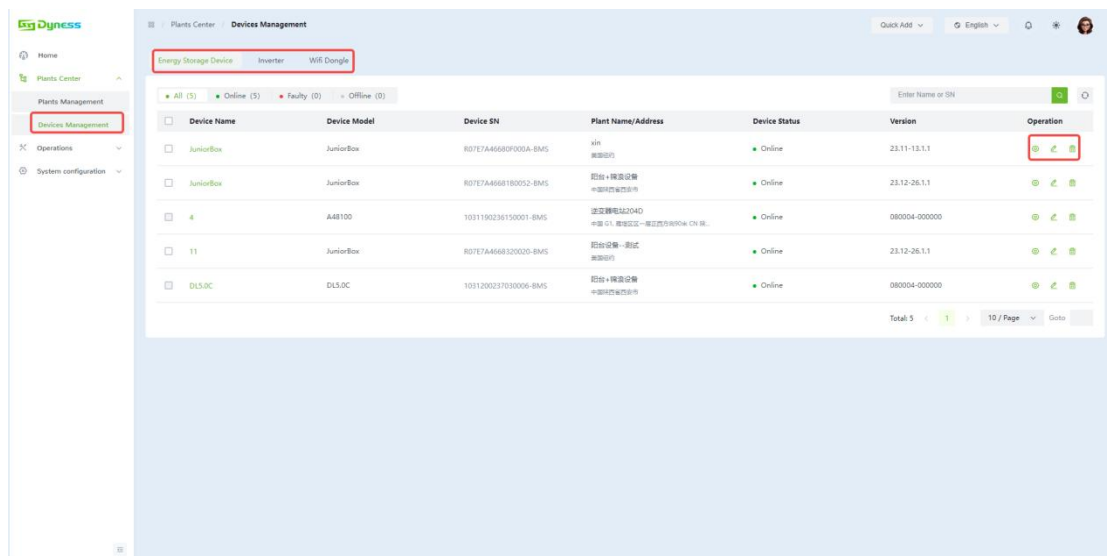
Click the "Delete" button to delete the power station.

Note: Clicking the delete button will prompt a confirmation in a pop-up window (After deletion, all devices and authorization information under the current power station will be cleared).



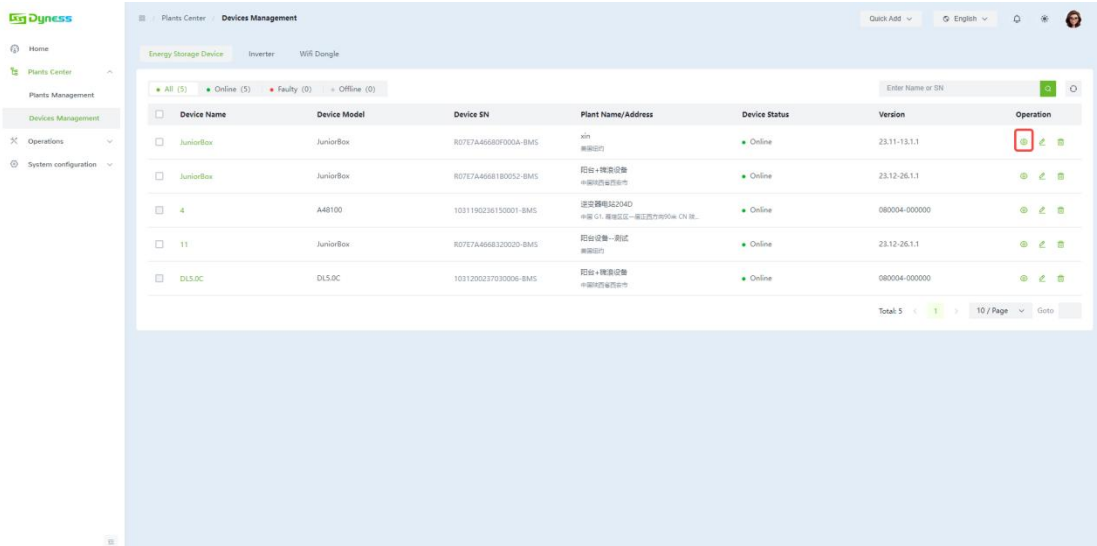
Devices Management

By selecting the left-hand menu option [Power Station Center], you can access the device management page. Here, you can view all devices associated with the currently logged-in account. Use the tabs to switch between different types of devices and perform operations such as deleting, and modifying devices.



Devices Details

Energy Storage Device

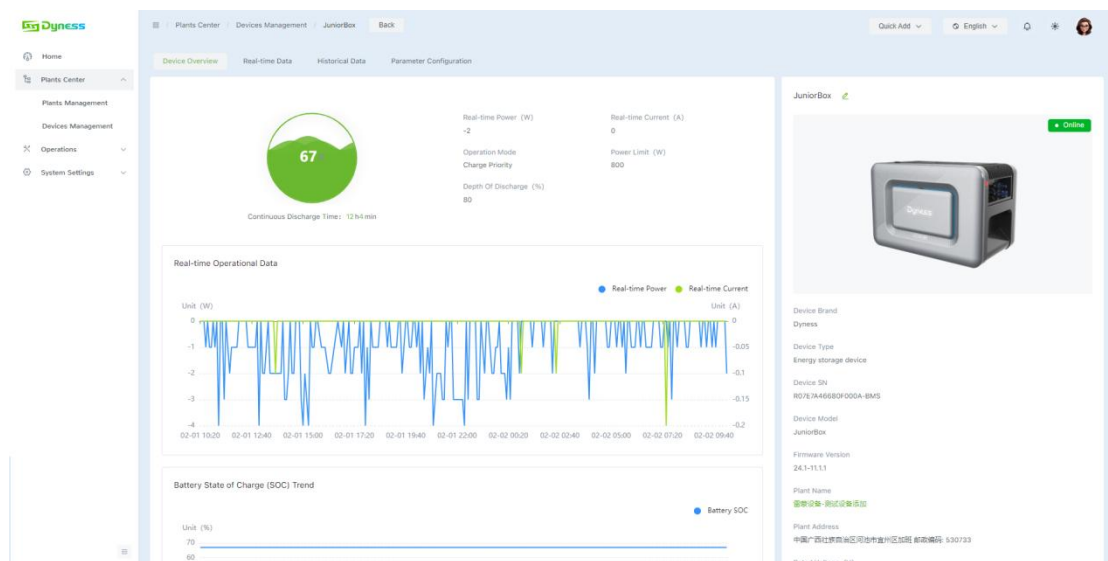


Device Overview

View the current status, operational data, battery trends, and basic information of the device.

