ESS Local Management Platform User Manual

Shanghai Elecnova Energy Storage Co., LTD

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Safety precautions

Hazards and warnings!

The system can only be installed by professionals.

The manufacturer will not be responsible for any failure to follow the instructions in this specification.

Note tips!

After removing the overall packaging of the system, please read all the contents of this manual before setting or using it.

To ensure the good functionality of the energy storage system, please install, set up, use and maintain the system in the manner described in this manual.

This manual is not intended to include all details or changes to the unit or to provide all possible accidents related to installation, operation, maintenance. Contact us for further information or special questions not fully stated in this manual.

Content

1. Introduction to the management platform

Management platform is a local management system developed by Shanghai Elecnova Energy Storage Co., Ltd. for ESS cabinets. It can realize the equipment operation monitoring, parameter setting, data forwarding management and other functions of the ESS cabinet.

The local management platform is accessed through the WEB browser.

2 Instructions for using the management platform

2.1 login and logout

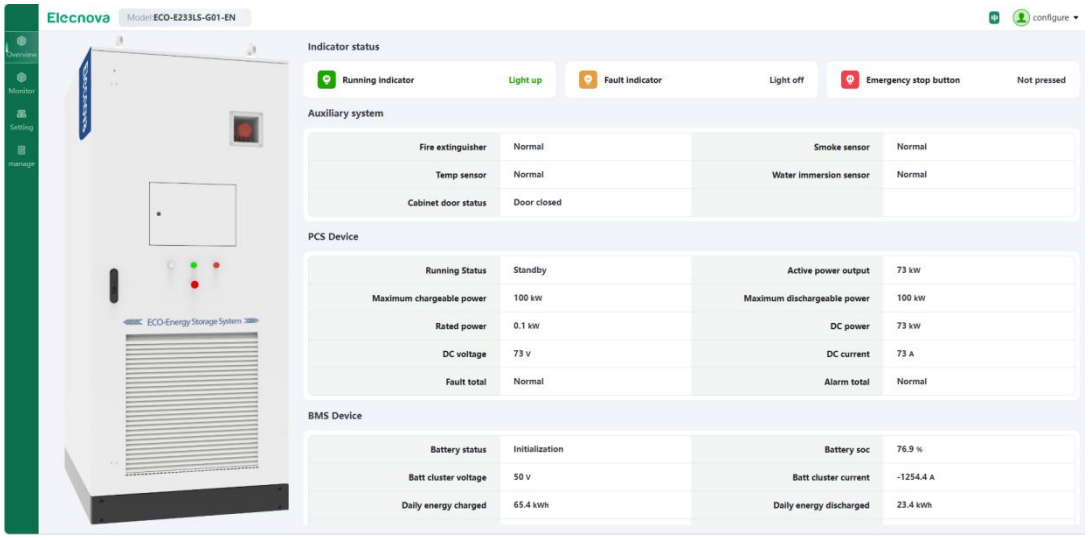
Open the computer browser, enter the IP address of the ESS cabinet controller (for example: http: //192.168.2.27:38080), and open the login page of the platform:

⚠**Please contact the manufacturer or dealer to obtain the IP address, account number and password of the login of the management platform**

2.1.1 Login

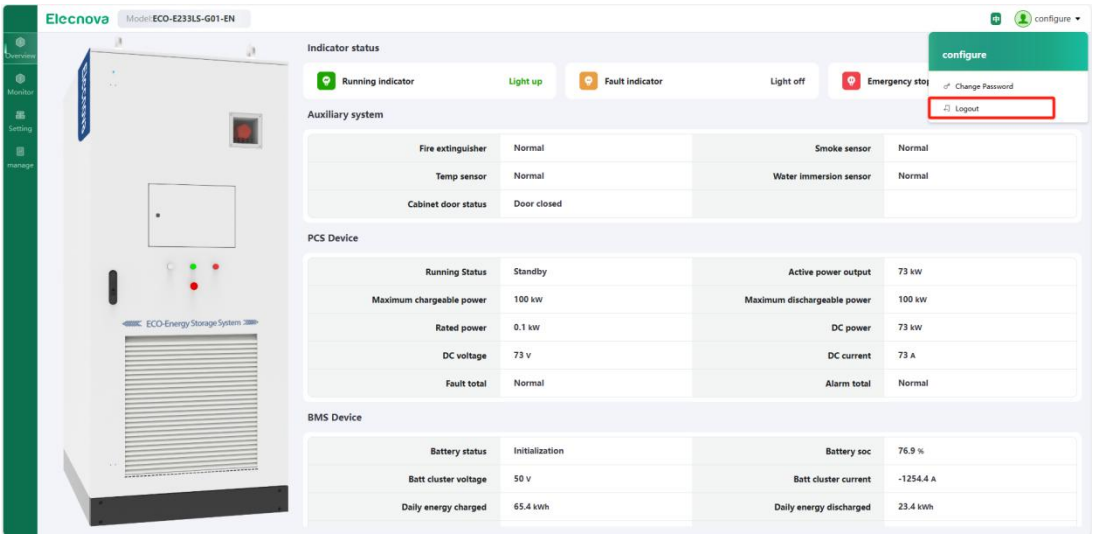
After correctly entering the IP address of the energy storage cabinet controller, enter the account number and password on the login page to complete the login work:

After successful login, display the overview data of the ESS cabinet:



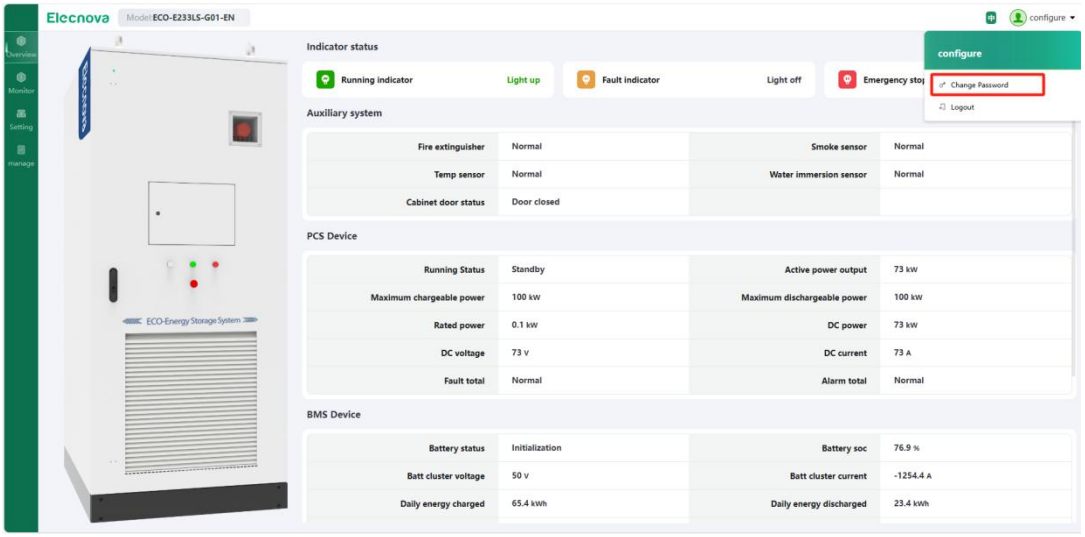
2.1.2 Logout

After successful login, you can click on the login account avatar in the upper right corner and select "logout" from the drop-down menu to exit the system.