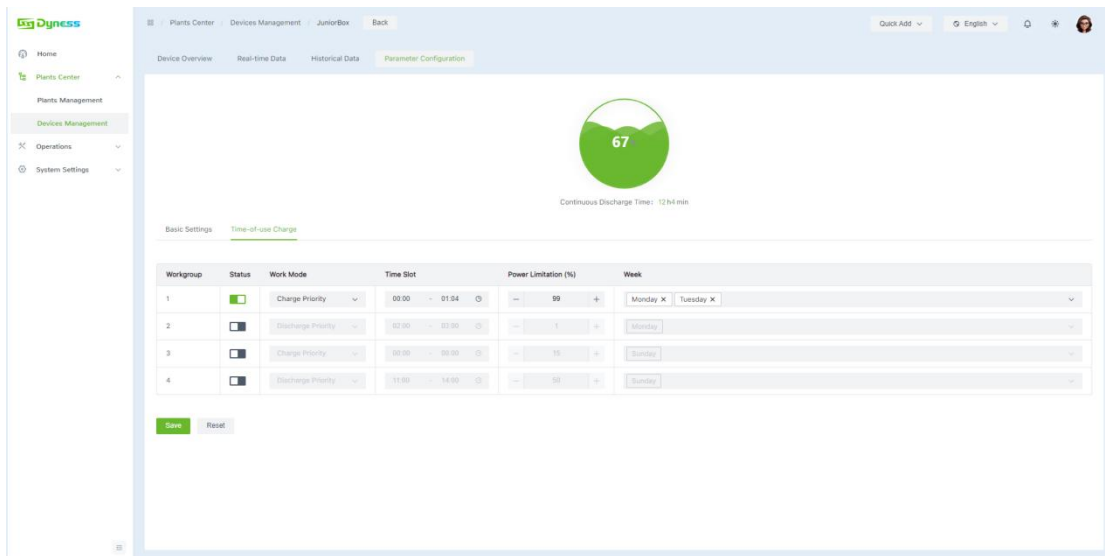
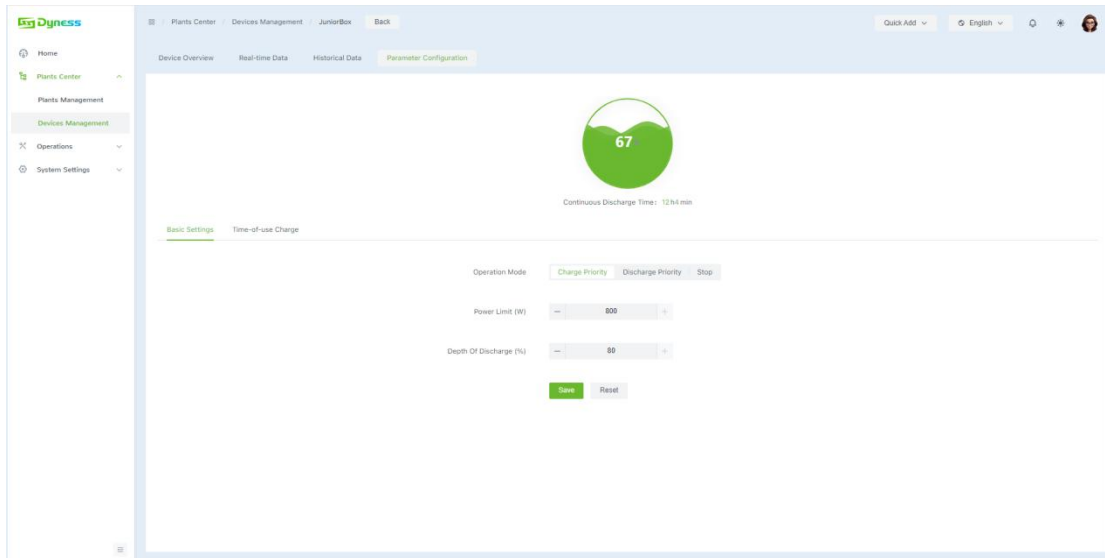
Preview the current device data.

Modify the basic name information of the device simultaneously.



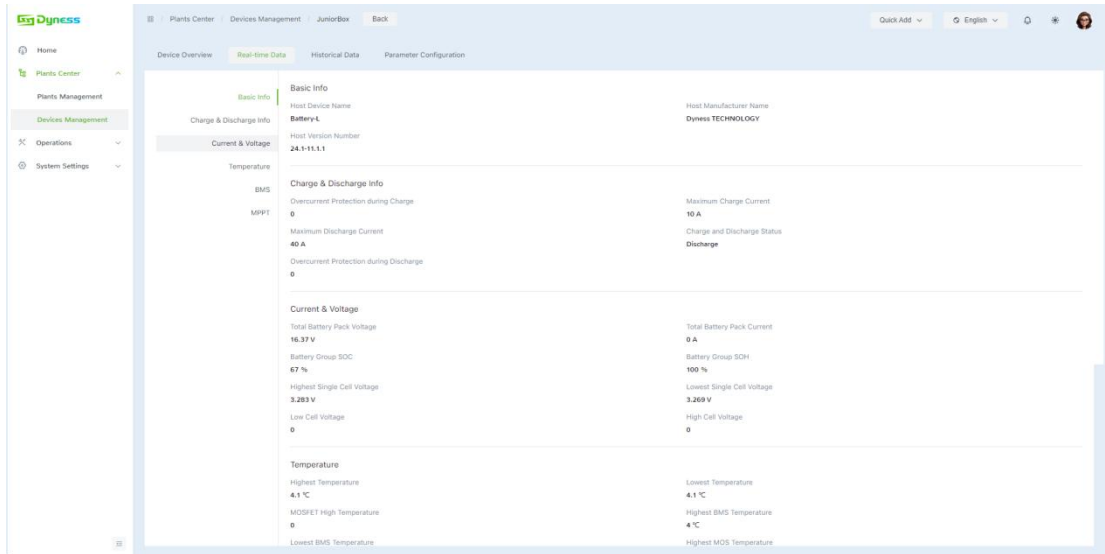
Parameter Configuration

Switch to the parameter configuration page by selecting the corresponding tab to view and edit the current operating mode of the energy storage device.



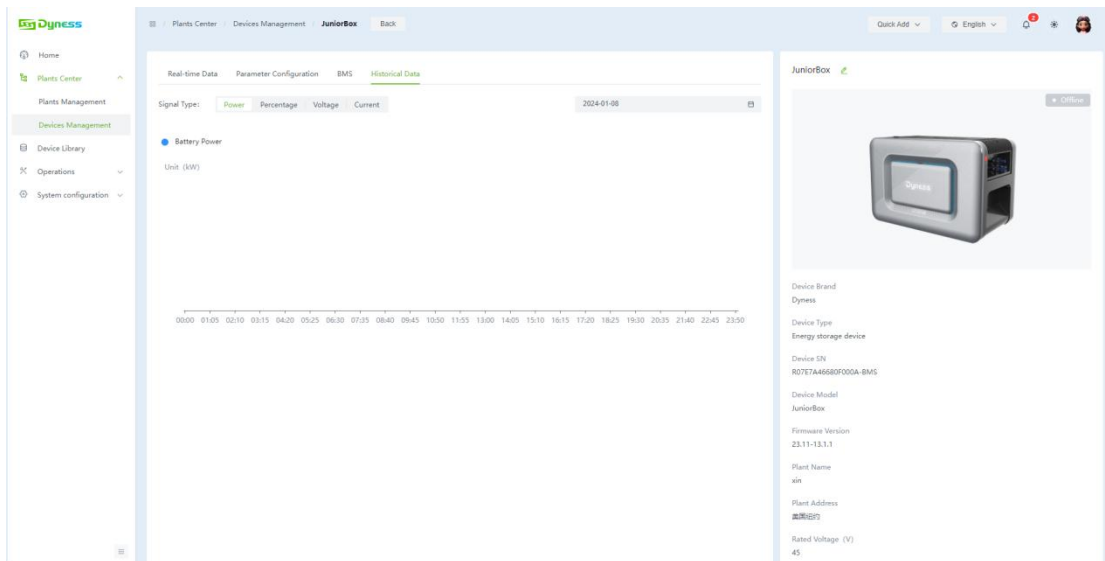
Real-time Data

Switch to the real-time data tab to view battery information.

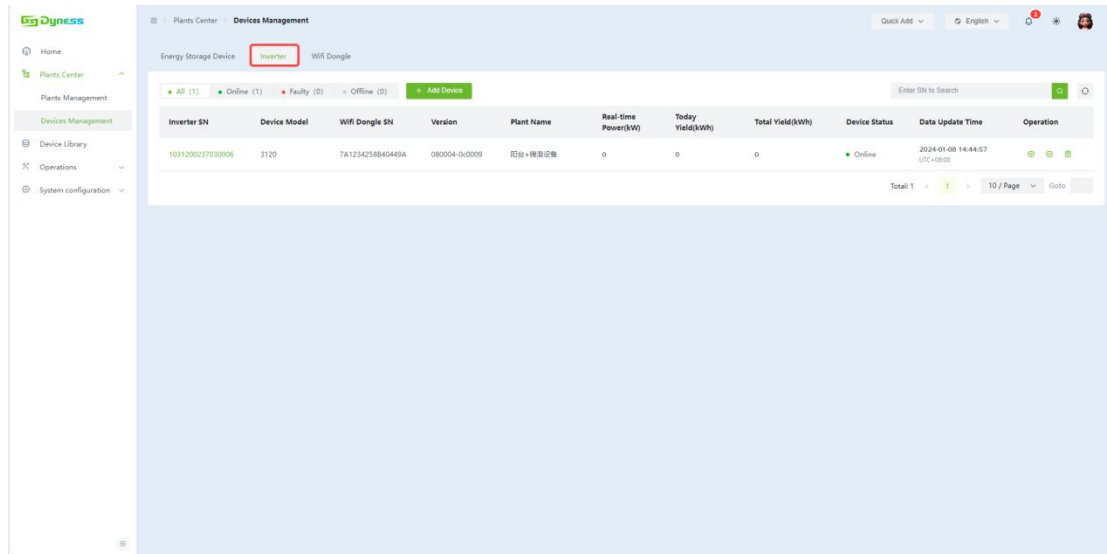


Historical Data

Switch to the historical data page by selecting the corresponding tab to view the historical data of the energy storage device.



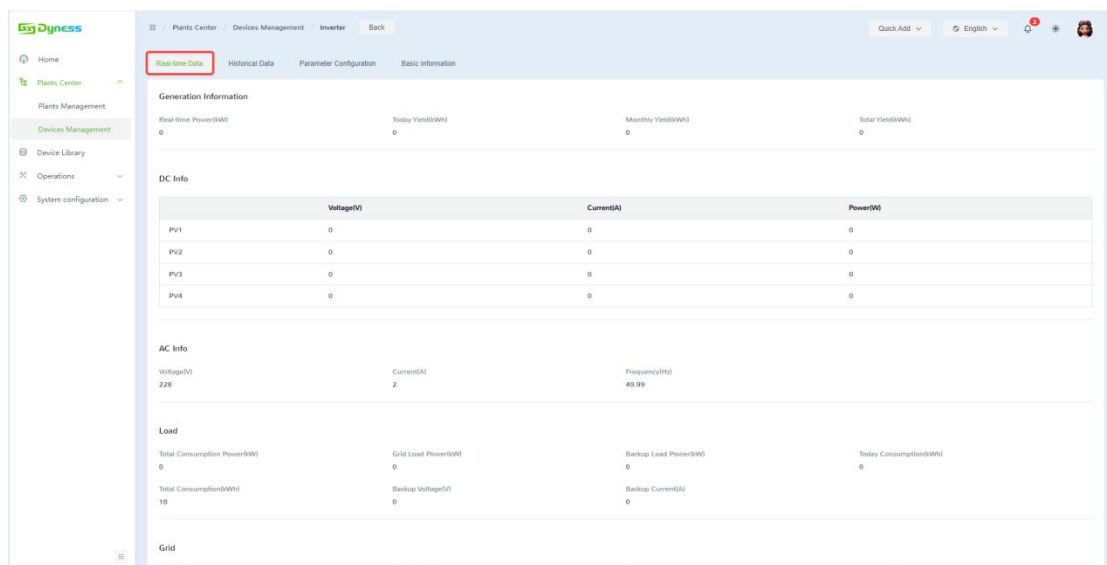
Inverter



Real-time Data

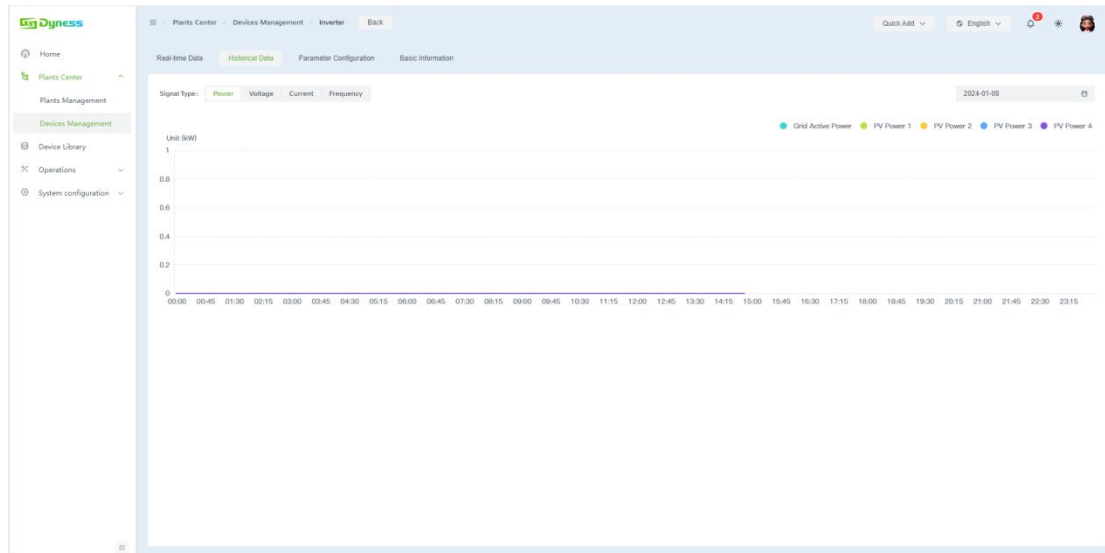
Check the online status of the device.

View basic information, power generation, AC/DC, grid, battery, and other information of the device.



Historical Information

Switch to the historical data page by selecting the corresponding tab to view the historical data of the energy storage device.

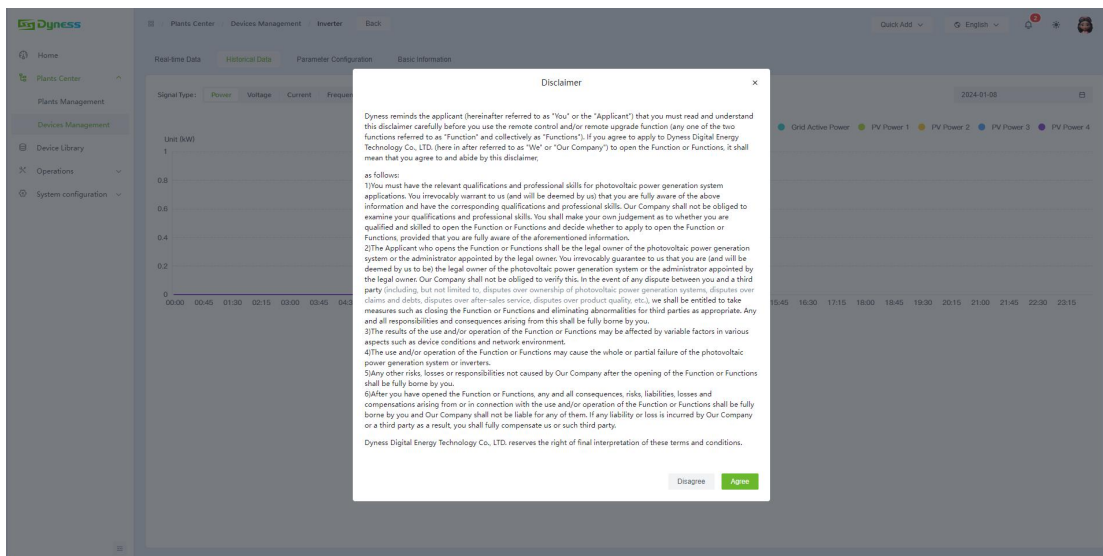


Parameter Configuration

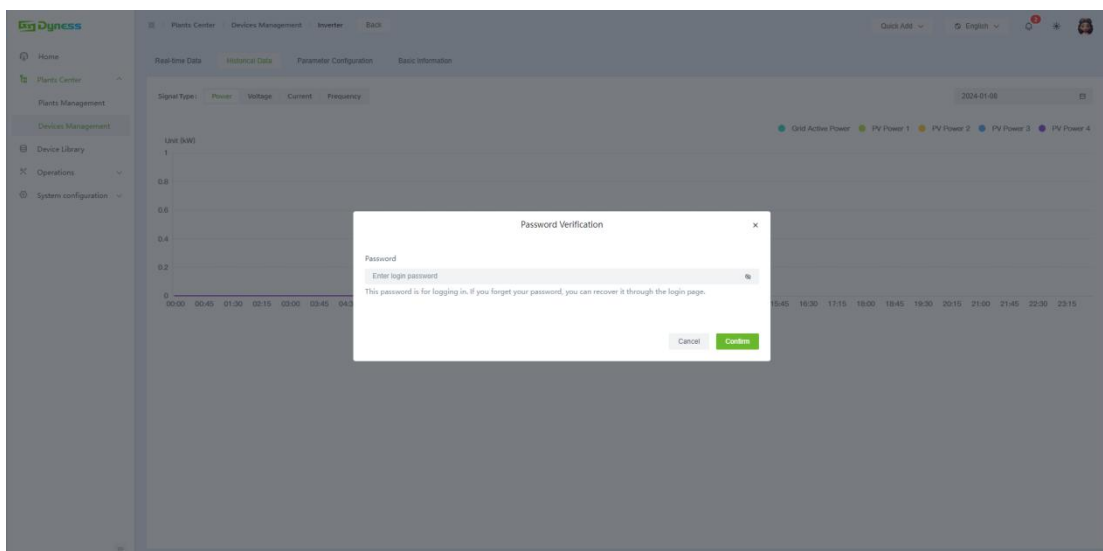
Switching to the parameter configuration tab allows you to configure parameters for the inverter.