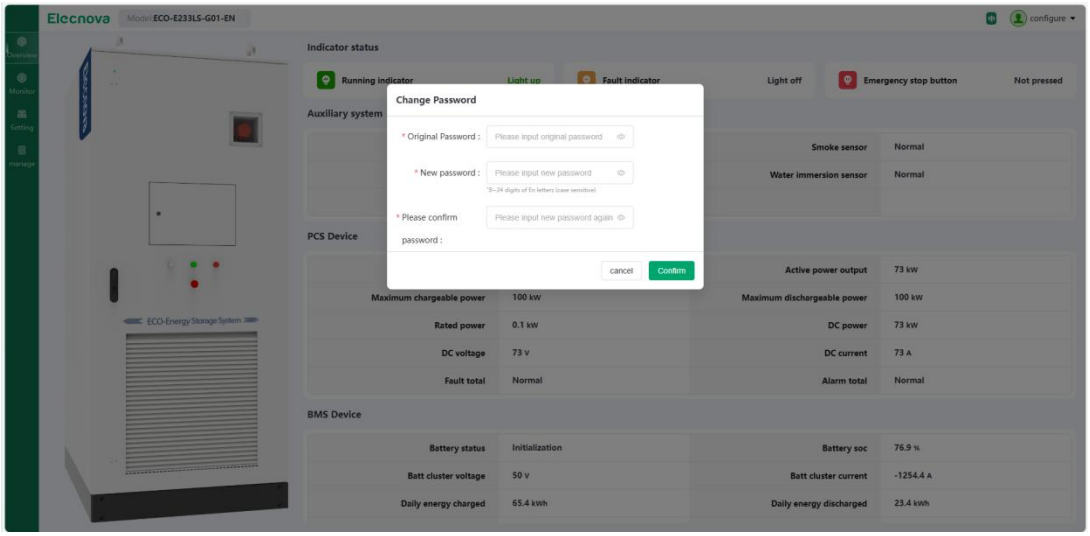


2.2 Change the password

After successful login, you can click on the login account avatar in the upper right corner and select "Change Password" from the drop-down menu:



In the pop-up window to change the password, correctly enter the original password and the new password to complete the password modification.



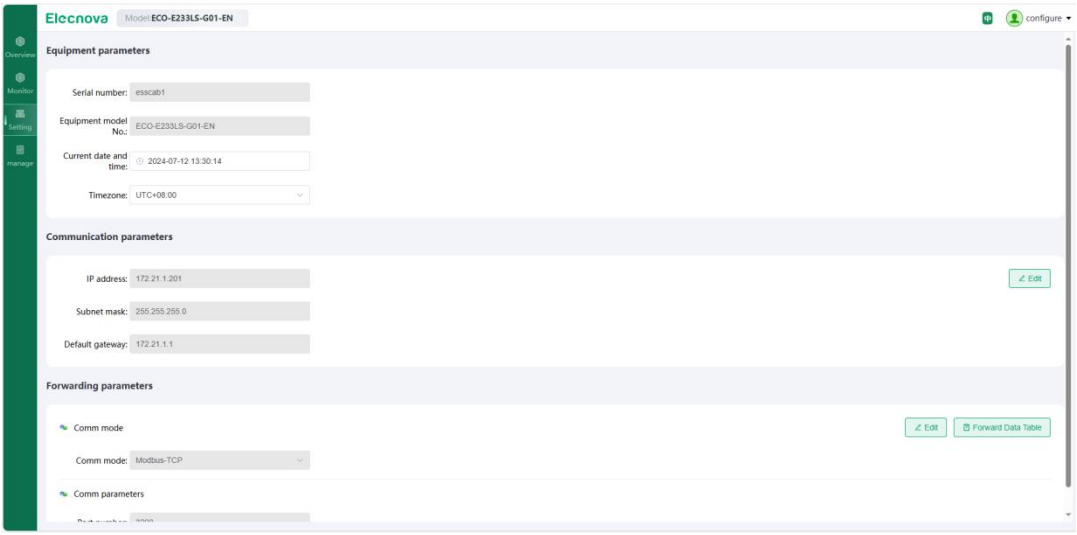
⚠ **1: Set the password requirements are: 8-24 bit English (case sensitive), numbers, symbols, at least two. Please remember the login password after modification.**

2: If you forget the login account and password, please contact the manufacturer or dealer for help.

2.3 Modify the communication parameters

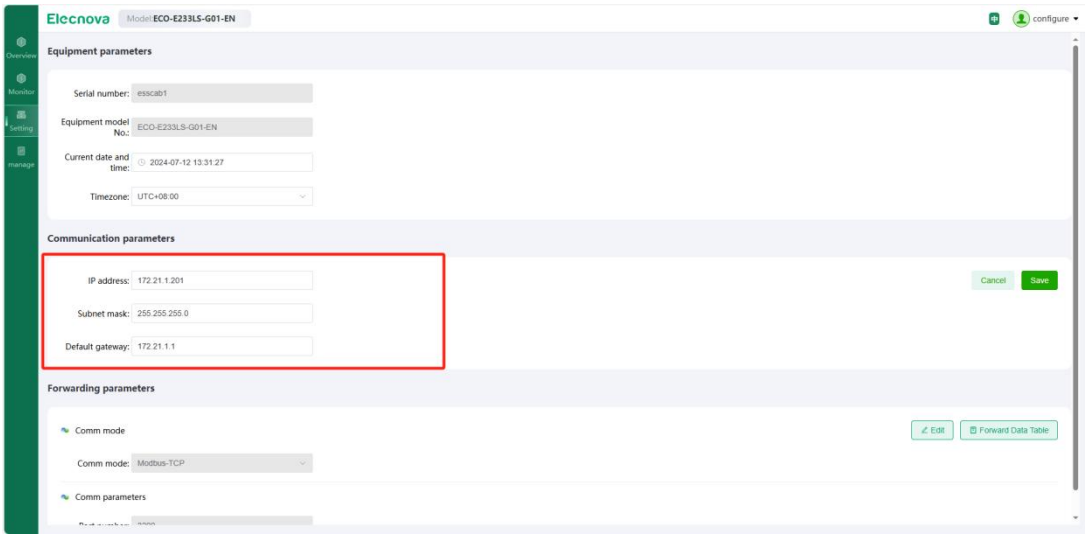
The IP address of the ESS cabinet controller can be modified.