Due to the potential risks associated with inverter operations, which may lead to the failure or partial failure of the photovoltaic power generation system or inverter, it is necessary for you to follow the procedure:

Confirmation of Disclaimer



Enter the operating password.

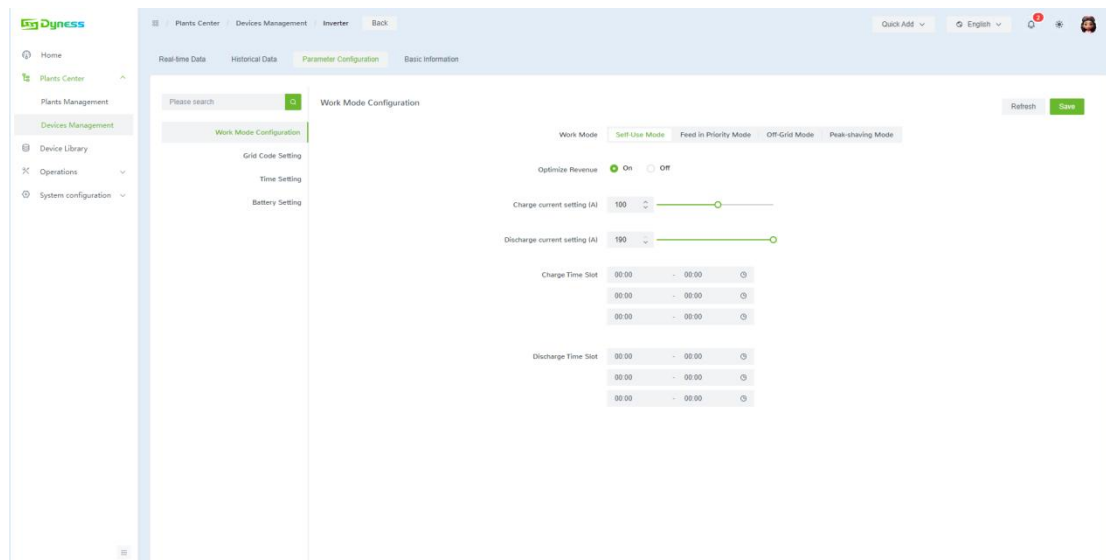


Parameter Configuration

Operating Mode

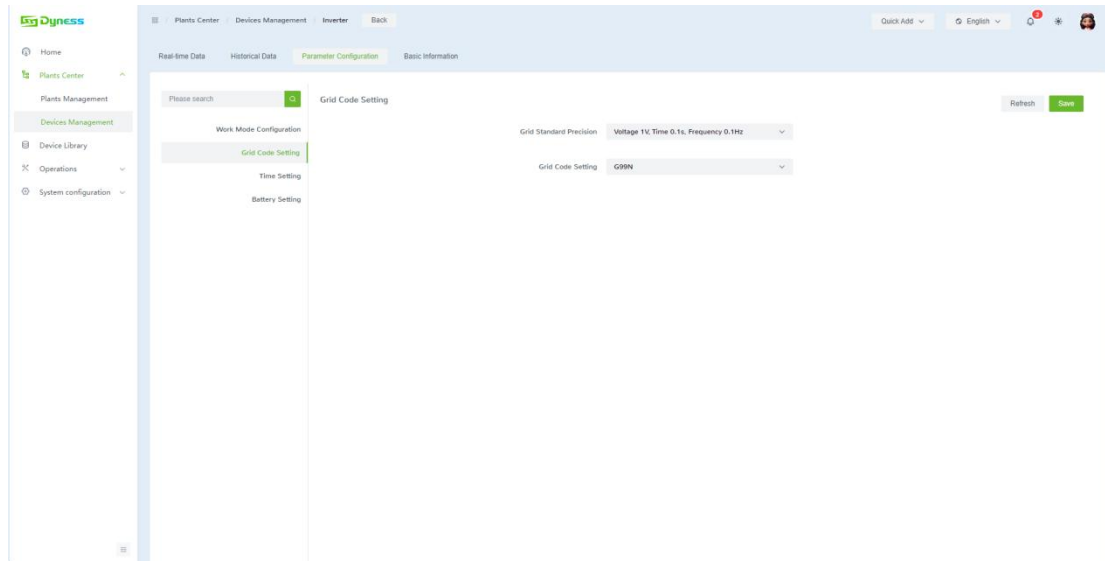
Number	Parameter Name	Note
1	Self-use Mode	The electricity generated by the photovoltaic system is used for self-consumption first. Any excess is used for charging, and if there is still surplus, it can be selectively fed into the grid.

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 Setting

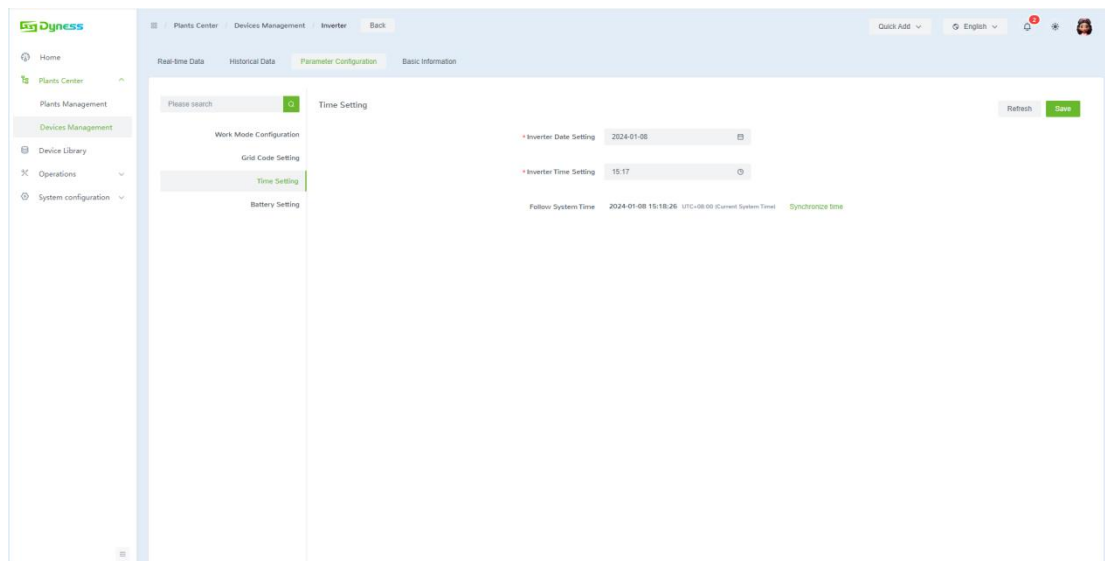
Grid Code Setting : Please select the relevant grid code to meet local requirements.



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.