Click [Parameter] - [Communication Parameter] to enter the setting page of communication parameters:



Click [Edit] to correctly input the new IP address, subnet mask and default gateway of the controller. After clicking the [Save] button, the controller will perform the reset network operation. When the network is reset, the management platform will automatically exit.

After a successful network reset, you need to enter a new IP address login management platform.



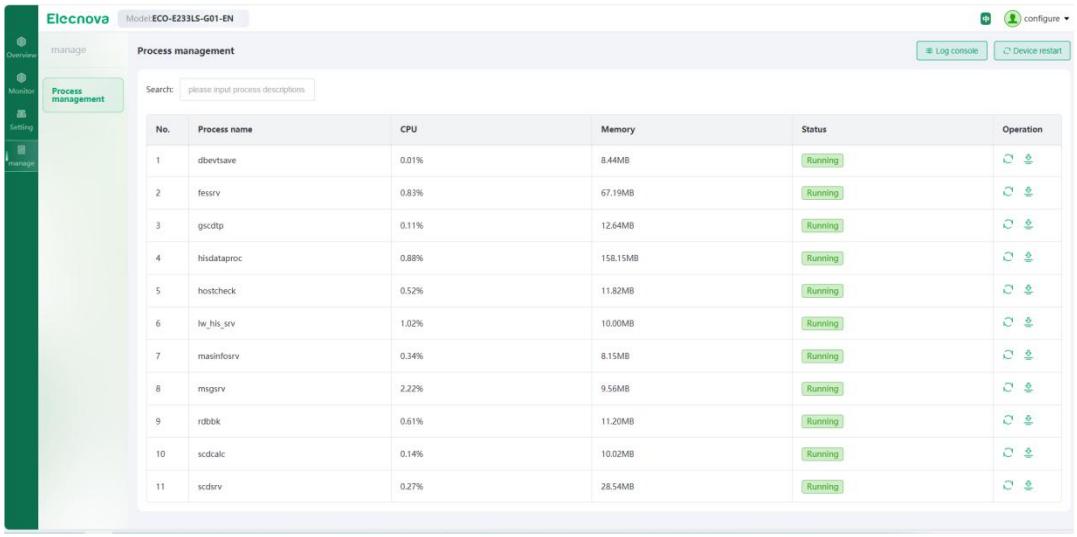
⚠**1: Please modify the IP address carefully. If you forget the IP address or the operation fails, the login will fail.**

2: If the IP address setting is abnormal and you cannot log in the management platform, you need to press the Reset button on the controller shell for 5 seconds to initialize the IP address.

2.4 Process management

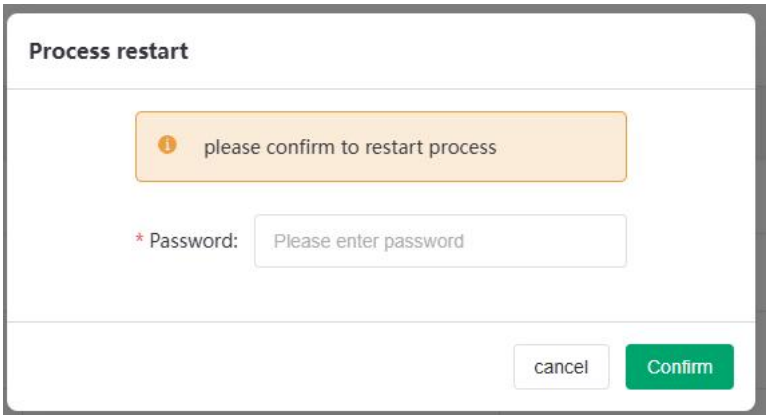
Monitor the process running status of the ESS controller, support the process restart, history log export and real-time log download, and the controller restart operation.

Click [Manage] - [Process Management], you can enter the Process Management page:



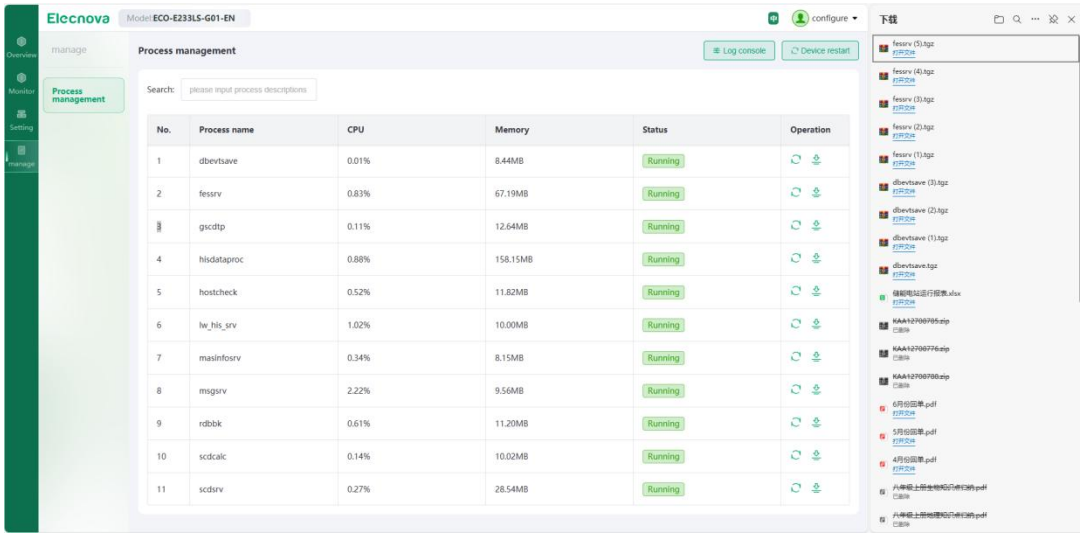
Process reset operation:

Click the restart button to restart the process. Enter the account number and password correctly to complete the restart operation of the process:



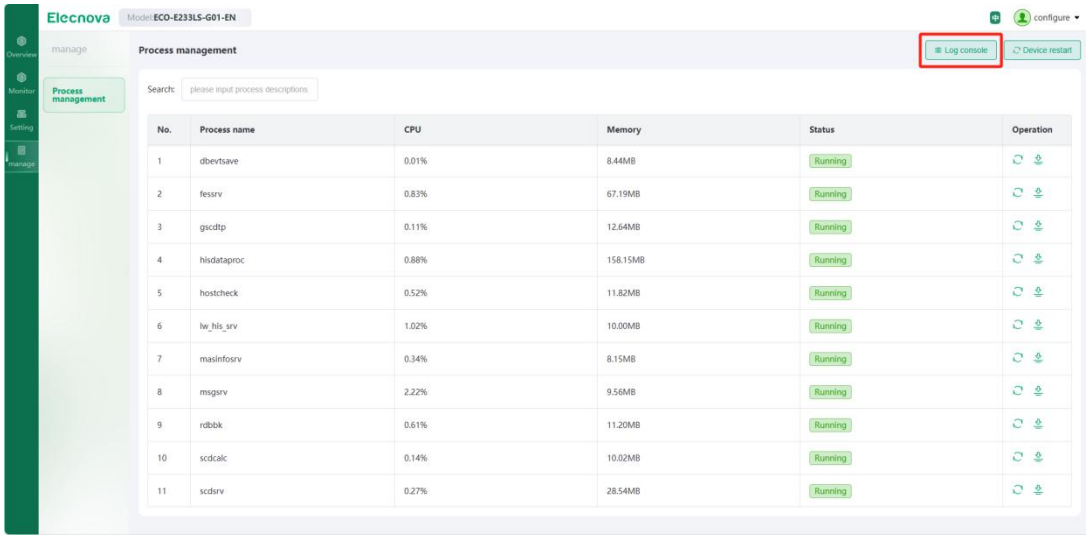
History log download:

Click the button to export the history log file packet for the process:

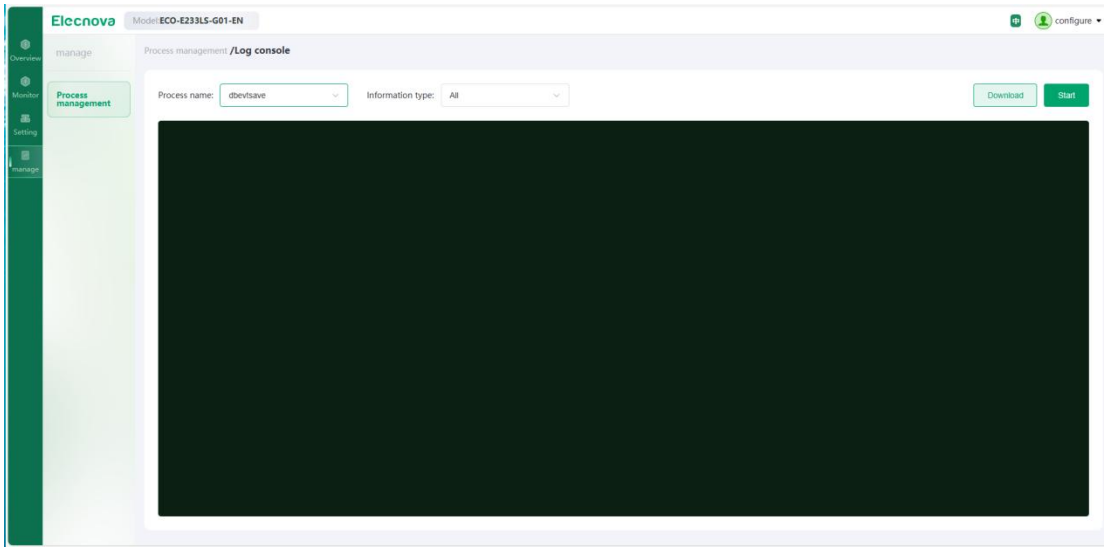


Real-time log download:

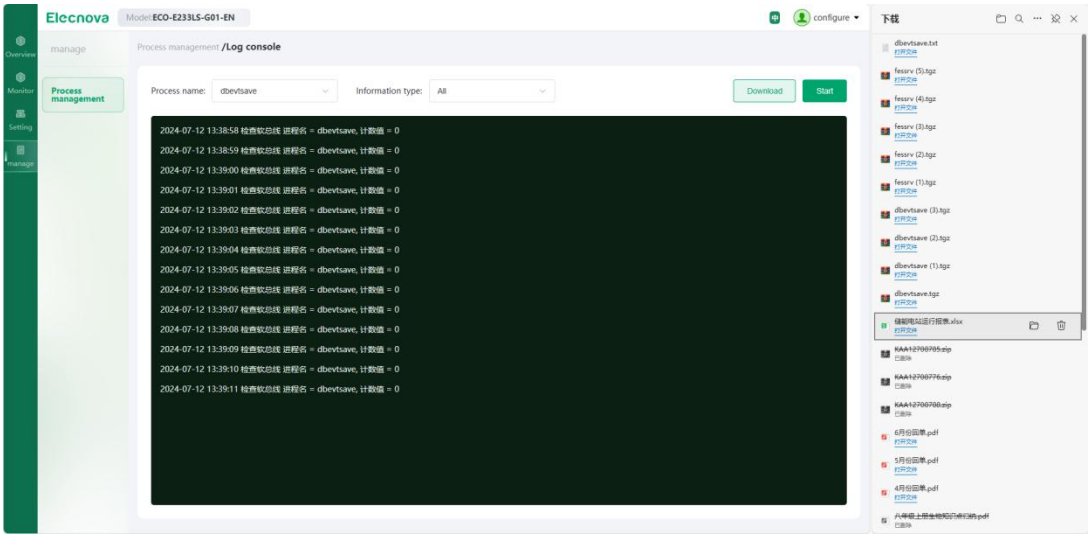
Click [Log Console] to view the real-time running log information of the process:



Click [Start], and the platform starts saving the log of the current process:

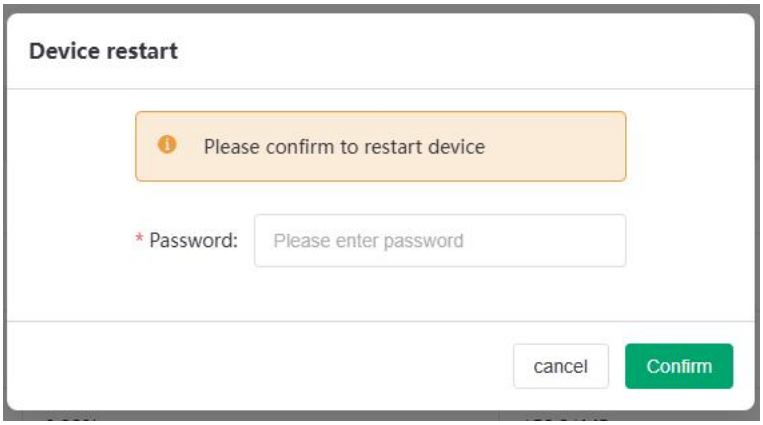


Click [Stop] to save the process log, and click the [Download] button to save the real-time process log file to the local disk.