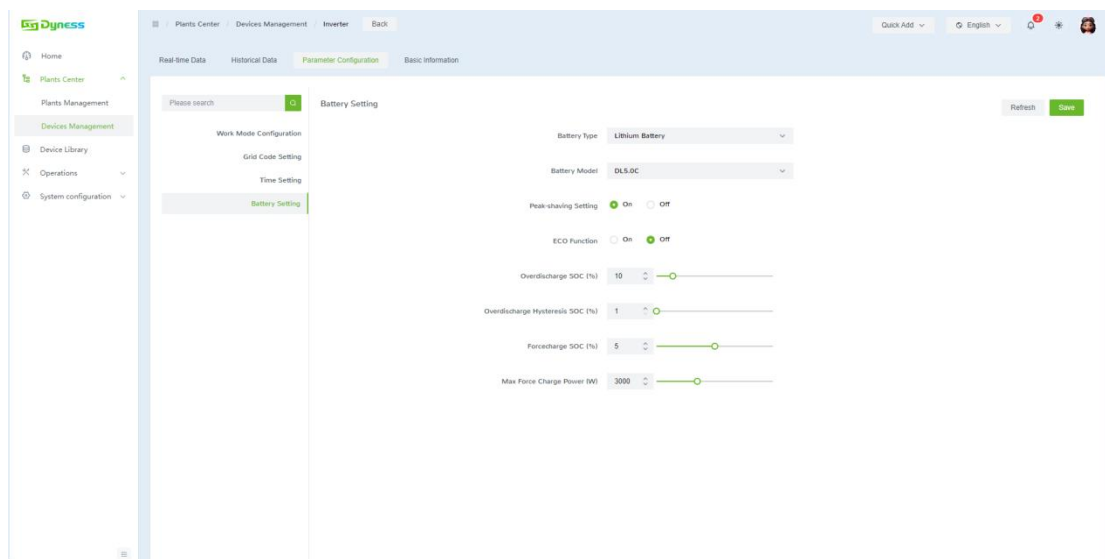


Battery Setting

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

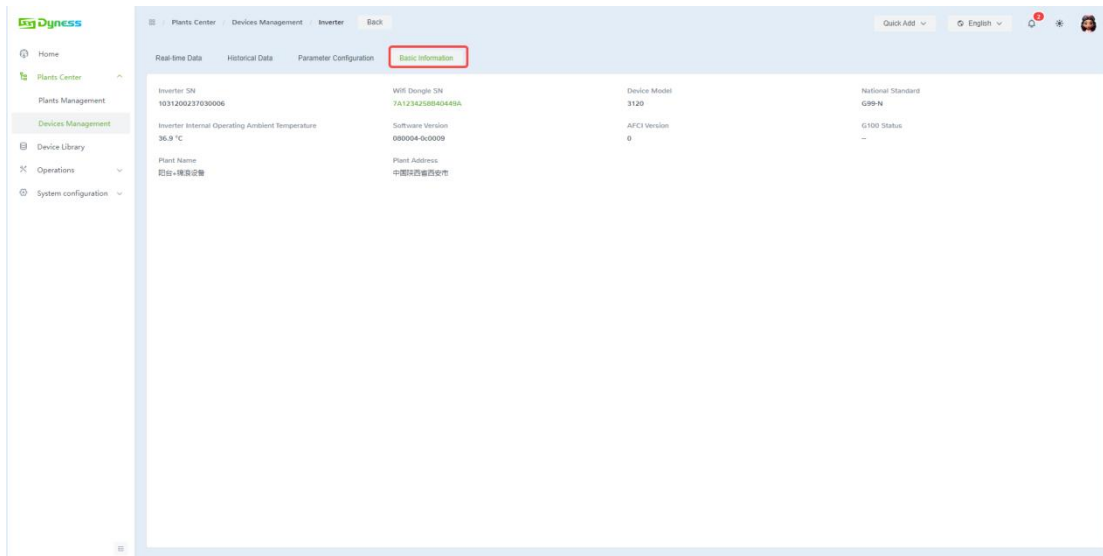
		over-discharge SOC, the inverter will stop discharging the battery.
3	Overcharge SOC	Due to self-discharge phenomena, the battery SOC may fall below the over-discharge SOC value. When the overcharge SOC is reached, the inverter will automatically charge the battery to prevent it from entering sleep mode.
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.

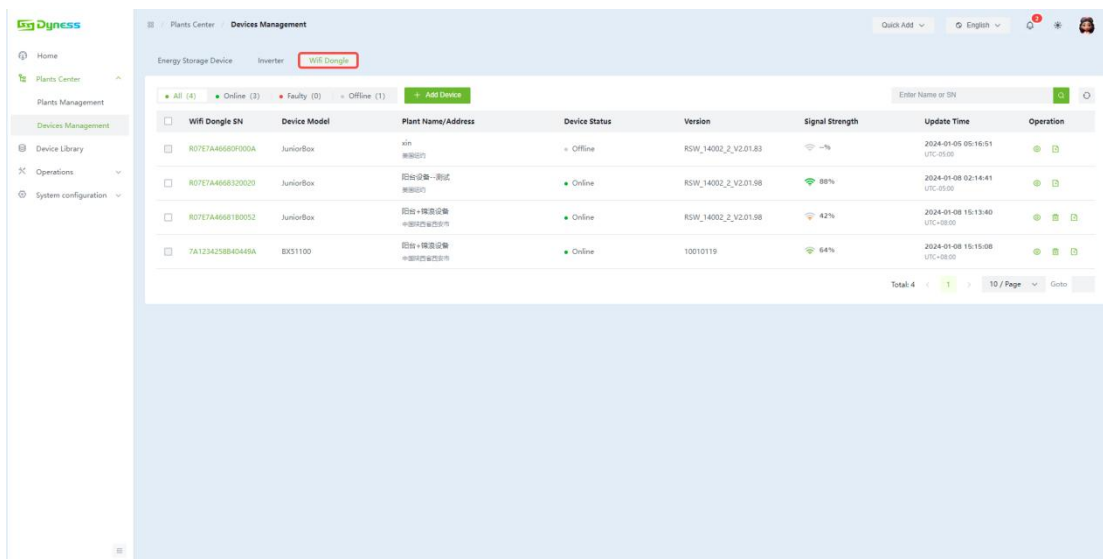


Basic Information

Switching to the corresponding tab allows you to view basic information about the inverter.