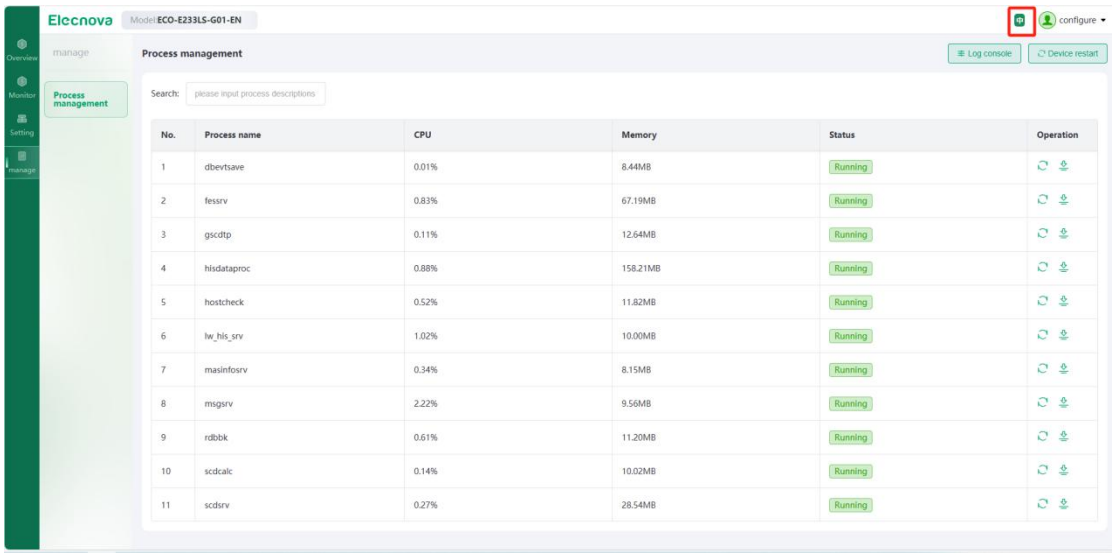
Equipment restart:

Click the [Device Restart] button, enter the login password of the current account, and can complete the restart of the ESS controller:



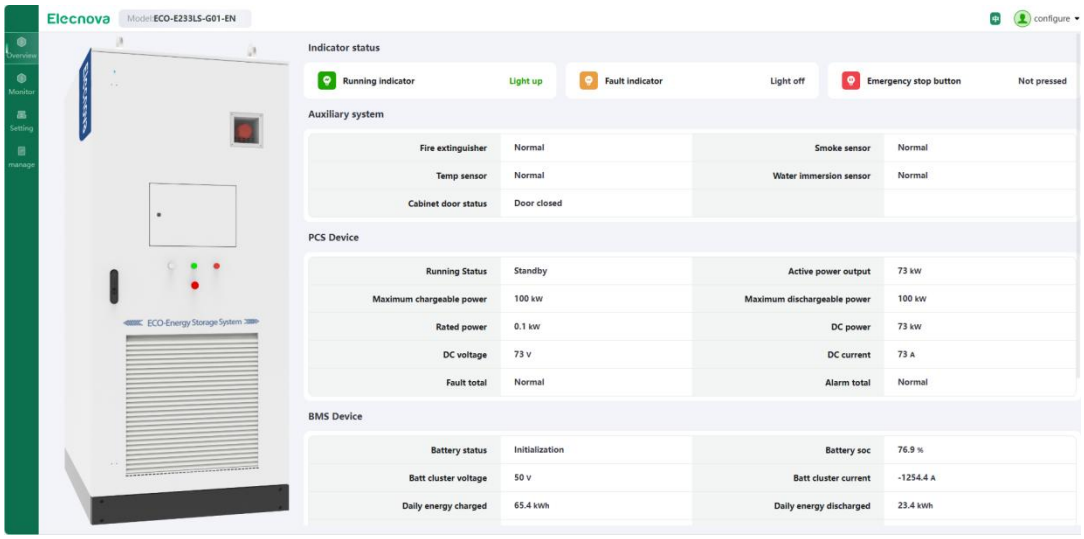
2.5 Language switching

Click the icon in the upper right corner to switch the language displayed on the platform. Currently, the platform supports both Chinese and English languages.



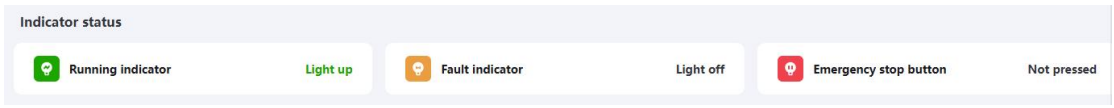
2.6 Overview

Display the operation status and monitoring data of the indicator light and emergency stop button, fire protection system, air conditioning system, sensors, PCS equipment and BMS equipment.



2.6.1 Indicator light status

Display the operation status of the operation indicator, fault indicator and emergency stop button of the ESS cabinet.



2.6.2 Auxiliary system

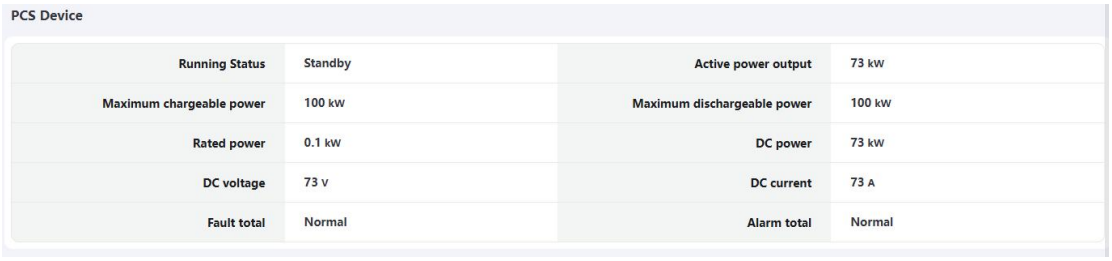
Show the working condition of the air conditioning system, fire protection system and sensors.

Auxiliary system

Fire extinguisher	Normal	Smoke sensor	Normal
Temp sensor	Normal	Water immersion sensor	Normal
Cabinet door status	Door closed		

2.6.3 PCS equipment

Display the running status and monitoring data of the PCS equipment.

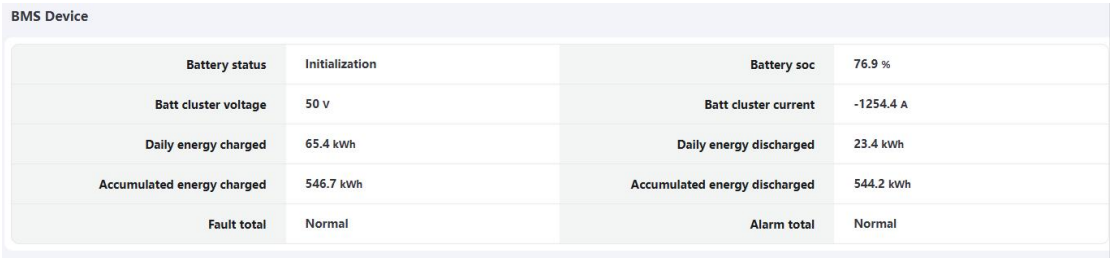


PCS Device

Running Status	Standby	Active power output	73 kW
Maximum chargeable power	100 kW	Maximum dischargeable power	100 kW
Rated power	0.1 kW	DC power	73 kW
DC voltage	73 V	DC current	73 A
Fault total	Normal	Alarm total	Normal

2.6.4 BMS equipment

Display the operating status and monitoring data of the BMS equipment.