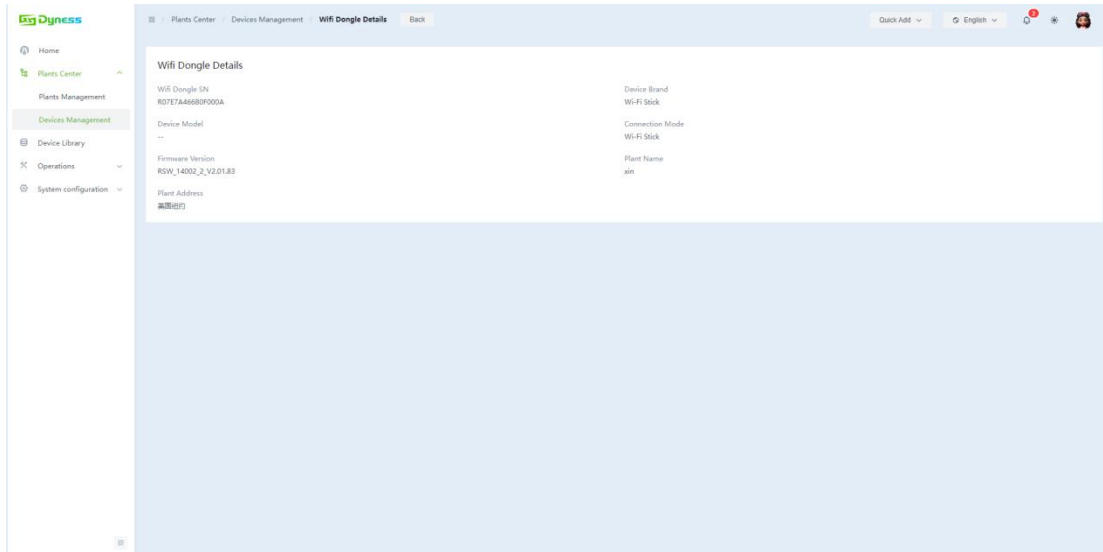
Wifi Dongle



Wifi Dongle Details

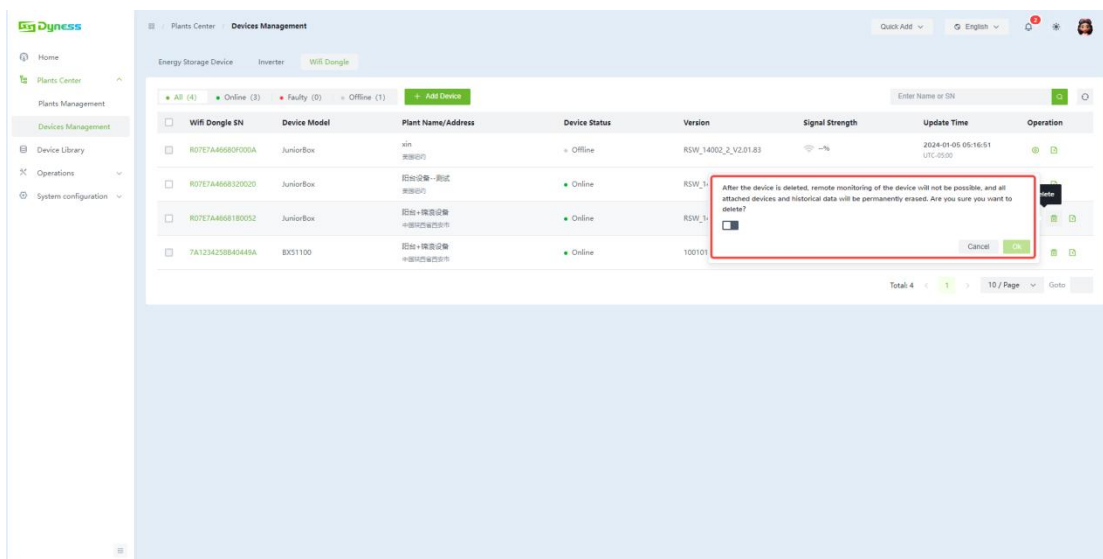
Check the online status of the device.

View basic information about the device.



Delete Devices

Click the "Delete" button to delete the device:



Note

Clicking the delete button will prompt a confirmation in a pop-up window.

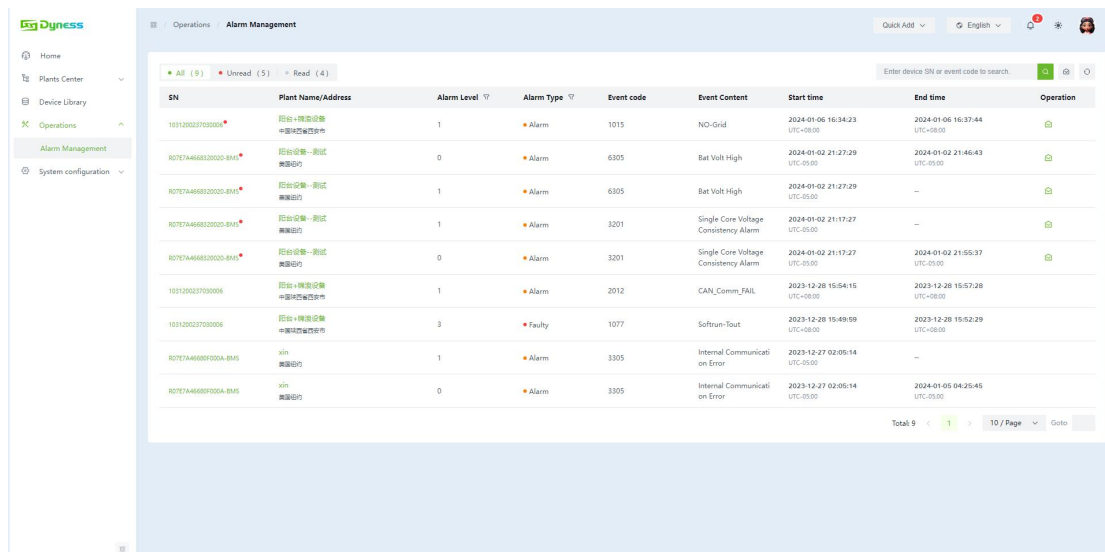
After deletion, all data information for the current device will be cleared.

The order of device deletion is as follows: delete the energy storage device or inverter first, and the collector should be deleted last.

Operations

Alarm Management

The device alarm list displays information such as alarm level, type, content, and time. By clicking on the alarm content associated with the device serial number (SN), you can enter the real-time data page for the device to view detailed information.



The screenshot shows the 'Alarm Management' interface in the Esig Dyness system. It features a table with columns for SN, Plant Name/Address, Alarm Level, Alarm Type, Event code, Event Content, Start time, End time, and Operation. The table contains 10 rows of alarm data. The interface also includes a sidebar with navigation options like Home, Plants Center, Device Library, Operations, Alarm Management, and System configuration. At the top right, there are options for Quick Add, English, and user profile. At the bottom right, there is a pagination control showing 'Total 9', '1 / Page', and 'Go to'.

SN	Plant Name/Address	Alarm Level	Alarm Type	Event code	Event Content	Start time	End time	Operation
103120023702006	阳谷+博康设备 中国山东聊城市	1	Alarm	1015	NO-Grid	2024-01-06 16:34:23 UTC+08:00	2024-01-06 16:37:44 UTC+08:00	
R0707A4668020000-8145	阳谷设备-测试 湖南邵阳	0	Alarm	6305	Bat Volt High	2024-01-02 21:27:29 UTC+09:00	2024-01-02 21:46:43 UTC+09:00	
R0707A4668020000-8145	阳谷设备-测试 湖南邵阳	1	Alarm	6305	Bat Volt High	2024-01-02 21:27:29 UTC+09:00	--	
R0707A4668020000-8145	阳谷设备-测试 湖南邵阳	1	Alarm	3201	Single Core Voltage Consistency Alarm	2024-01-02 21:17:27 UTC+09:00	--	
R0707A4668020000-8145	阳谷设备-测试 湖南邵阳	0	Alarm	3201	Single Core Voltage Consistency Alarm	2024-01-02 21:17:27 UTC+09:00	2024-01-02 21:56:37 UTC+09:00	
103120023702006	阳谷+博康设备 中国山东聊城市	1	Alarm	2012	CAN_Comm_FAIL	2023-12-28 15:54:15 UTC+08:00	2023-12-28 15:57:28 UTC+08:00	
103120023702006	阳谷+博康设备 中国山东聊城市	3	Faulty	1077	Softstart-Tout	2023-12-28 15:49:59 UTC+08:00	2023-12-28 15:52:29 UTC+08:00	
R0707A4668020000-8145	阳谷设备-测试 湖南邵阳	1	Alarm	3305	Internal Communicati on Error	2023-12-27 02:05:14 UTC+09:00	--	
R0707A4668020000-8145	阳谷设备-测试 湖南邵阳	0	Alarm	3305	Internal Communicati on Error	2023-12-27 02:05:14 UTC+09:00	2024-01-05 04:25:45 UTC+09:00	

Data analysis

Cumulative reports

Cumulative reports can be exported by defining factors such as power plants, time, fields, etc. After export, you can view various data indicators of selected power plants within the specified time.

New report

Download report

The screenshot shows the 'Cumulative Report' page in the Dyness system. A table lists various reports with columns for Report Name, Creator, Status, Creation Time, and Operation. The table contains 14 rows of data, all with a 'Completed' status. A 'Create New Report' button is visible at the top left of the table area.

Report Name	Creator	Status	Creation Time	Operation
111_2024030182105.csv	vis jin	Completed	2024-03-01 08:21:07	
vitest-000a_20240301973613.csv	vivi-test1	Completed	2024-03-01 07:36:14	
candy-oooa_20240301073532.csv	T-Candy jay	Completed	2024-03-01 07:35:33	
yang-0052_20240301073330.csv	yang	Completed	2024-03-01 07:33:30	
x0062_20240301052408.csv	运策zh	Completed	2024-03-01 05:24:08	
candy_20240301020437.csv	T-Candy jay	Completed	2024-03-01 02:04:38	
waw_20240229160739.csv	jack	Completed	2024-02-29 16:07:39	
waw_20240229160726.csv	jack	Completed	2024-02-29 16:07:26	
year_2024022911859.csv	运策zh	Completed	2024-02-29 11:19	
month-0012_2024022911808.csv	运策zh	Completed	2024-02-29 11:18:08	

New report

Enter via the "New" button on the report page:

Report name: Custom input

Selected power plants: Search and select power plants

Granularity of statistics: Time dimension

Statistical time: Start and end time interval

Report fields: Export the headers and corresponding data contained in the table

The screenshot shows the 'Create New Report' form in the Dyness system. The form includes fields for Report Name, Select Plant, Statistical Granularity (Hour, Day, Month, Year), and Statistical Time (Start date, End date). Below these are 'Report Fields' and 'Selected Fields' sections. The 'Report Fields' section lists various metrics with checkboxes, and the 'Selected Fields' section shows a list of selected metrics.

Report Name: Please enter the report name

Select Plant: Please select Plant Name

Statistical Granularity: Hour | Day | Month | Year

Statistical Time: Start date | End date

Report Fields:

- PV Yield Measure(WWh)
- Generated power of the generator(WWh)
- Grid Import Measure(WWh)
- Grid Sold Measure(WWh)
- Active power of the grid(WWh)
- Reactive power of the grid(WWh)
- Battery Discharge Measure(WWh)
- Battery Charge Measure(WWh)
- Power consumption of the load(WWh)
- PV Income
- Grid price differential Income
- Standard coal saving(g)
- CO2 emissions reduction(g)
- Reduce forest logging(tree)

Optional Fields: Please Select

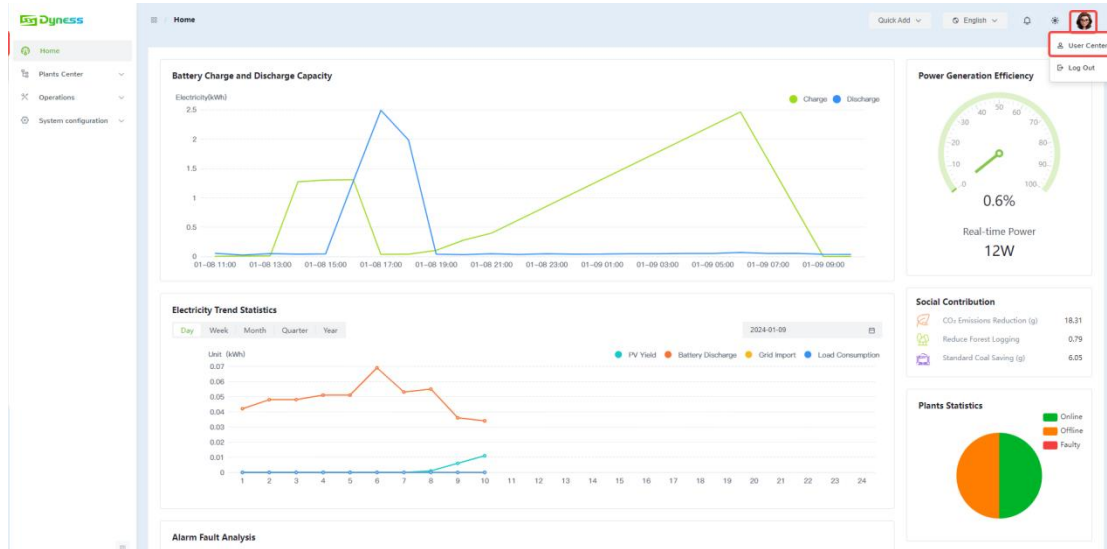
Selected Fields:

- PV Yield Measure(WWh)
- Generated power of the generator(WWh)
- Grid Import Measure(WWh)
- Grid Sold Measure(WWh)
- Active power of the grid(WWh)
- Reactive power of the grid(WWh)

Save

Account Settings

You can configure the current account in the account center.



Basic Information

In the basic information settings, you can edit and modify the username, phone number, and country/region for the current account.

The screenshot displays the Esy Dyness User Center Basic Information settings page. The left sidebar contains navigation options: Home, Plants Center, Operations, and System configuration. The main content area is divided into two sections:

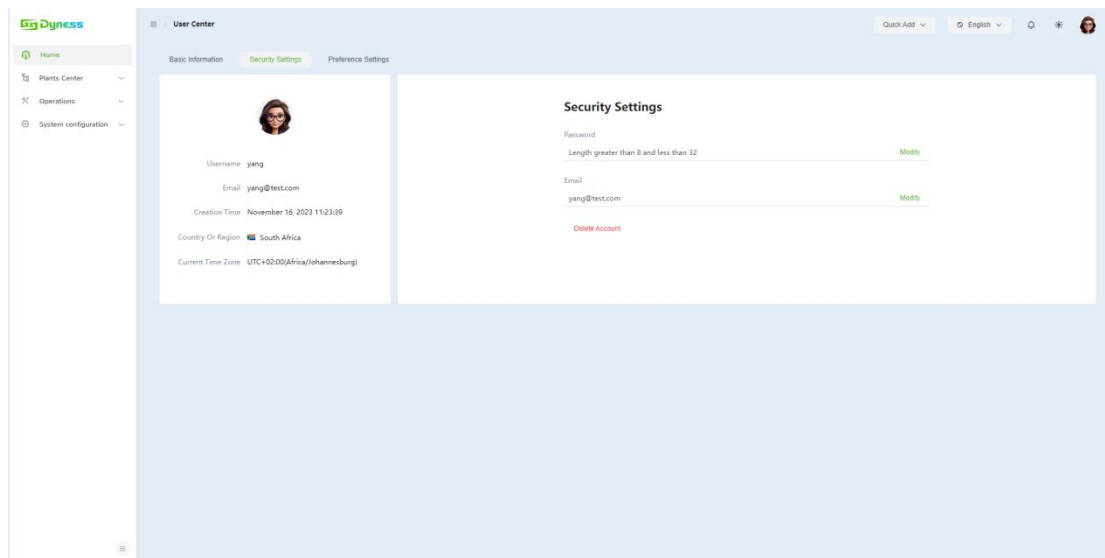
- User Profile:** A section showing the user's profile information, including a profile picture, Username (yang), Email (yang@test.com), Creation Time (November 16, 2023 11:23:39), Country Or Region (South Africa), and Current Time Zone (UTC+02:00(Africa/Johannesburg)).
- Basic Information:** A section for editing user details, including a profile picture, Username (yang), Telephone (85 +1242 586669877), and Country Or Region (South Africa). A Save button is located at the bottom.

Security Settings

Verify Email: Verified email is used for password recovery.

Password Reset: Resetting the password can enhance account security in case of password leakage or prolonged non-change.

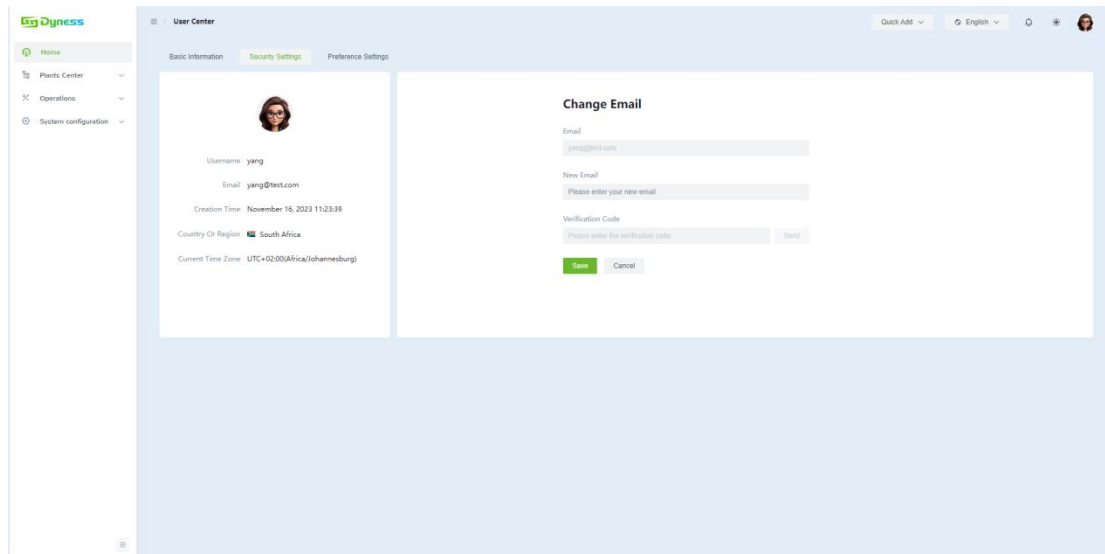
Logout Account: Logout the current account.



Verify Email

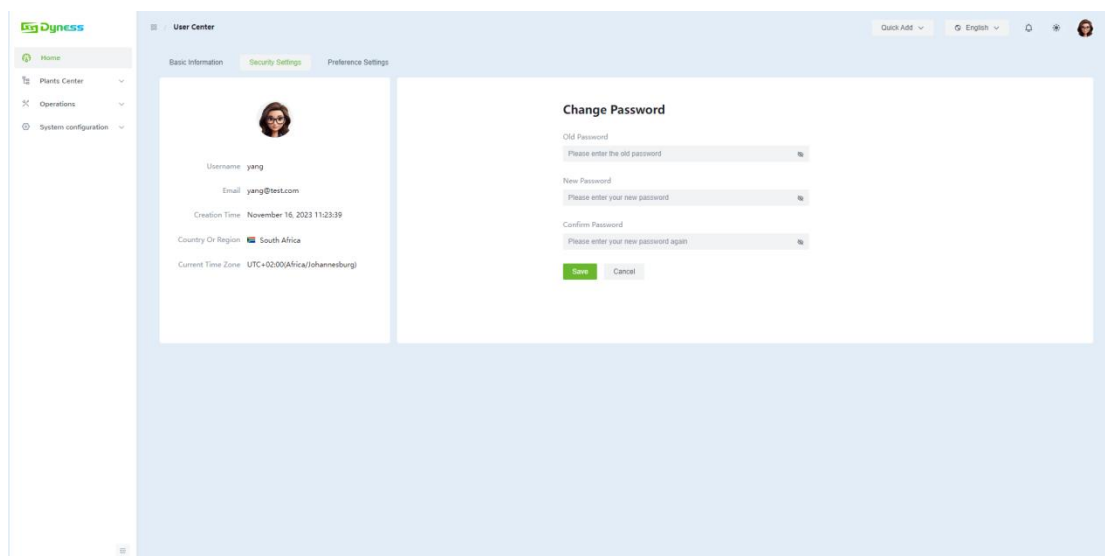
Steps: Click on "Modify - Enter the new email - Verification code verification - Save." After

completing the email modification, you need to log in with the new email.



Reset Password

Steps: Click on "Modify - Enter the current password - Enter the new password - Confirm the password - Save." After completing the password modification, you need to log in with the new password.



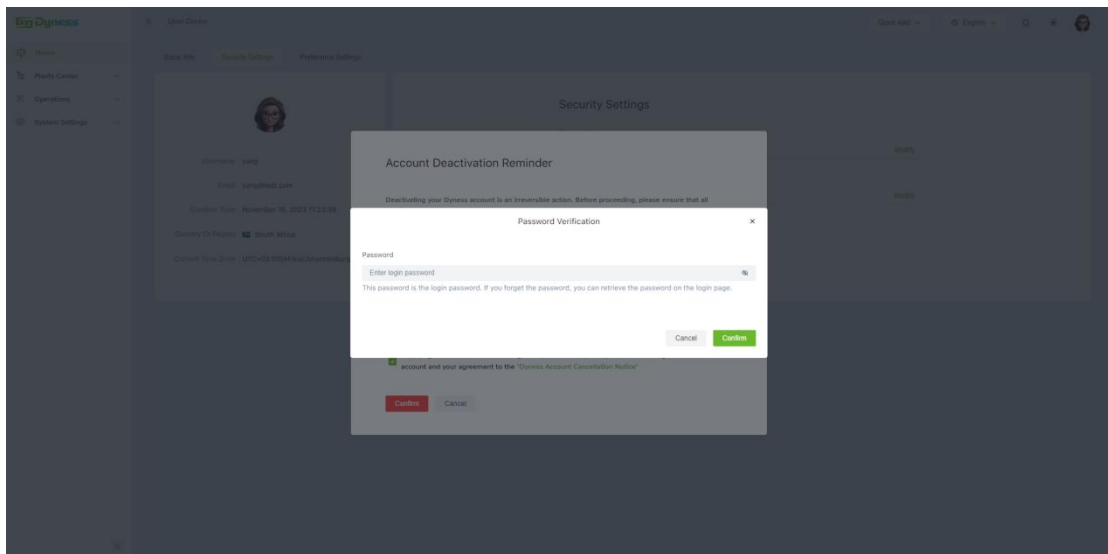
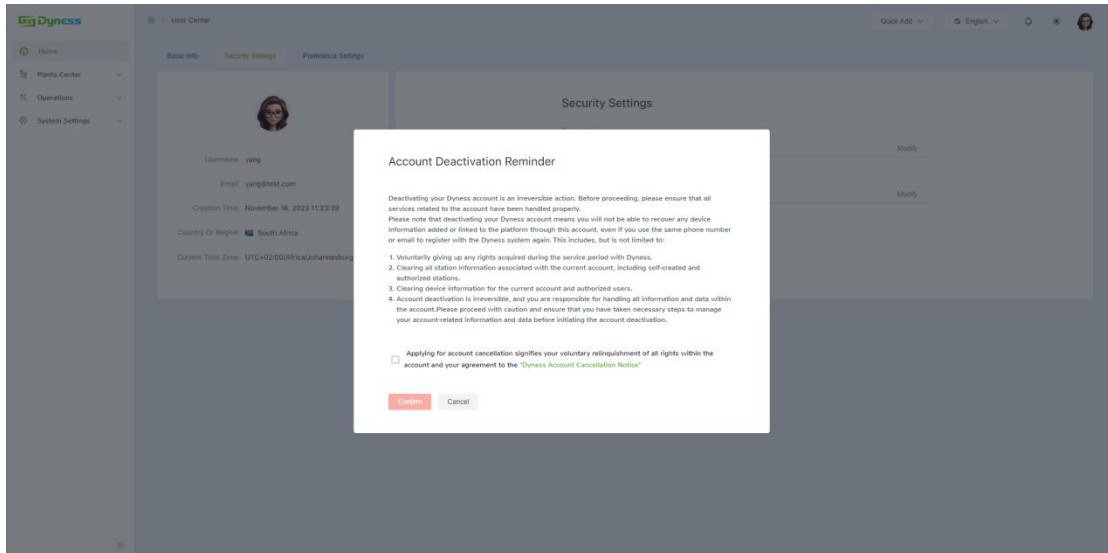
Delete Account

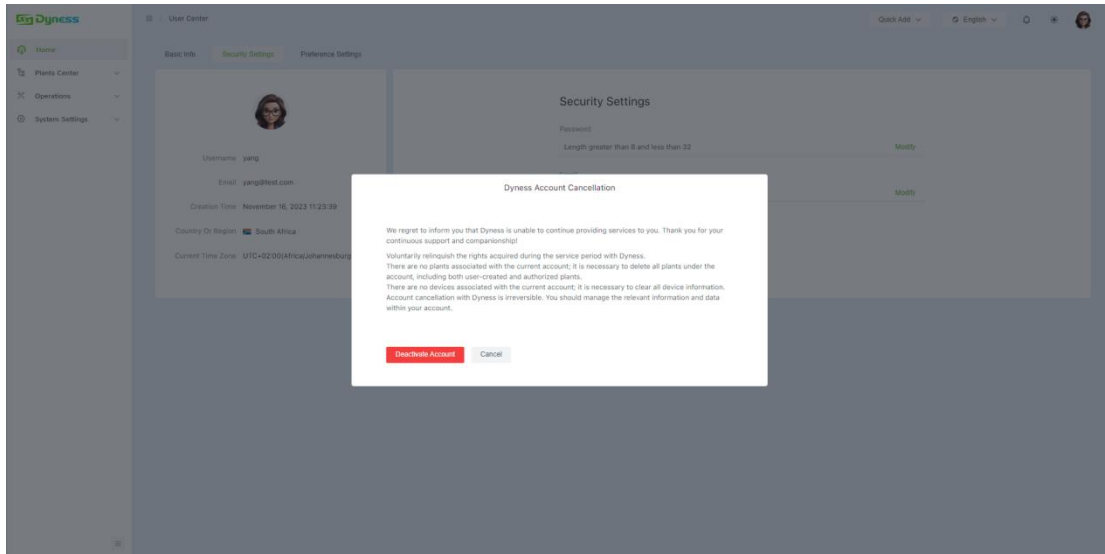
Click on "Log out of Account".

Enter the log-out account interface, check/view the log-out instructions.

Enter the login password for verification.

Click on the "Log out of Account" button.





Preference Settings

Switching temperature units.