BMS Device

Battery status	Initialization	Battery soc	76.9 %
Batt cluster voltage	50 V	Batt cluster current	-1254.4 A
Daily energy charged	65.4 kWh	Daily energy discharged	23.4 kWh
Accumulated energy charged	546.7 kWh	Accumulated energy discharged	544.2 kWh
Fault total	Normal	Alarm total	Normal

2.6.5 Air-conditioning system

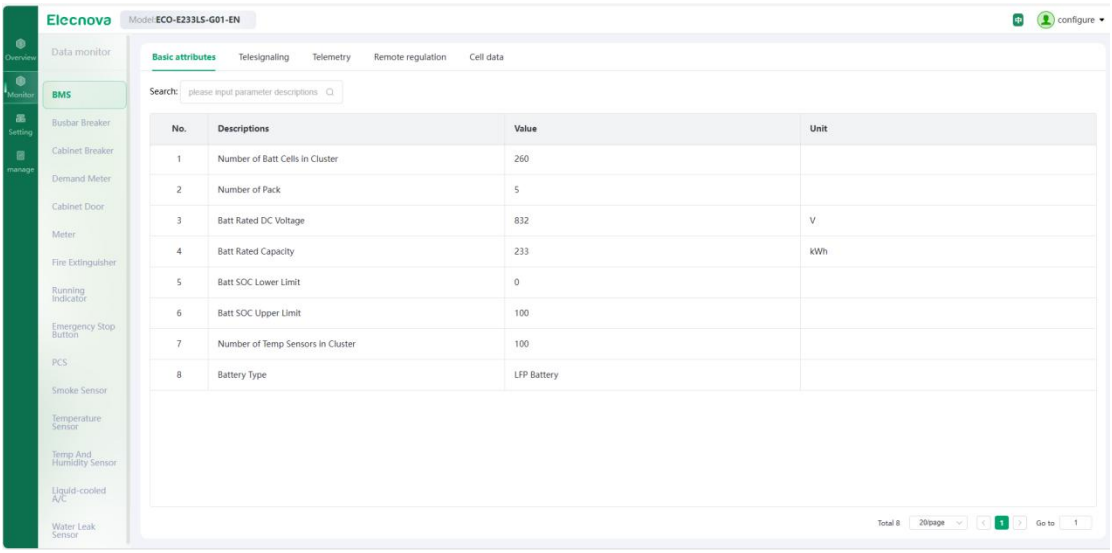
Display the operating status and monitoring data of the liquid cooled air conditioning system.

Air-conditioning System

Running Status	Running	System mode	Internal Circulation
Water outlet temp	25.8 ℃	Water reflux temp	26.7 ℃
Exhaust air temp	26.7 ℃	Water inlet pressure	12.12 Bar
Water outlet pressure	21.21 Bar	Water pump rotating speed	1234.3 %

2.7 Monitoring

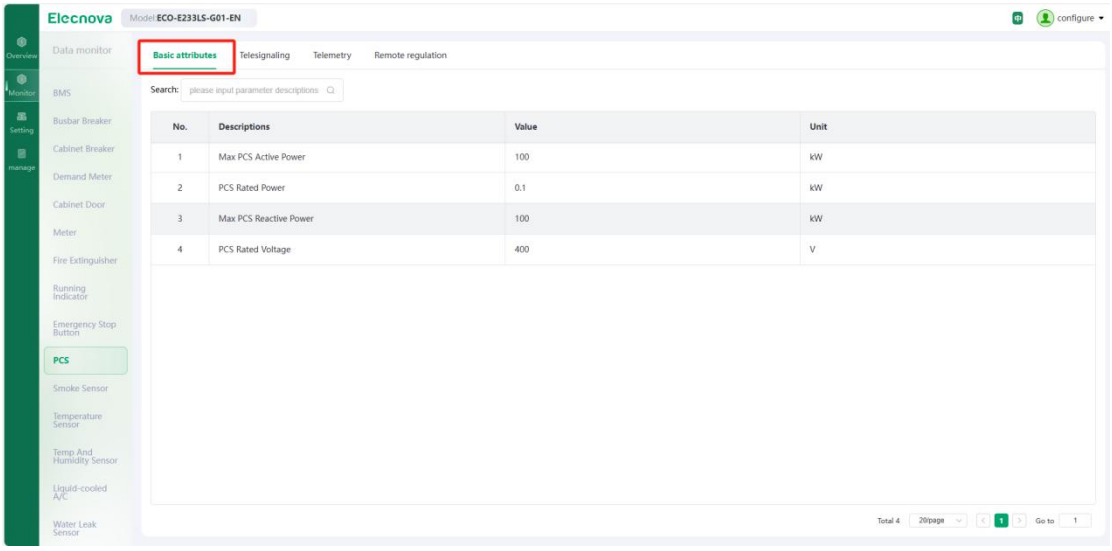
2.7.1 Display the detailed operation data of the equipment in the ESS cabinet. It mainly includes the operation data of PCS, BMS, battery cell, air conditioning equipment, measuring meter, demand meter, sensor and other equipment.



Equipment monitoring data are classified and displayed according to the basic attributes, remote communication data, telemetry data and remote modulation data respectively:

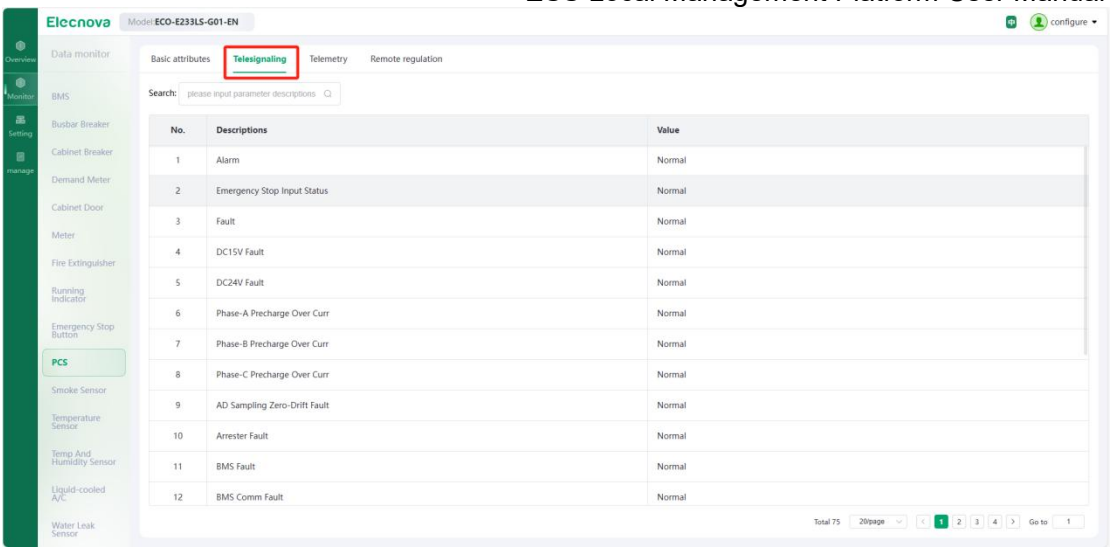
Basic attributes:

Relevant data showing the basic attributes of the device:



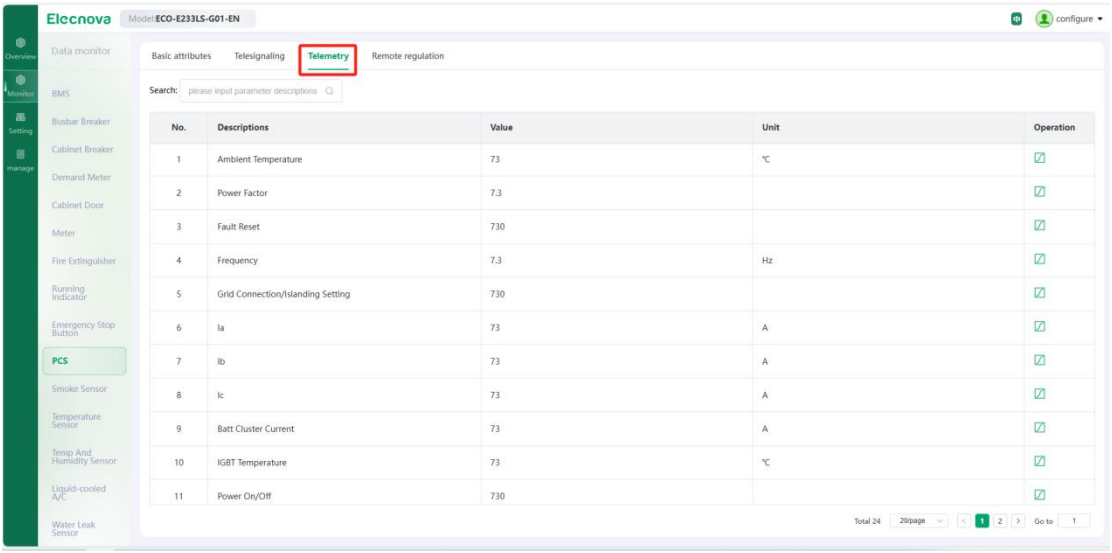
2.7.2 Remote communication data

Display the status of the remote communication data of the device:



2.7.3 Remote metering data

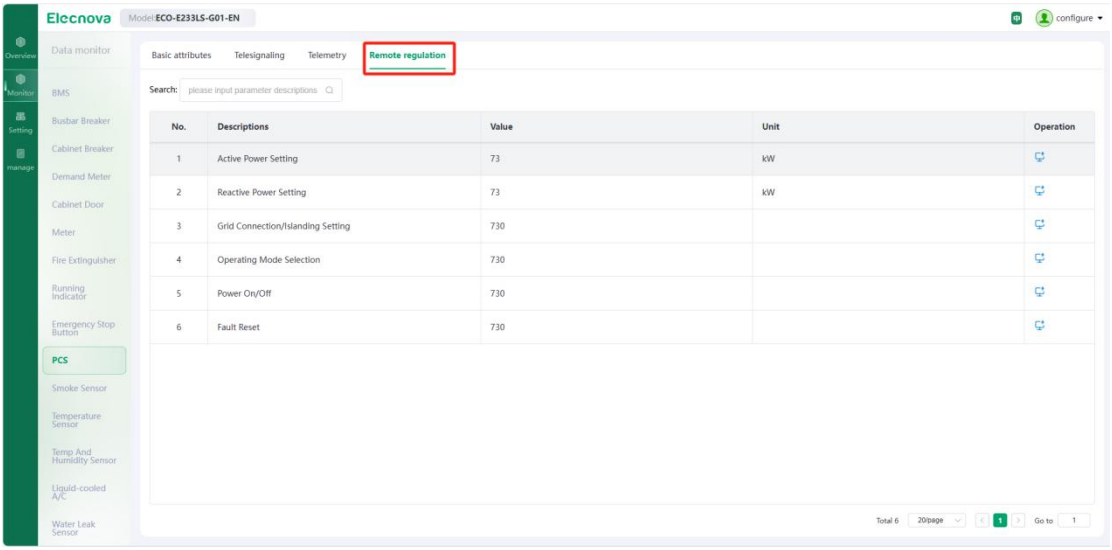
Display the current value of the remote metering data of the device and support the query of the historical data of the remote metering data:



Click the button to query the curve of the history:

2.7.4 Remote regulation data

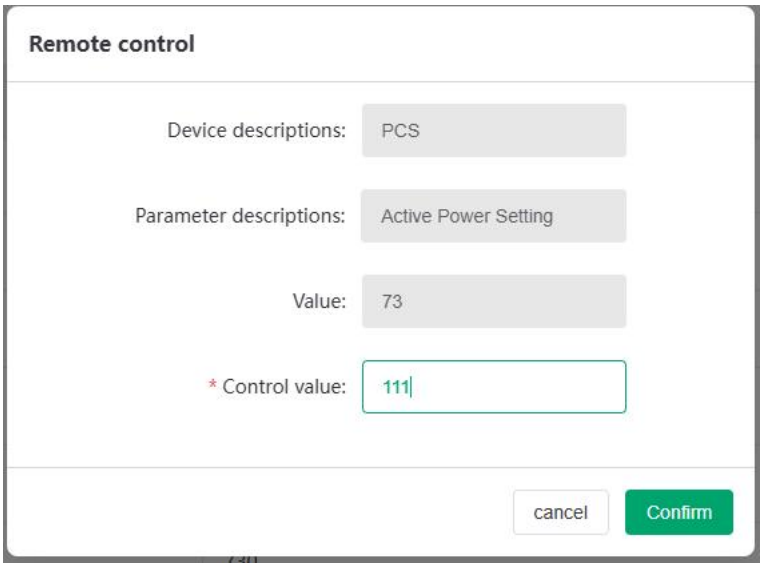
Show the current value of the remote regulation data of the device, and support the remote control operation of the device:



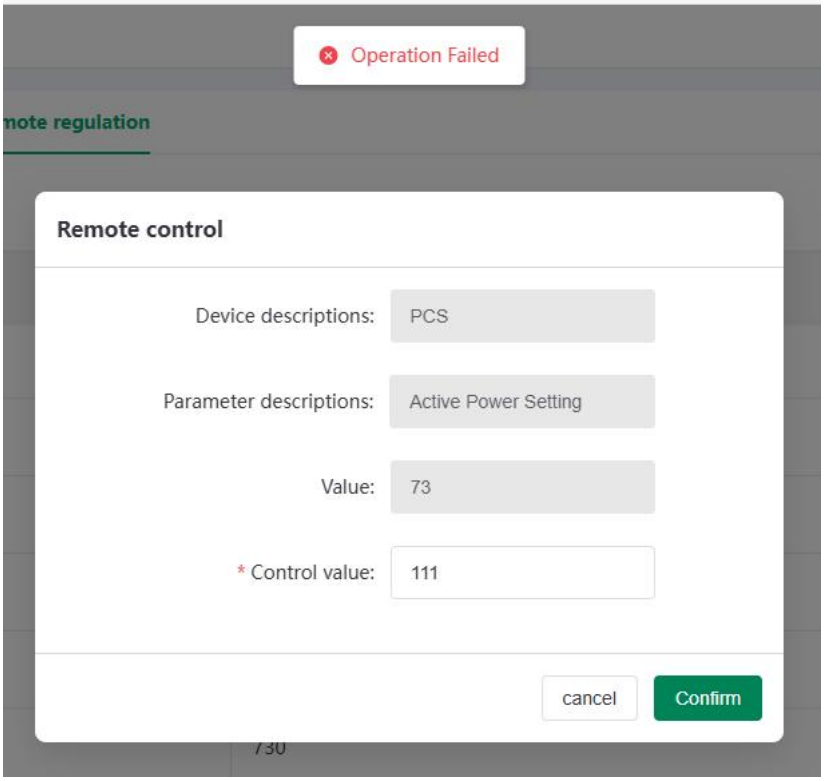
Click the button  to provide remote control:

First: you need to enter the login password of the account to verify:

Then the platform will issue control parameters according to the required input control value and conduct remote control operation on the equipment:

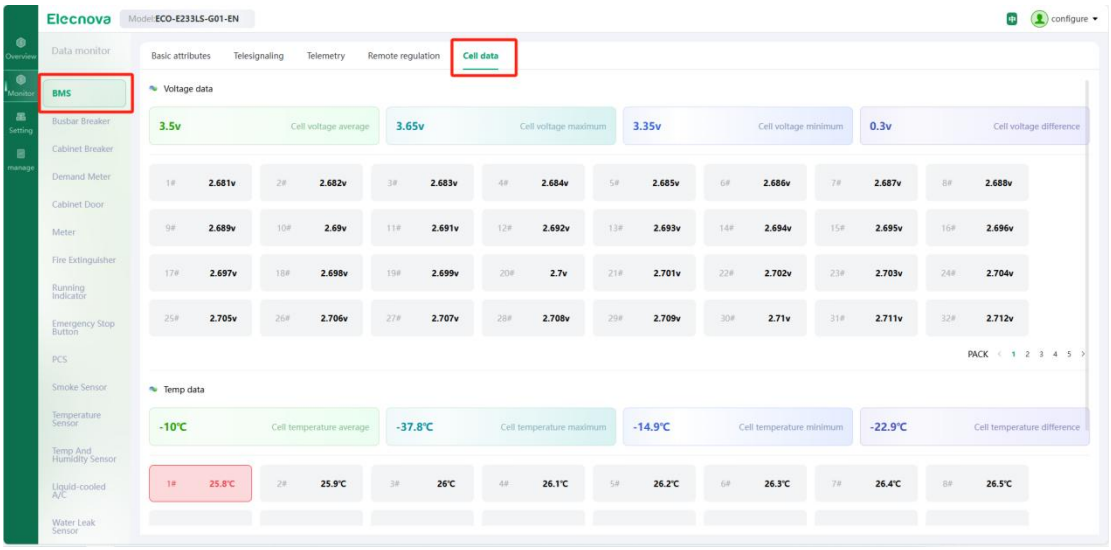


The platform will prompt the execution result of the remote control, and the customer can also determine the result of the remote control based on the current value.



2.7.5 Cell data

Select the BMS device, and you can view the data of all the battery cells in the ESS cabinet. Important display of the voltage and temperature data of the cells:

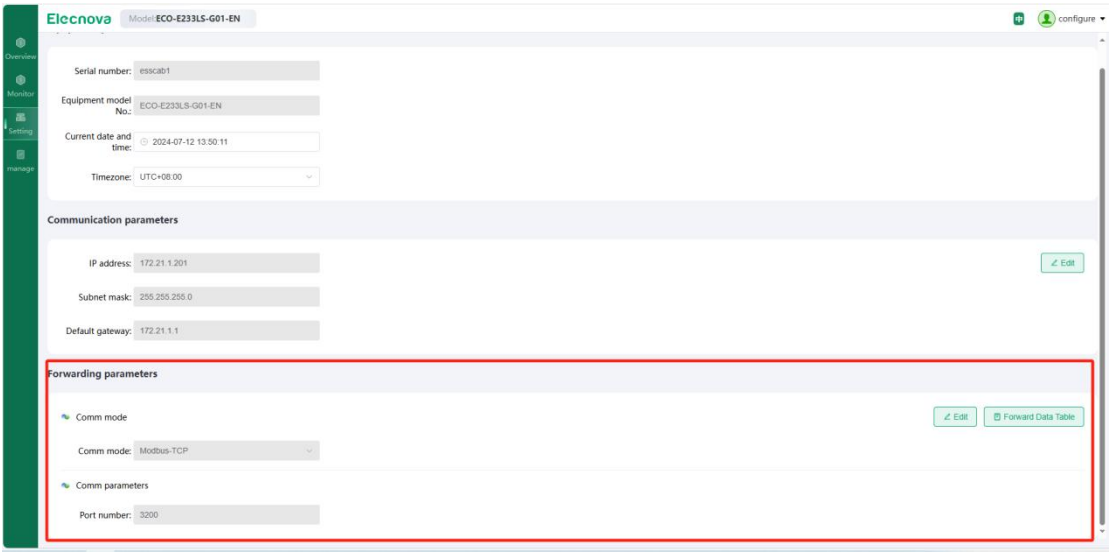


2.8 Data forwarding management

The controller supports forwarding all the monitoring data of the ESS cabinet to the third-party system. Currently, two forwarding protocols, Modbus-RTU and Modbus-TCP, are supported.

Click [Parameter] - [forwarding parameter] to enter the forwarding data management page:

According to the communication protocol supported by the third-party system, select the appropriate communication mode and set the corresponding communication parameters:



Click [All data] to view the data details of the controller forwarded to the third-party system: