



Acrel IoT EMS Platform Manual

Acrel Co., Ltd.

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Overview

Acrel IoT EMS Cloud Platform is a platform based on the Internet of Things data center, which establishes uplink and downlink data standards, and provides Internet users with energy IoT data services. Users only need to purchase Acrel IoT sensors, install them and scan the QR code to obtain the required industry data services using mobile phones and computers.

Acrel IoT EMS combines the Internet business model of online sales to provide PAAS platform services for widely distributed small and medium-sized customers. Users can choose the required functional modules by themselves. Use the gateway to upload, you can use the mobile phone to scan the code to get the corresponding industry data service, and you don't need to pay attention to the debugging process and platform operation process.

Login

Users can open the IoT website with a browser (Google Chrome, Firefox, 360 Extreme Browser are recommended), the URL is : <https://iot.acrel-eem.com>



Figure. 2- 1 Login Interface

Home

The home page shows users project overview information, equipment status information, alarm information, energy consumption statistics, energy trend information including electricity, water, comprehensive energy consumption and carbon emissions information, and the middle map of the home page shows project information. The upper right corner of the website will display the alarm data and classification, and can also display the user's local weather information. The user can also click on the APP to download the app through the QR code. As shown in Figure 3-1.

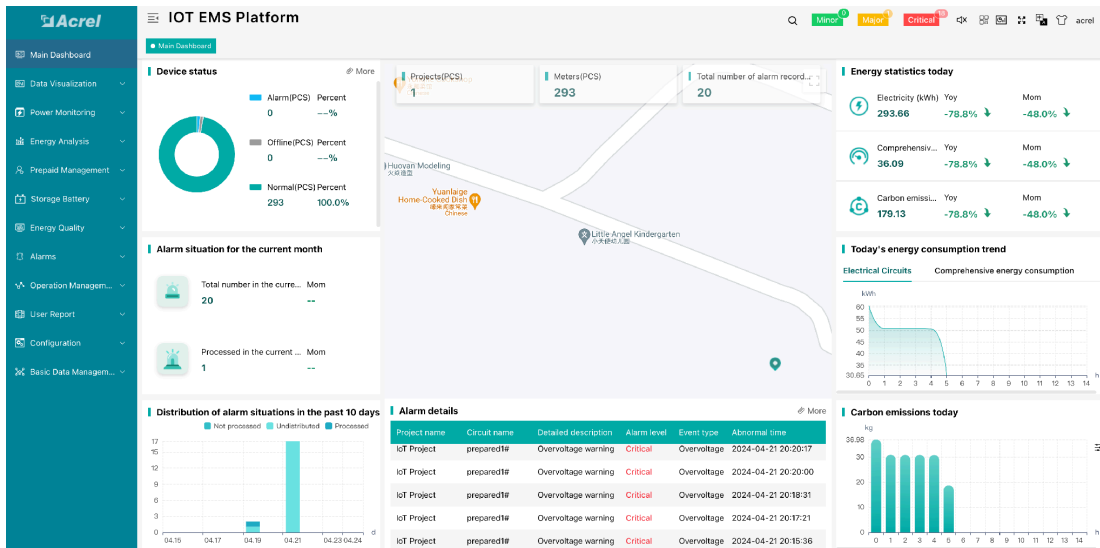


Figure 3- 1 Home Interface

Data Visualization

Vision is a data visualization customization platform, developed using a B/S architecture. Once deployed, it can be accessed and used through common web browsers. It can connect to various data sources such as online services, common database types, Excel files, static data, etc. Users can configure data in a WYSIWYG manner to display it in the form of charts, maps, tables, etc., and use various interactive components to achieve linkage between different components. As shown in Figure 4-1, 4-2.

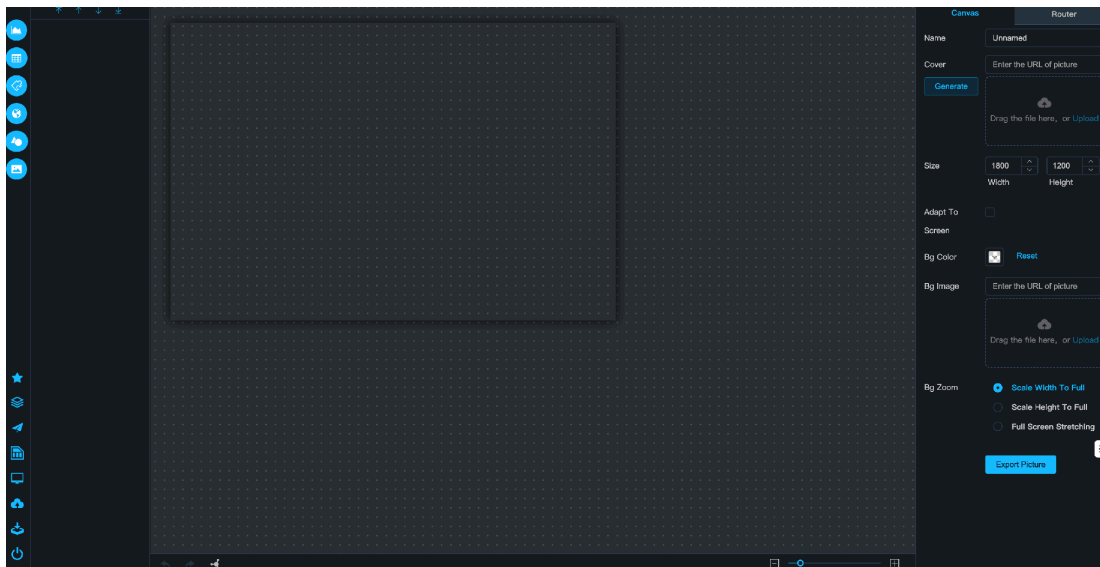


Figure 4-1 Vision Edit Interface

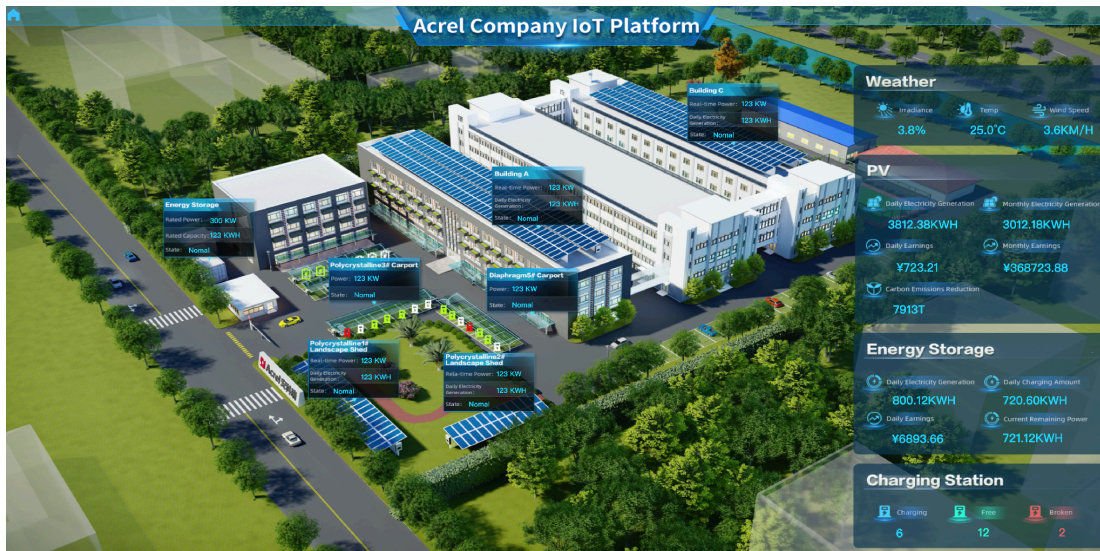


Figure 4- 2 Data Visualization Example

Power Monitoring

5.1.Real-time Monitoring

Real-time monitoring displays project information and all equipment information under the project, and you can see the communication status, circuit name, etc. of each meter. You can switch between different projects, as well as display modes such as tables or arrays. These meters are classified and queried based on energy consumption topology. It can also be filtered through gateway identification number, instrument model, and circuit name. As shown in Figure 5-1.

You can click details for more information, as shown in Figures 5-2.

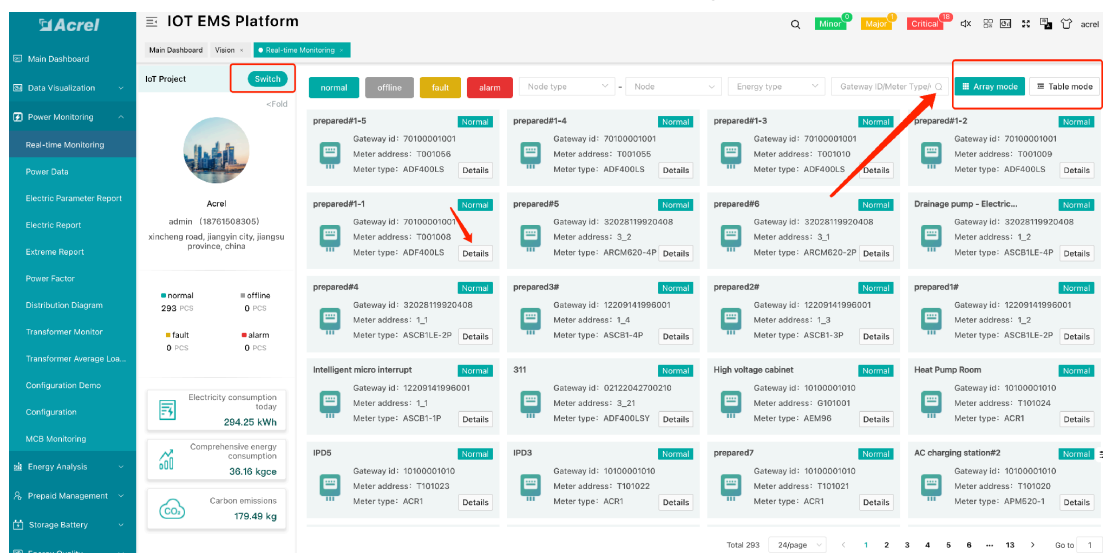


Figure 5-1 Real-time Monitoring

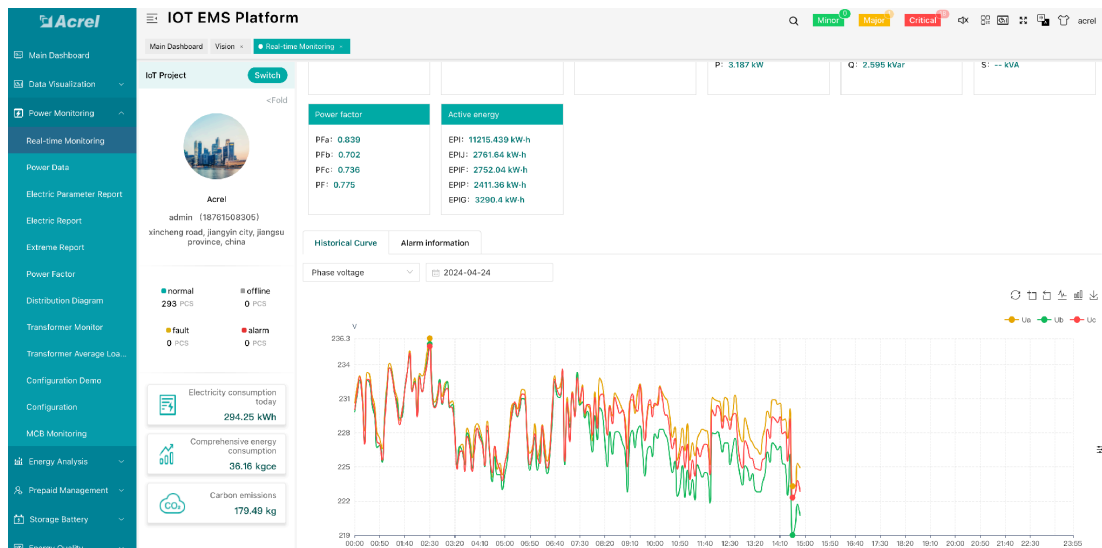


Figure 5-2 Real-time Detail Information

5.2.Power Data

This page displays the daily data information of a certain circuit for a certain period of time. Users can choose different parameter types and display different electrical parameter data. The data will be displayed in the form of charts or data lists. The maximum and minimum values of the data can also be obtained through maximum value analysis, as shown in Figure 5-3.

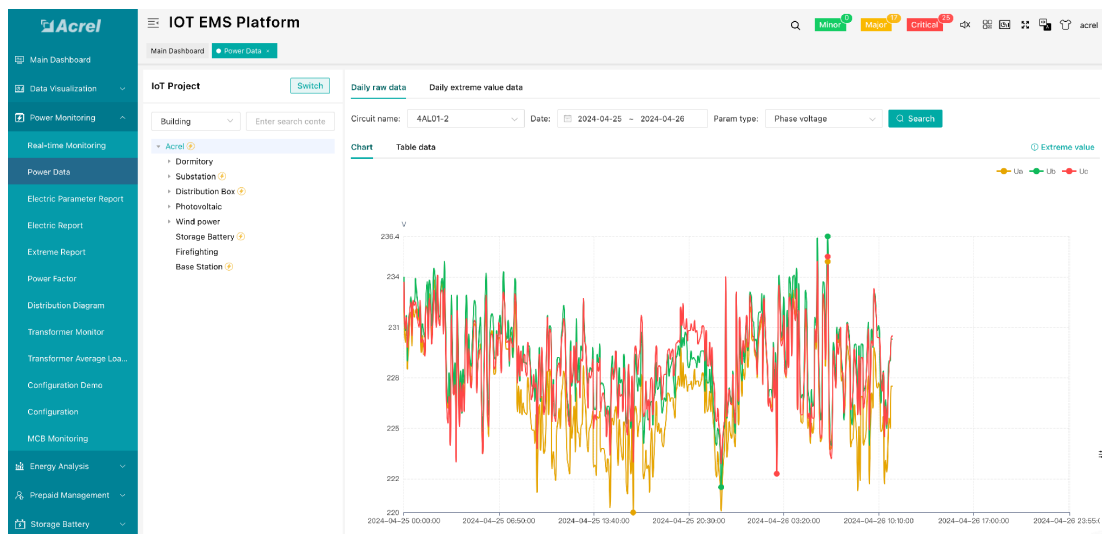


Figure 5-3 Power Data

5.3.Electric Parameter Report

The electrical parameter report page displays the electrical parameter reports of project equipment. Users can view the electrical parameter reports of equipment in various regions, and display and view corresponding data by switching time, adjusting electrical parameters, and adjusting time intervals, as shown in the figure. This page supports report export and batch export. Click the export button to export the corresponding data. The report can be exported in Excel or CSV format. As shown in Figure 5-4.

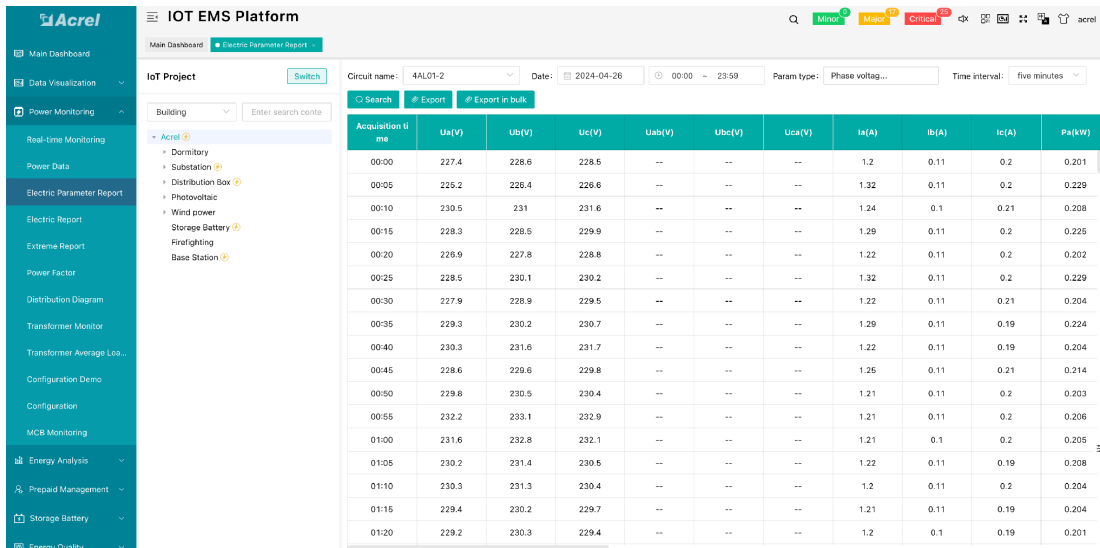


Figure 5-4 Electric Parameter Report

5.4.Electric Report

This page displays the electrical parameter values of the bound devices at a certain time point in the project. Users can check the left all or individual nodes to view the electrical parameter values of the bound devices on the nodes. They can switch dates and times to query the electrical parameter values of the devices at different time points, and if the number of queried devices exceeds fifteen, they will be displayed on a page. This page supports report export. Click the export button to export the corresponding data, and export the report in Excel format. As shown in Figure 5-5

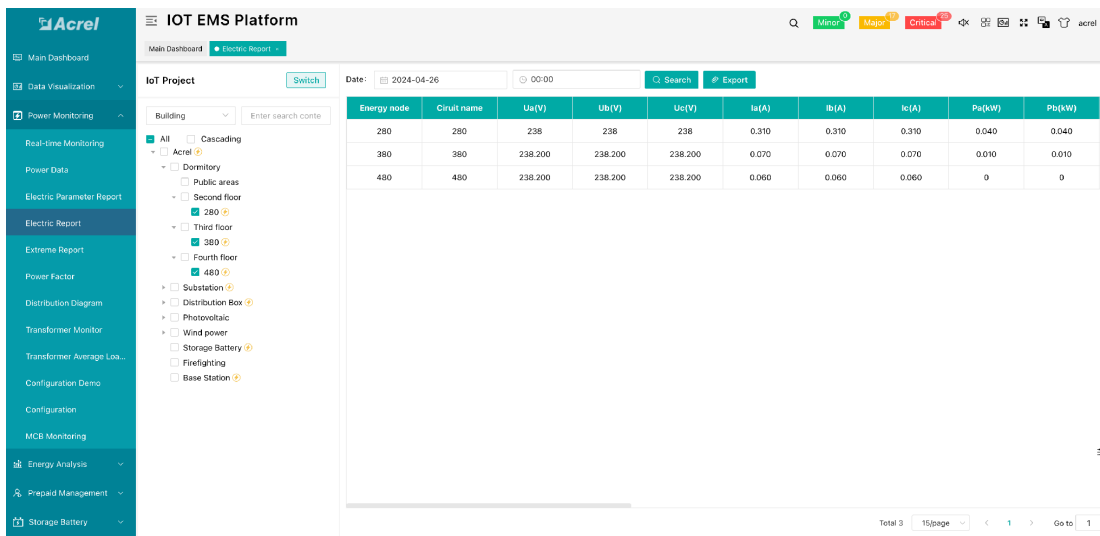


Figure 5-5 Electric Report

5.5.Extreme Report

This page displays the maximum and minimum values, as well as the average and occurrence time, of the electrical parameters of the instruments under each project on a certain day, forming a report form for display, and adding export function, as shown in Figure 5-6.

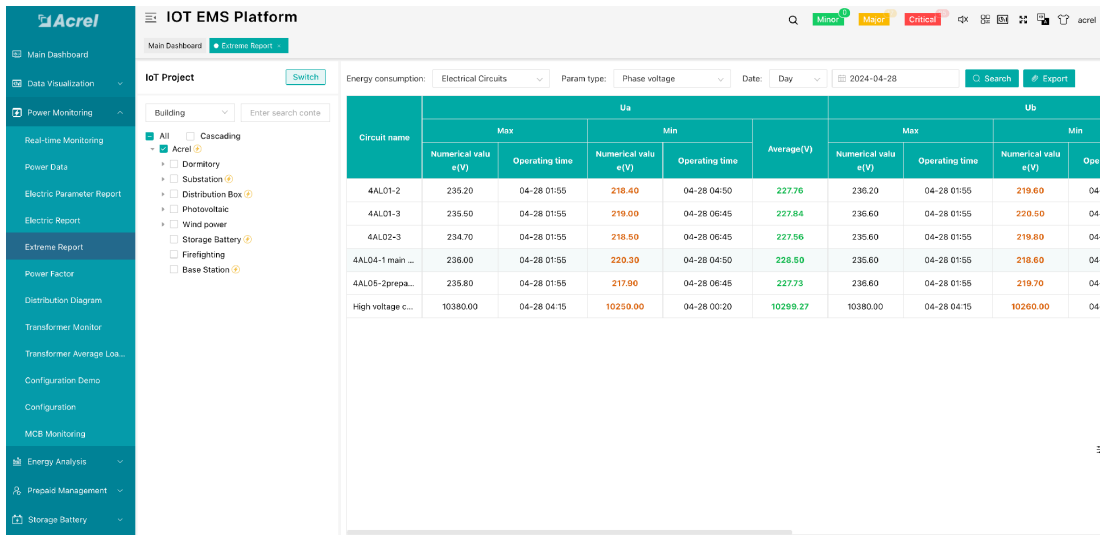


Figure 5-6 Extreme Report

5.6.Power Factor

This page shows the forward total active energy, reverse total active energy, forward total reactive energy, reverse total reactive energy, and average power factor of a certain circuit in a month within a month. and data tables, as shown in Figure 5-7.

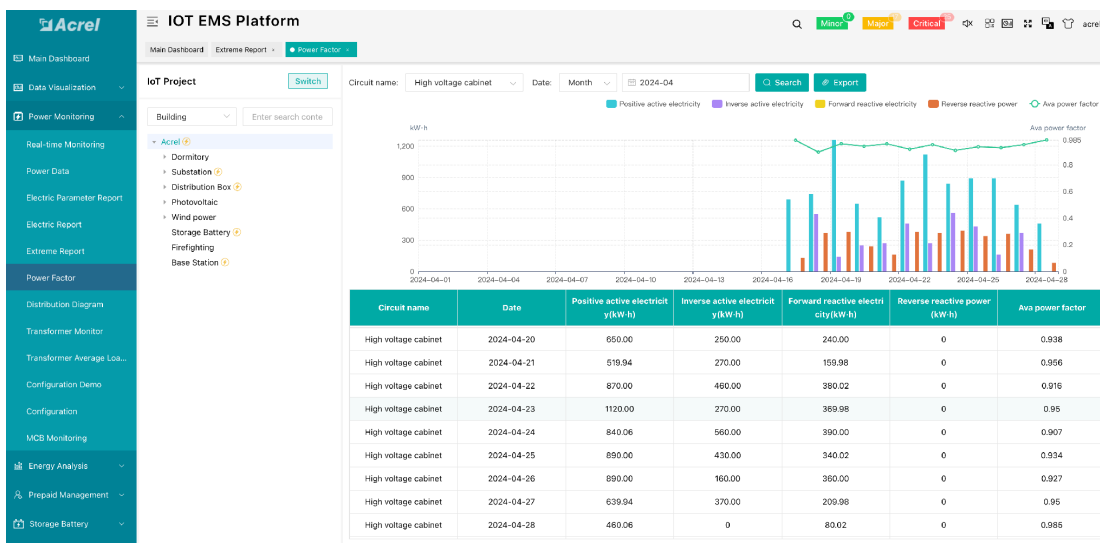


Figure 5-7 Power Factor

5.7.Distribution Diagram

Power distribution monitoring mainly displays the customer's primary power distribution map. As shown in Figure 5-8.

Note: You need to draw a primary power distribution diagram first, complete the binding of the diagram, and then you can view the primary diagram of power distribution.

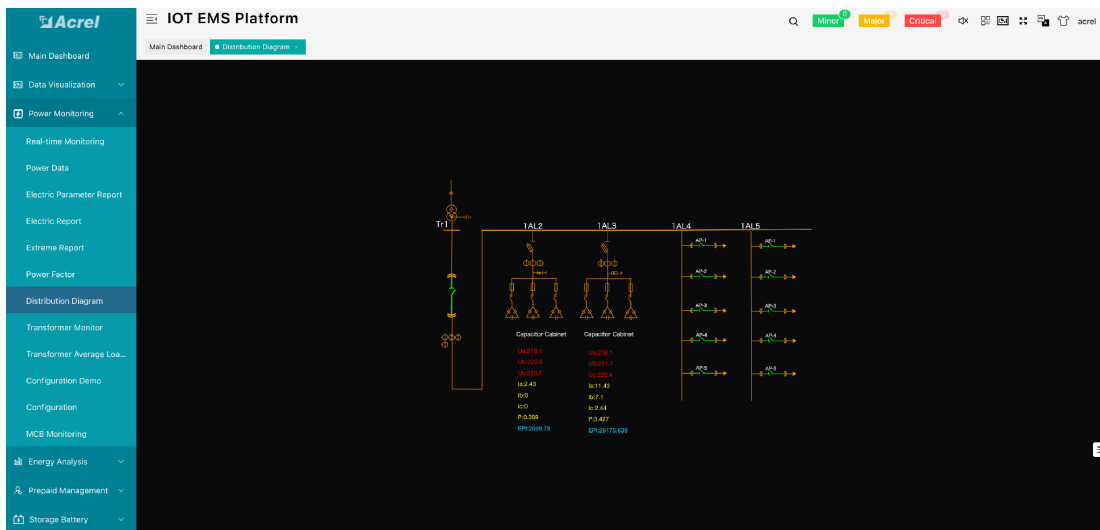


Figure 5-8 Power Distribution Diagram

Click the data in the figure to call up the control box and view real-time data, such as phase voltage, active power, reactive power, active energy, phase current, and reactive energy, as shown in Figure 5-9.

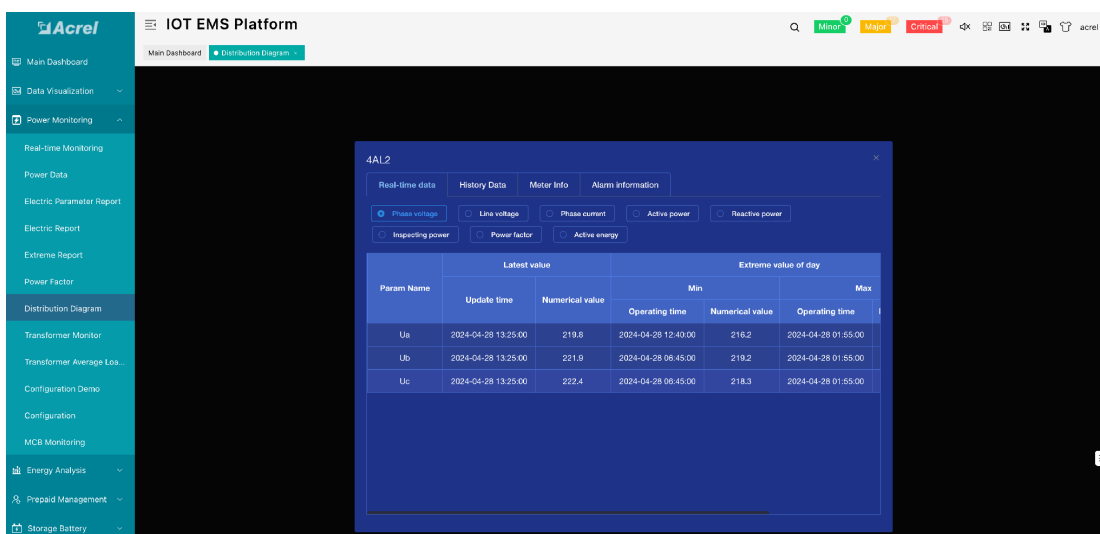


Figure 5-9 Real-time Data

Switch to historical data, and query the charts and data you want to see by selecting the date and power category, as shown in Figure 5-10 and 5-11.

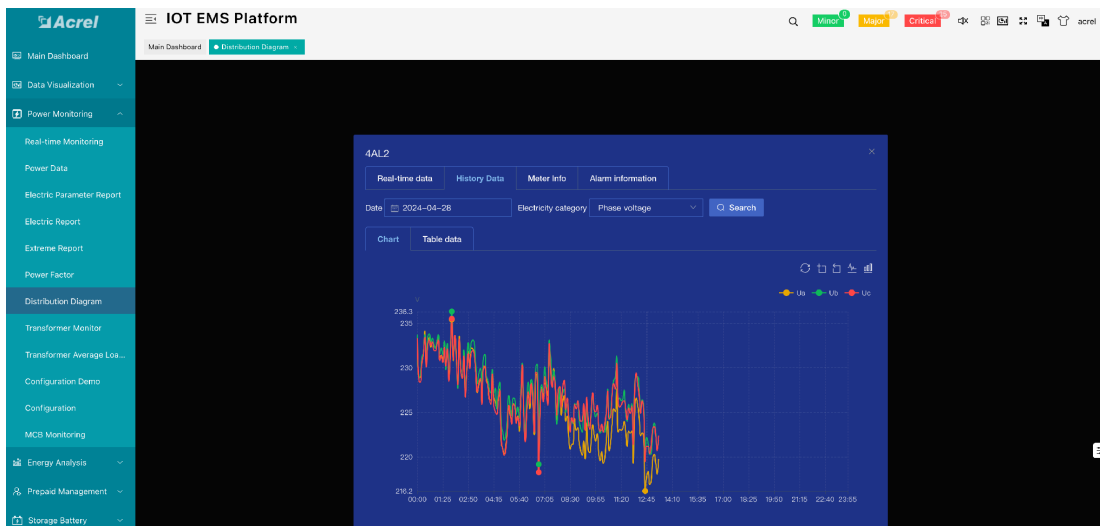


Figure 5-10 Chart

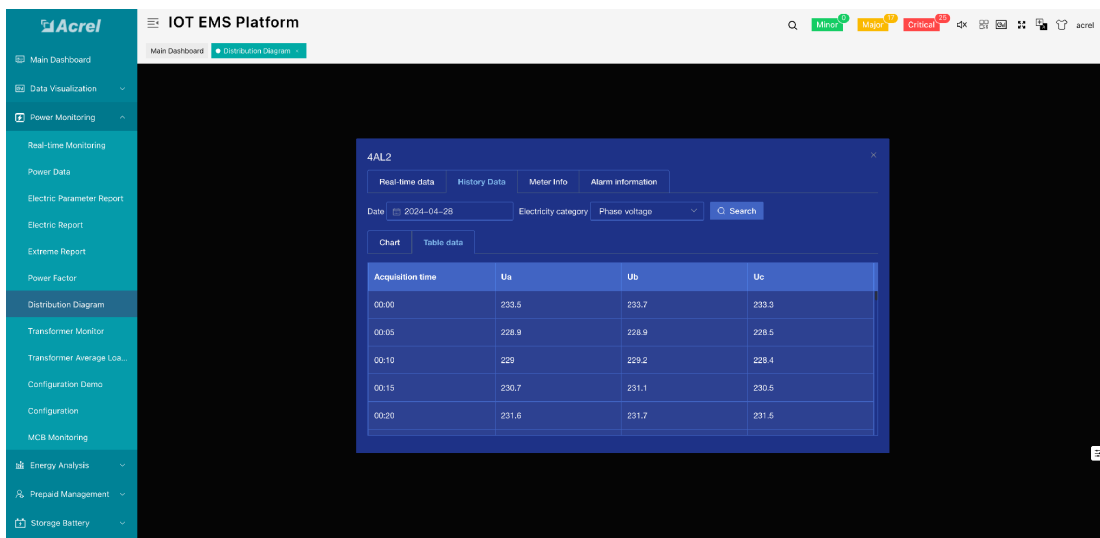


Figure 5-11 Chart

Switch to the Meter information to view the relevant information of the instrument, as shown in Figure 5-12.

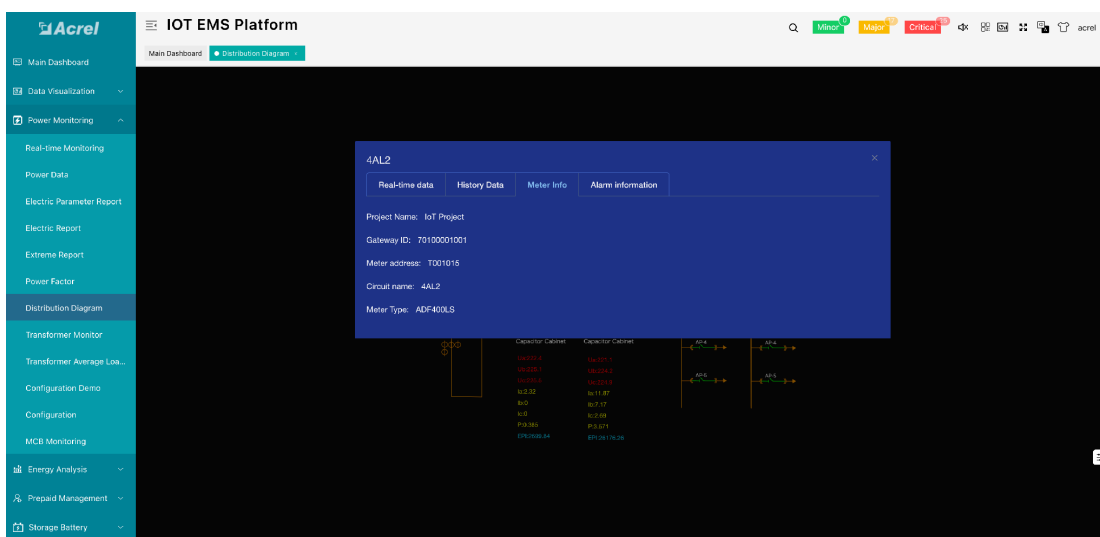


Figure 5-12 Meter Information

5.8. Transformer Monitoring

Display the load conditions of each transformer, so that scientific and reasonable planning can be made for the allocation of transformers. Through the comparative analysis of power consumption efficiency under various operating parameter states, find out the best operating mode. The load is adjusted according to the optimal operation mode, thereby reducing the unit consumption of electricity and minimizing the loss of electric energy. As shown in Figure 5-13

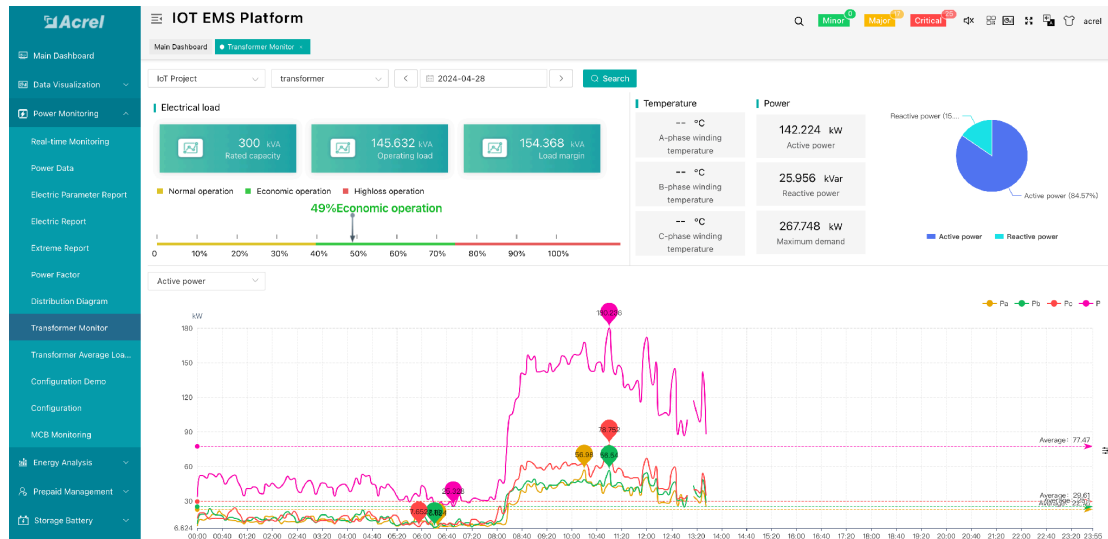


Figure 5-13 Transformer Monitoring

5.9. Transformer Average Load Report

This page displays various data of a single transformer under the project, allowing users to switch to other transformers within the project and view transformer average load data across different time dimensions, as shown in Figure 5-14. This page supports report exporting excel. Select a data row, click the "Chart" button to generate the corresponding chart.

IOT EMS Platform					
Main Dashboard • Transformer Average Load Report					
Project name: IOT Project Transformer name: transformer Date: Day 2024-04-28 Search Export Chart					
	Time	Rated capacity(kVA)	Average operating load(kVA)	Average load occupancy	
☐	2024-04-28 00	300	50.96	16.99%	
☐	2024-04-28 01	300	43.06	14.35%	
☐	2024-04-28 02	300	45.96	15.32%	
☐	2024-04-28 03	300	43.82	14.61%	
☐	2024-04-28 04	300	46.42	15.47%	
☐	2024-04-28 05	300	37.08	12.36%	
☐	2024-04-28 06	300	31.78	10.59%	
☐	2024-04-28 07	300	32.5	10.83%	
☐	2024-04-28 08	300	105.91	35.3%	
☐	2024-04-28 09	300	150.87	50.29%	
☐	2024-04-28 10	300	157.23	52.41%	
☐	2024-04-28 11	300	143.97	47.99%	
☐	2024-04-28 12	300	126.8	42.27%	
☐	2024-04-28 13	300	111.2	37.07%	
☐	2024-04-28 14	300	--	--	
☐	2024-04-28 15	300	--	--	
☐	2024-04-28 16	300	--	--	
☐	2024-04-28 17	300	--	--	

Figure 5-14 Transformer Average Load Report

5.10. Configuration Demo

Users can draw their own configuration diagram through this page. The left area places components, components, devices, etc. by category. Users can drag and drop them to the middle canvas area as needed, adjust their position and size, select components, and perform parameter settings, data binding, and other operations on them in the right area, as shown in Figures 5-15. Simultaneously supports the import, export, and preview functions of configuration diagrams.

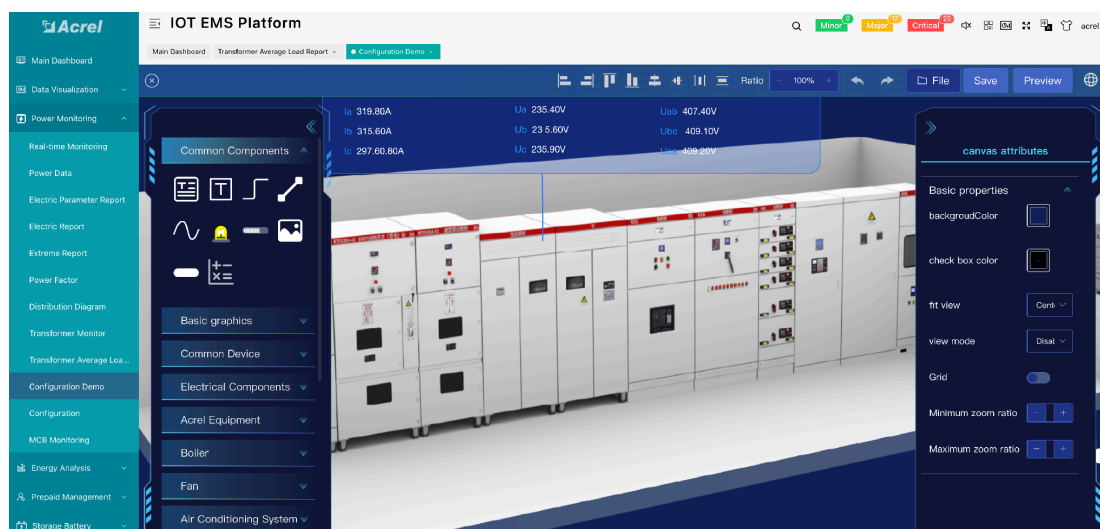


Figure 5-15 Configuration Editing

5.11. Industry Configuration

This page displays the industrial configuration diagrams that have been drawn under the project. If there are multiple configuration diagrams, you can select the corresponding one from the drop-down list to display, as shown in Figure 5-16. Click the full screen button to enlarge the configuration diagram in full screen. Click the close button in the upper left corner to return to the industrial configuration page.

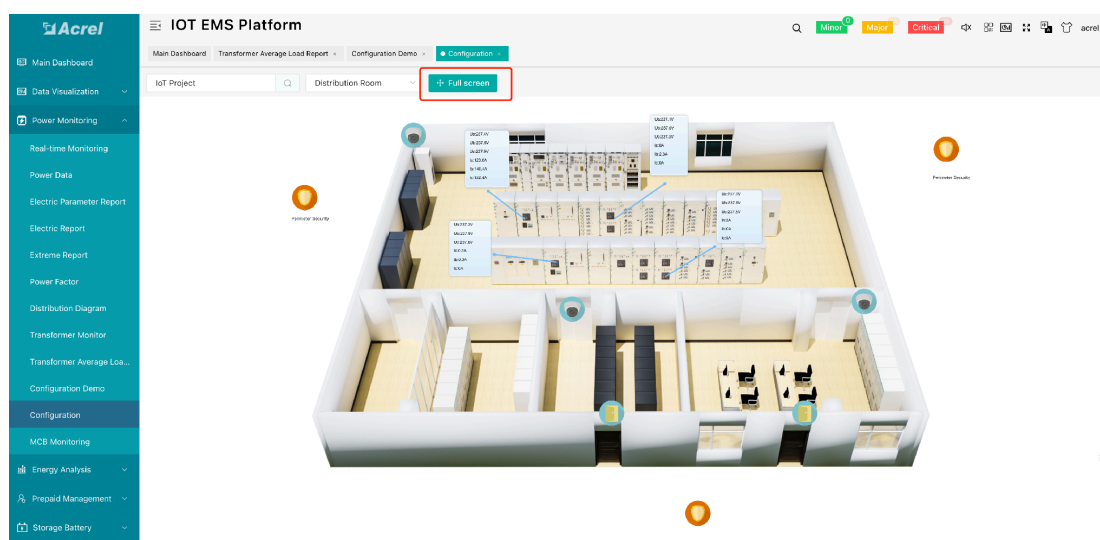


Figure 5-16 Industry Configuration

Click on the electrical parameter data on the diagram to display real-time data, historical data,

and instrument information in the form of a table. As shown in Figure 5-17

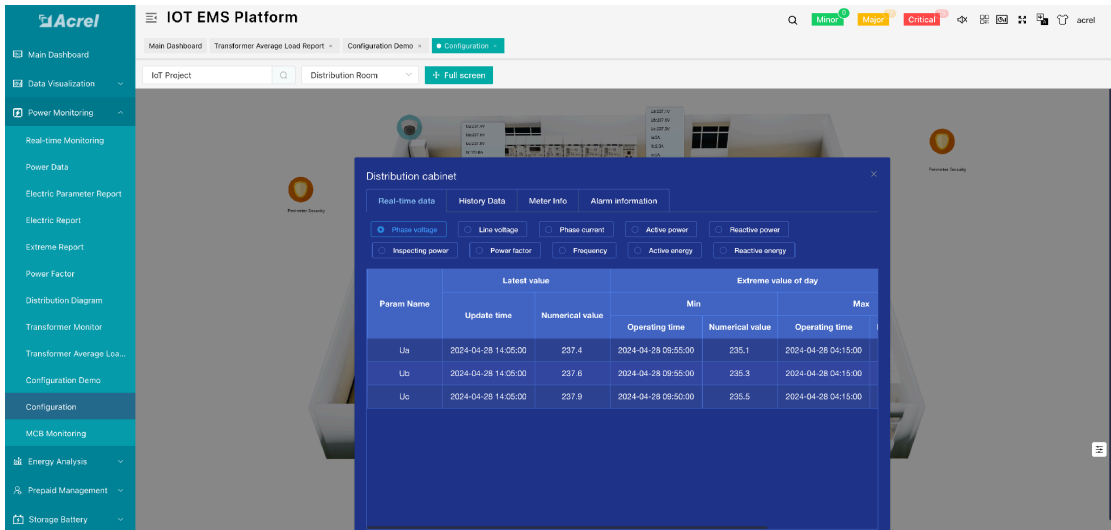


Figure 5-17 Chart

5.12.MCB Monitoring

This page displays the operating status of each circuit breaker, in order to make a scientifically reasonable plan for the circuit breaker configuration. By conducting statistical analysis on the open and close status of each circuit breaker, as shown in the figure 5-18.

Click the "Details" button to open the real-time circuit breaker monitoring page. This page displays the device's operational status, real-time data, historical curves of various electrical parameters, alarm information, and control logs, as shown in the figure 5-19. Users can perform operations such as resetting, leakage self-checking, opening and closing, maintenance switch, forced opening and closing, micro-break timing, parameter setting, etc. on the circuit breaker.

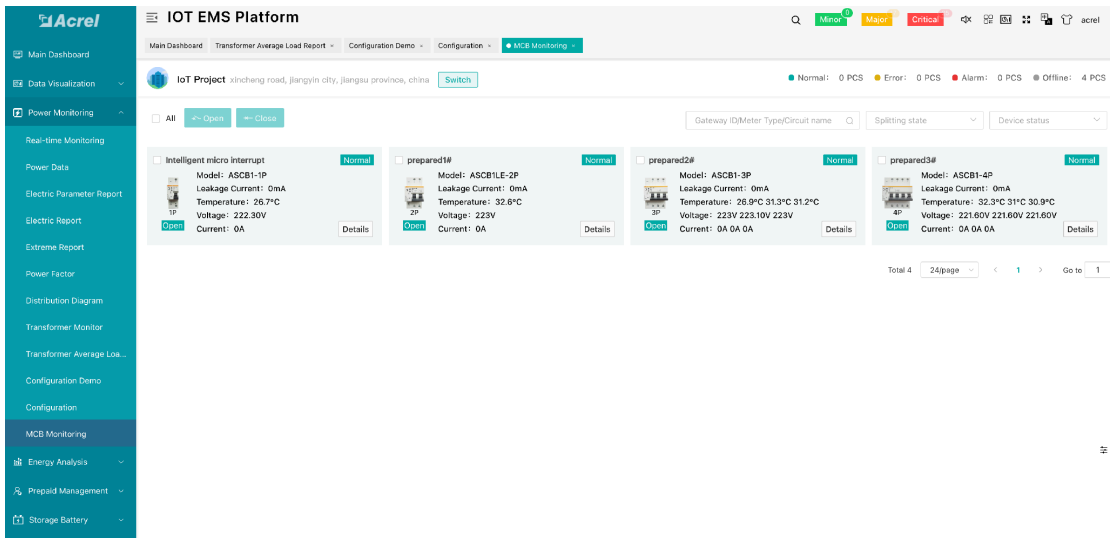


Figure 5-18 MCB Monitoring

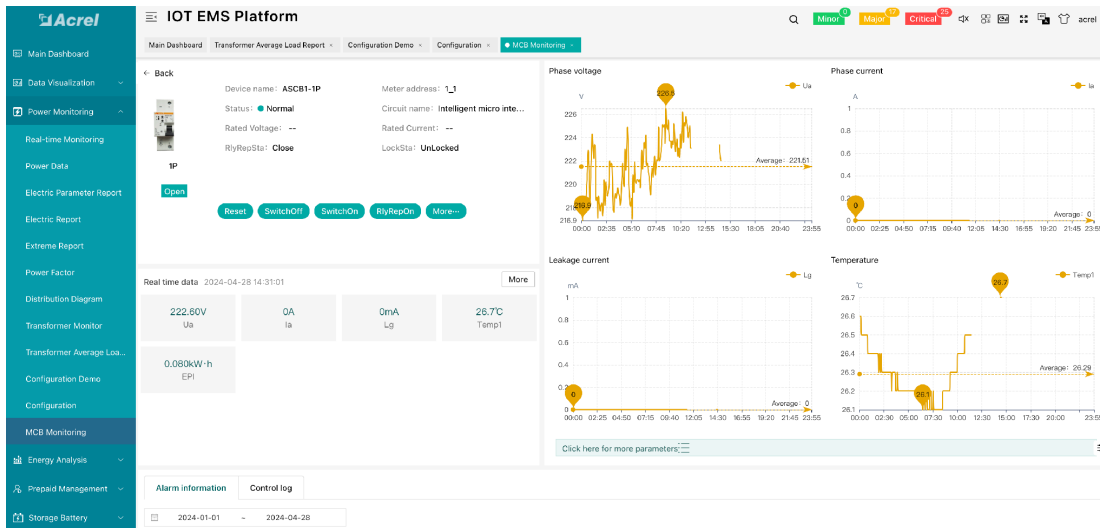


Figure 5-19 Details

5.13 Running Duration Report

This page shows the operating duration and total energy consumption of a circuit within a project. Users can query by time and export the data.

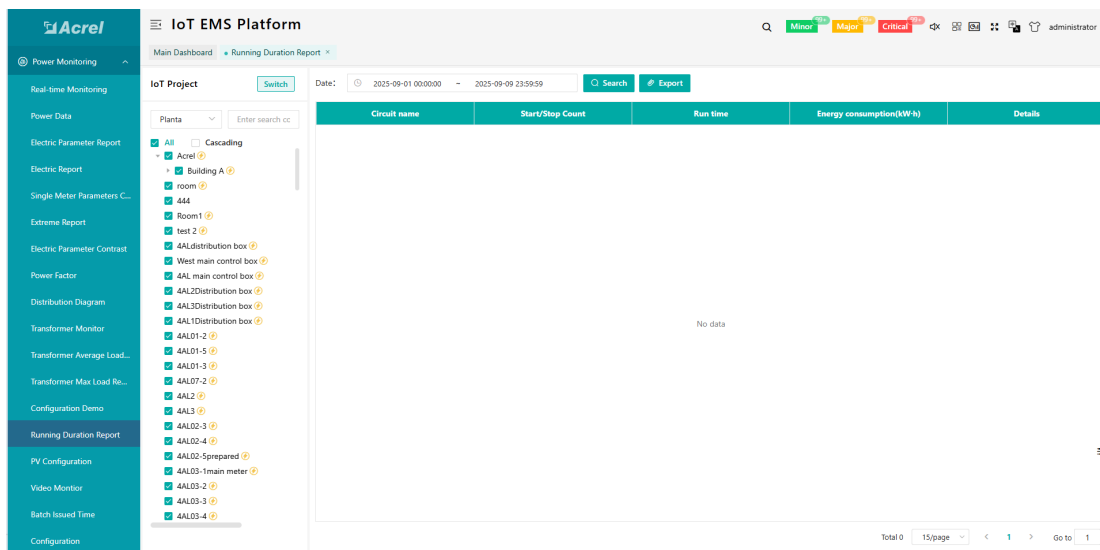


Figure 5-20 Running Duration Report

5.14 Environment Monitor

This page monitors the substation's indoor environment, including smoke detection, water leakage, and access control.

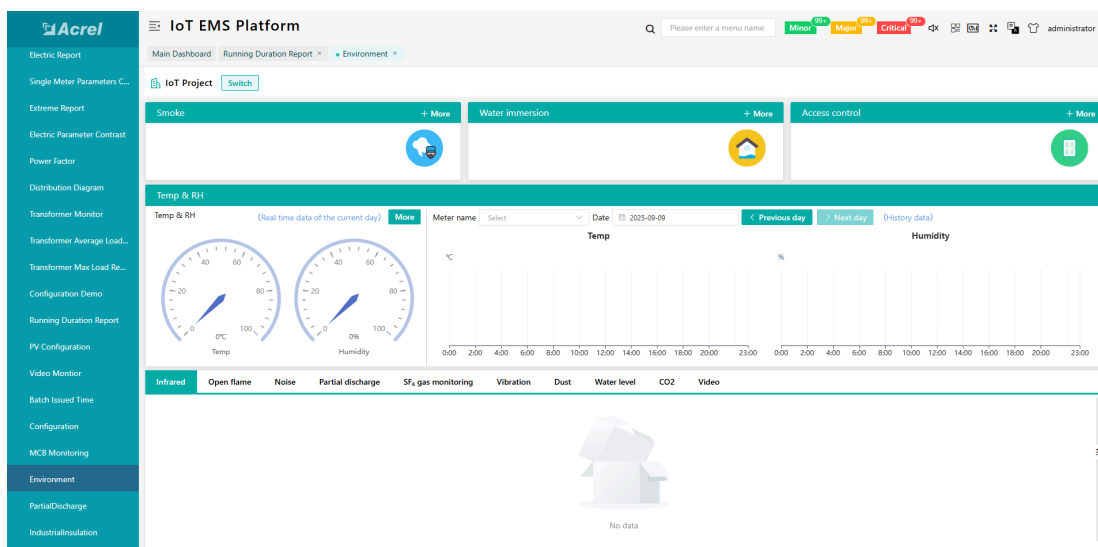


Figure 5-21 Environment Monitor

5.15 Batch Command Delivery

This page displays commands sent to meters. Users can filter by command type, time, or status, and perform batch operations such as time control, forced control, and multi-rate period settings on multiple meters.

Command type	Circuit name	Delivery method	Scheduled time	Operator	Status	Create time	Operation
Unit price setting		Direct delivery		administrator	Delivered successfully	2023-08-02 09:53:14	Details
Unit price setting		Direct delivery		administrator	Delivered successfully	2023-07-18 16:14:43	Details

Figure 5-22 Batch Command Delivery

Energy Analysis

6.1. Energy Overview

The energy overview is to display the month on month Analysis, energy consumption trend, daily electric power curve, and power peak value on the same interface. According to viewing a certain project, select the corresponding building node and classified energy consumption, you can view the project, month on month Analysis, energy consumption trend, and some can also view the

daily power curve and power peak value. At the same time, you can switch the current day, current month, and current year to view energy consumption trends in different time periods. As shown in Figure 6-1.

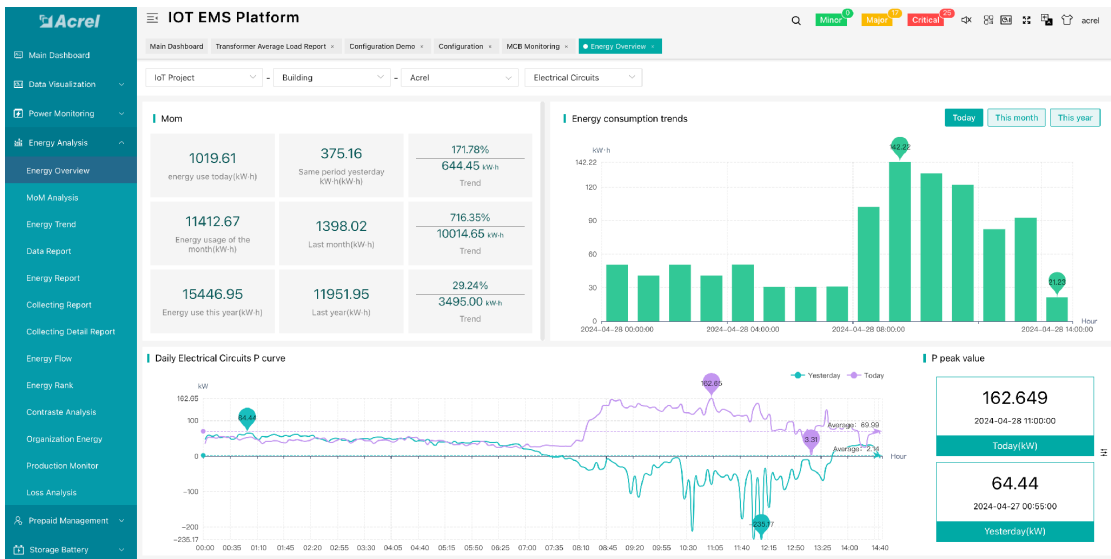


Figure 6-1 Energy Overview

6.2.MoM Analysis

On the month on month analysis page, you can query the classified energy consumption of energy consumption nodes under the project on a daily and monthly basis, compare and analyze it with the energy consumption of the same period yesterday or last month, and get the ring ratio, which can be exported to excel, as shown in Figure 6-2.

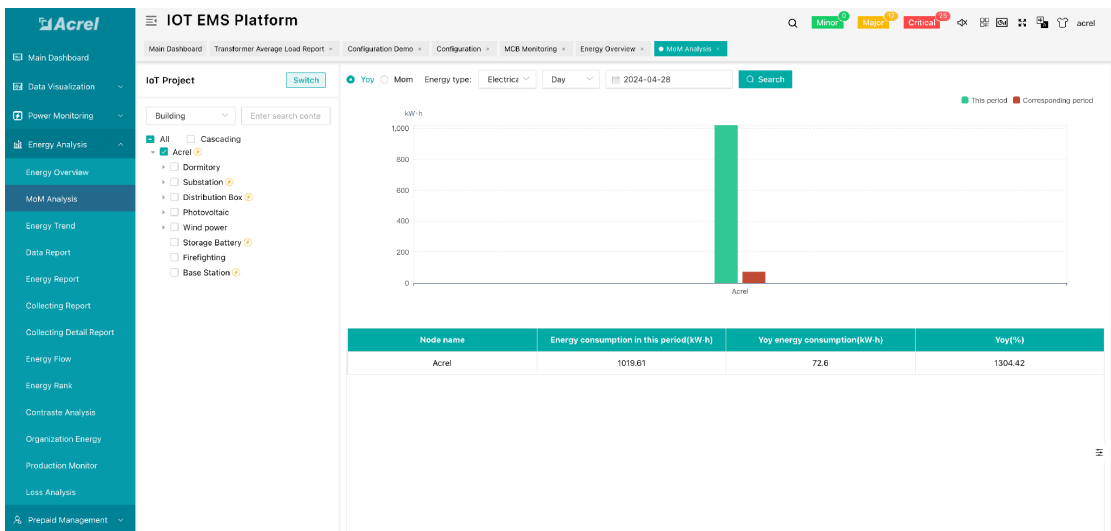


Figure 6-2 MoM analysis

6.3.Energy Trend

On the energy trend interface, you can view the daily, monthly and annual energy consumption trend of classified energy consumption under the building energy consumption node

of the project, as shown in Figure 6-3.

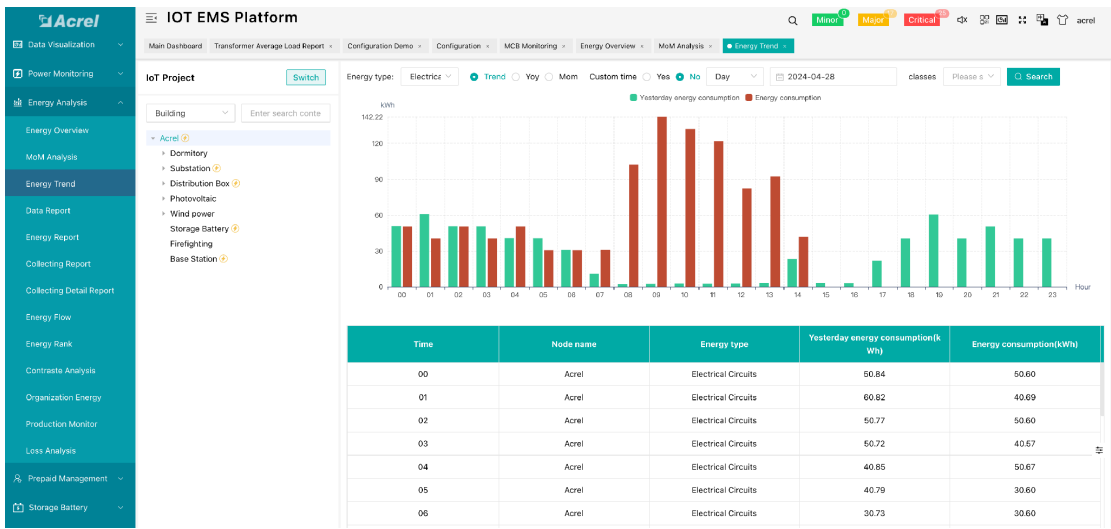


Figure 6-3 Energy Trend

6.4.Data Report

The energy consumption data is displayed on the page. Users can select energy consumption, comprehensive energy consumption, carbon dioxide emissions, daily, monthly, quarterly, annual, and custom reports for building nodes according to different categories of energy consumption statistics, and export tables. Select nodes, classify energy consumption and dates, click "Query" to view the energy consumption data of each node in the classification. Click "Export" to export the table. As shown in Figure 6-4.

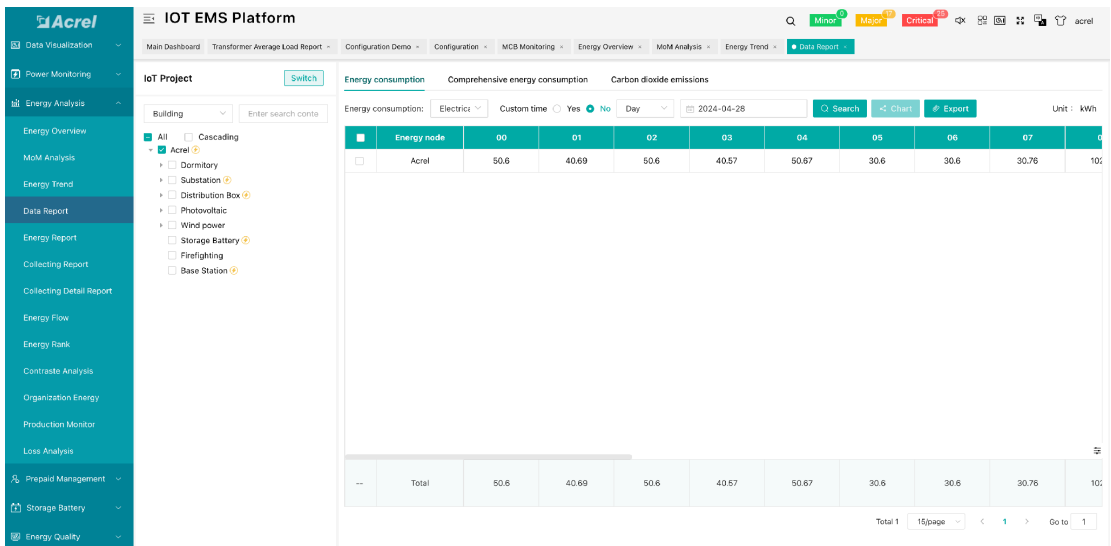


Figure 6-4 Data Report

6.5.Energy Report

The energy report mainly counts the daily, monthly and annual reports of building energy consumption, comprehensive energy consumption, and carbon dioxide emissions managed by the currently logged-in user. According to different categories of energy consumption statistics, you

can select building energy consumption, comprehensive energy consumption, and carbon dioxide emissions daily, monthly, and annual reports, and export the tables. Select the energy consumption, the classified energy consumption to be viewed and the date, and select one of the report types of "Day", "Month" and "Year". Click "Query" to view each building energy consumption node of this category. Click "Export" to export the table. As shown in Figure 6-5.

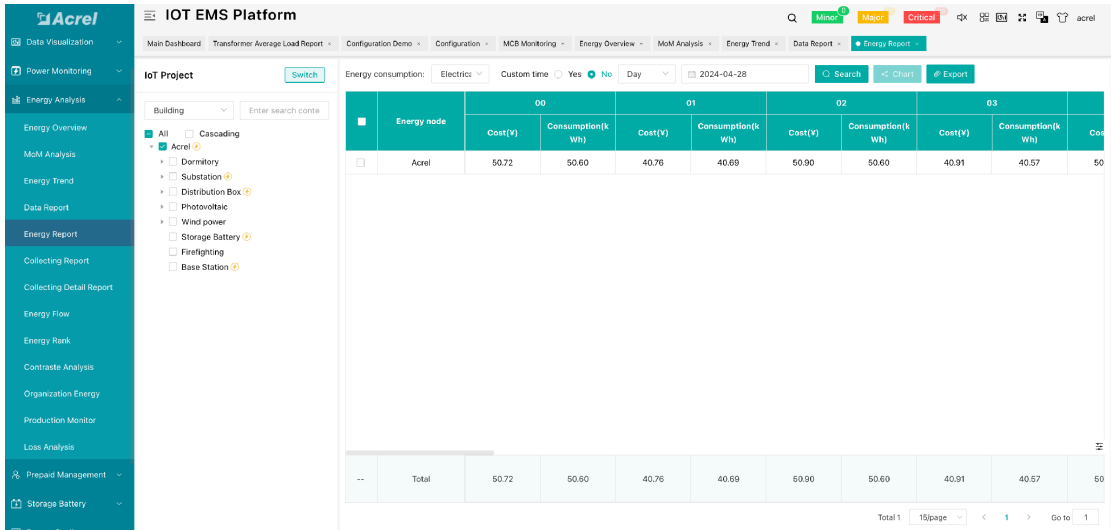


Figure 6-5 Energy report

Support to select project data to generate histogram. Select the energy consumption node to be viewed, and click "Chart" to view the energy consumption chart of the energy consumption node. As shown in Figure 6-6.

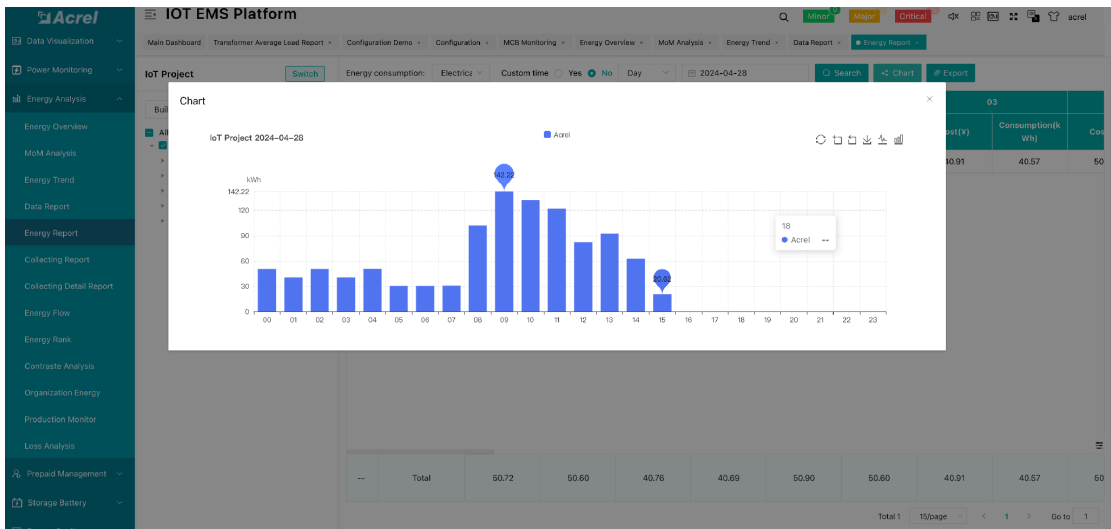


Figure 6-6 Energy consumption report - chart

6.6.Collecting Report

The collection report can count the classified energy consumption of the energy consumption nodes of the project in any time period, and supports excel export, as shown in Figure 6-7.

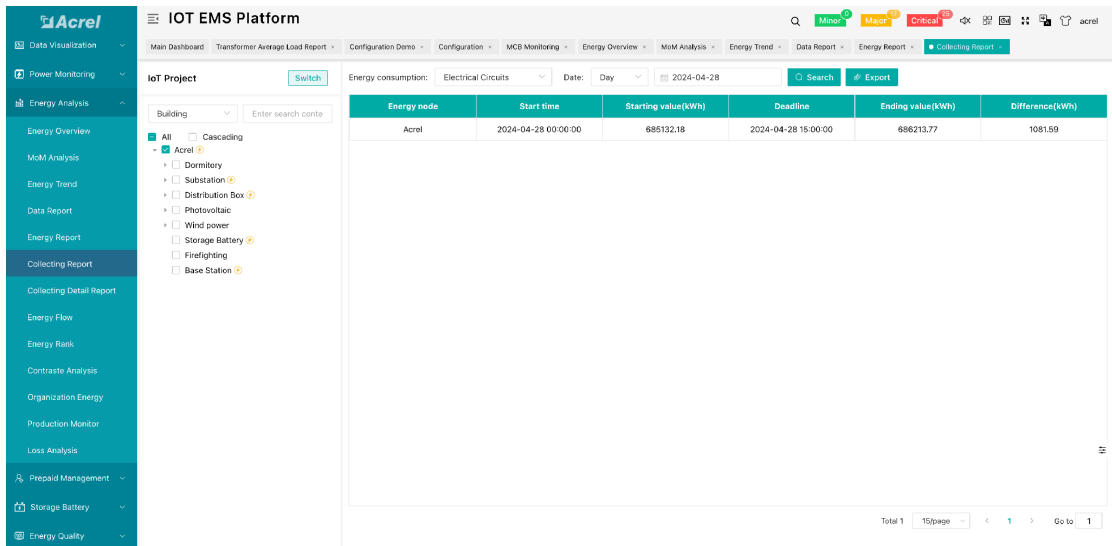


Figure 6-7 Collection report

6.7. Collecting Detail Report

This page supports querying the detailed energy consumption data and totals of various circuits of the project's topology nodes according to daily, weekly, monthly, quarterly, yearly, or custom time frames, and supports Excel export, as shown in the figure 6-8.

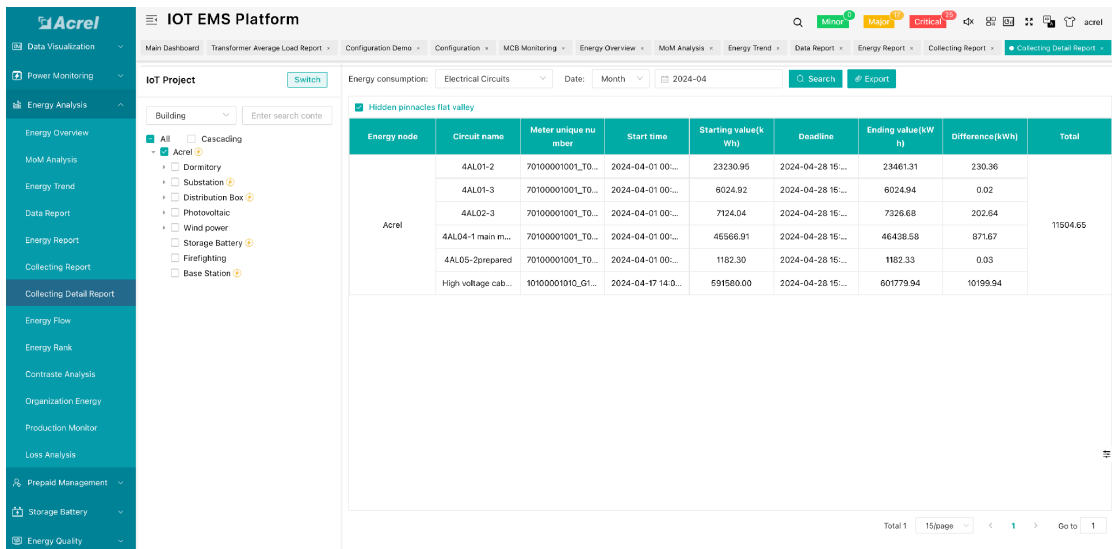


Figure 6-8 Collecting Detail Report

6.8. Energy Flow

The energy flow diagram mainly shows the flow diagram of the energy consumption of each category of a single project. Select the project to be viewed, classified energy consumption, start date and deadline, and you can view the energy flow of the project. At the same time, you can see the energy consumption of each node by placing the mouse on the graph. As shown in Figure 6-9.

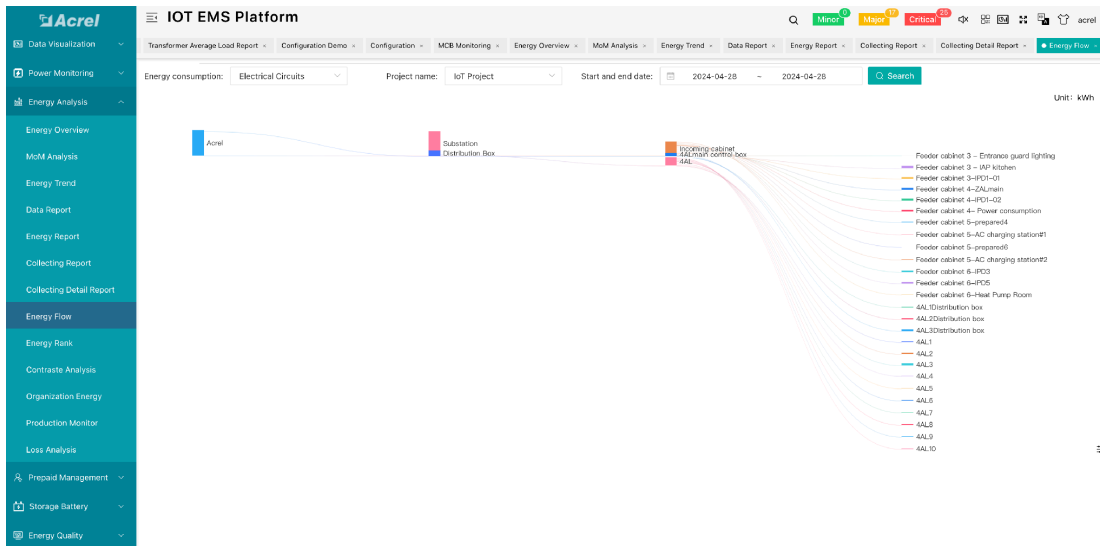


Figure 6-9 Energy flow direction

6.9. Energy Rank

The energy consumption ranking can rank the energy consumption, comprehensive energy consumption, and carbon dioxide emissions of each energy consumption node of the project, and the consumed energy consumption, comprehensive energy consumption, and carbon dioxide emissions are displayed in the form of a report. As shown in Figure 6-10.

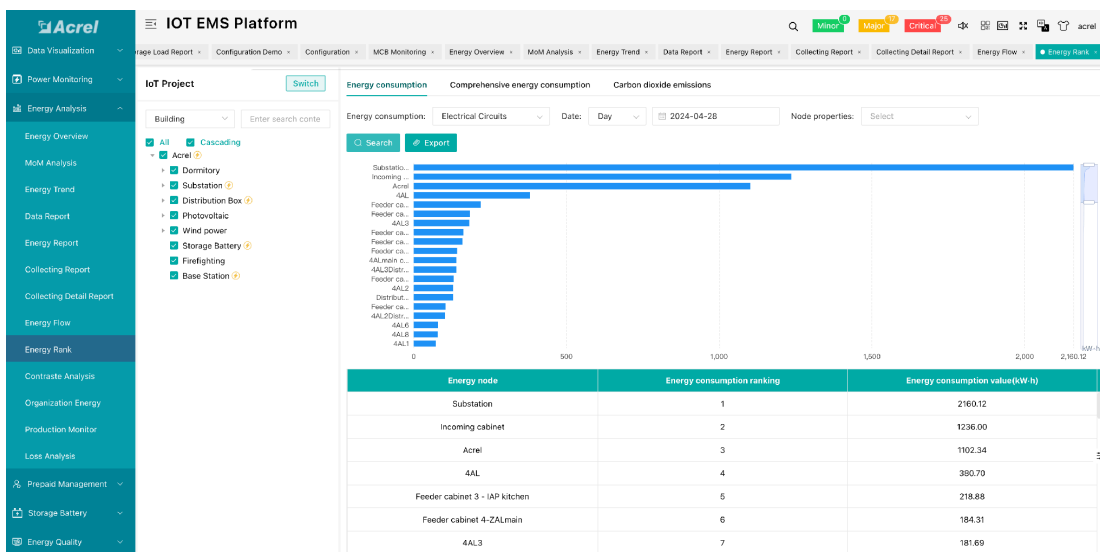


Figure 6-10 Ranking Of Energy Consumption

6.9. Contrast Analysis

Contrate analysis allows for chart comparisons of energy consumption nodes for the selected project. Select the project, energy consumption nodes, and choose a date range such as daily, weekly, monthly, or quarterly, then click "Query" to view the comparison. As shown in Figure 6-11. It also supports the multi-node curve comparison of data, switch "Curve contrast", as shown in Figure 6-12

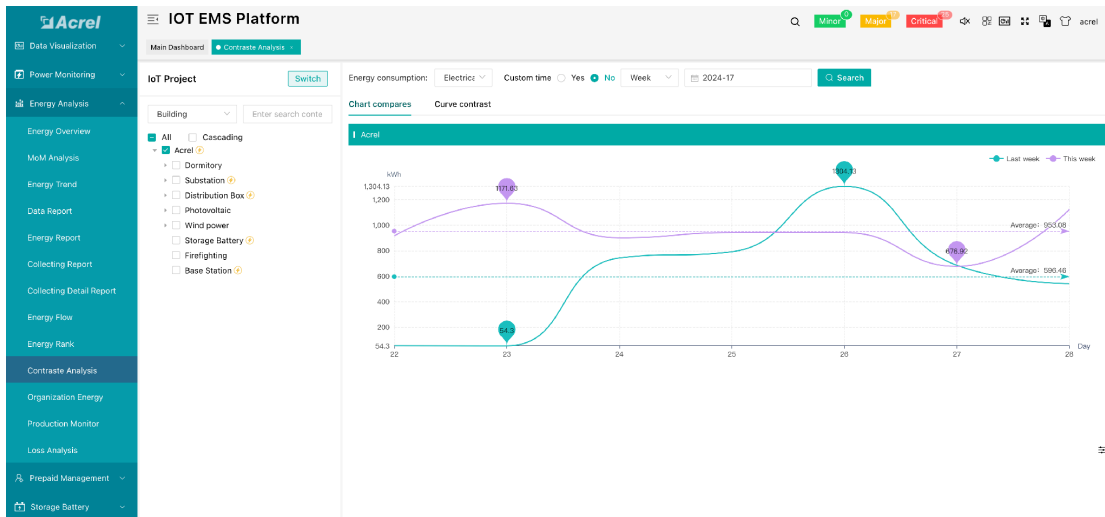


Figure 6-11 Chart

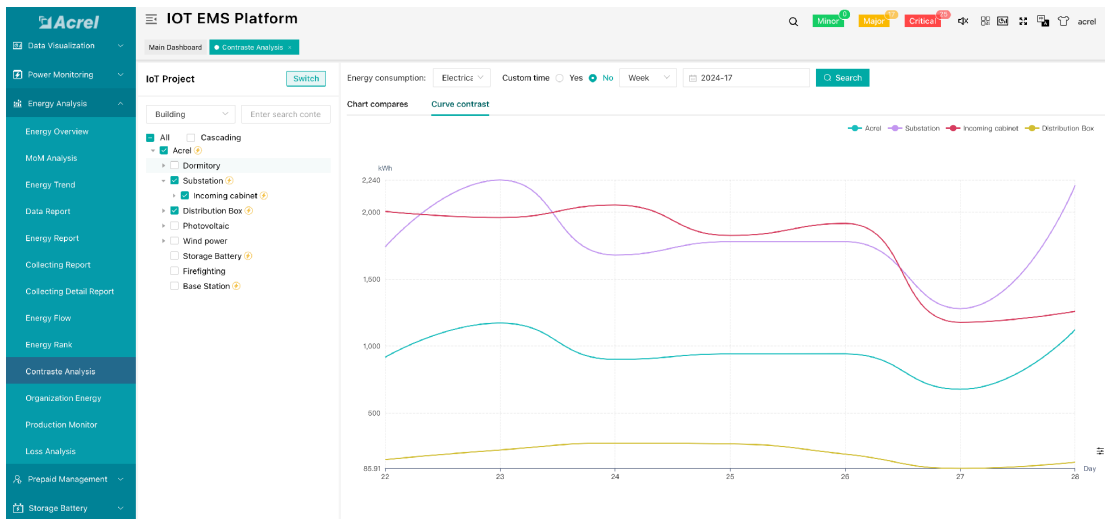


Figure 6-12 Chart

6.10.Organization Analysis

The organization analysis is set up to view energy usage based on the organization's projects. It supports daily, monthly, and custom time frames, allowing users to view charts and export data. As shown in Figure 6-12.

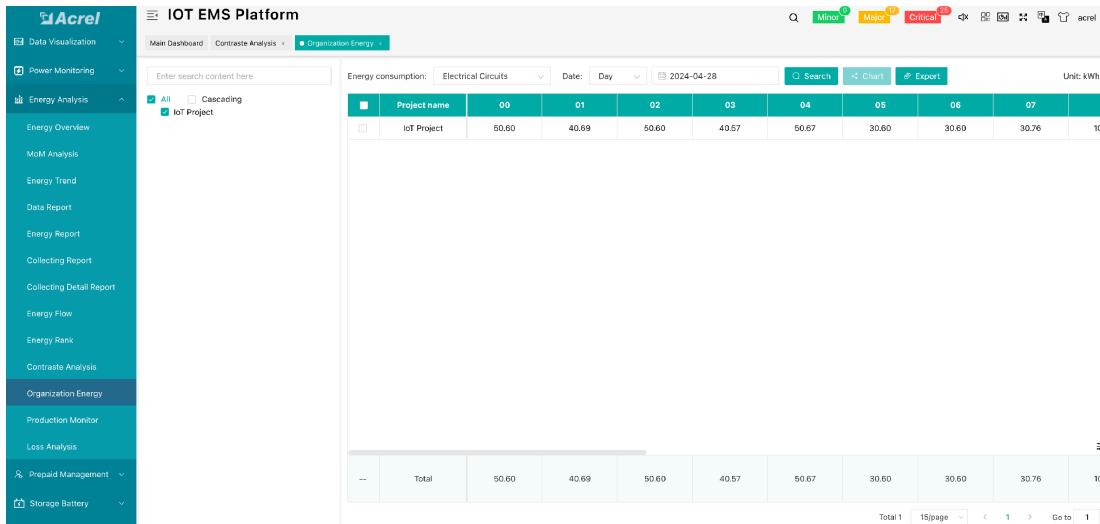


Figure 6-12 Organization Analysis

6.11. Production Monitor

This page displays the energy consumption flow information of each node based on the energy consumption topology under the project. Users can view it by selecting classified energy consumption and dates. Click the ‘+’ sign to display the energy consumption data of the next level node. Users can also download picture and export data. As shown in Figure 6-13.

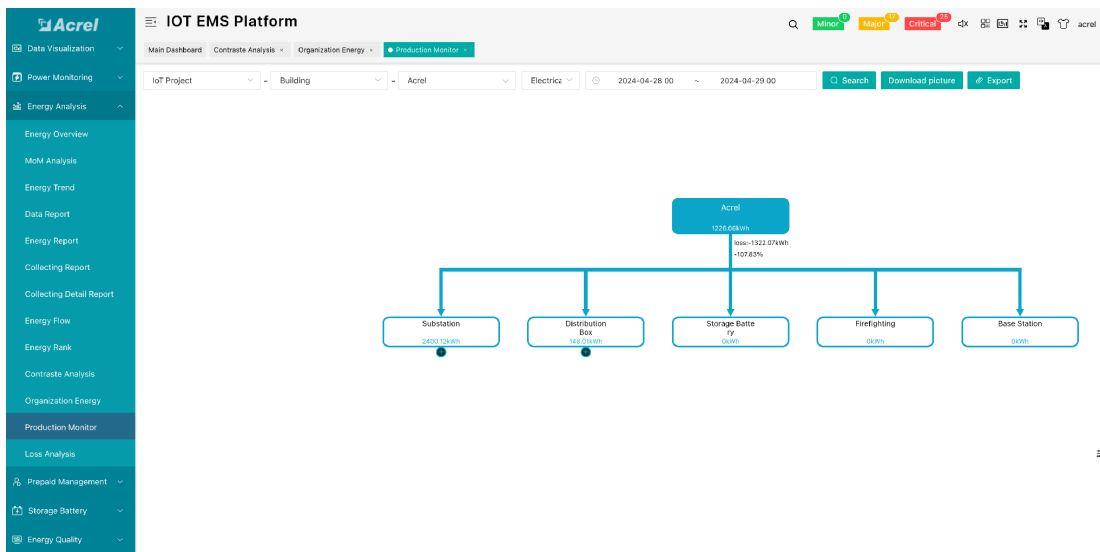


Figure 6-13 Organization Analysis

6.12. Loss Analysis

Loss analysis can check the line loss between various power consumption branches, and also supports the export of reports. As shown in Figure 6-14.

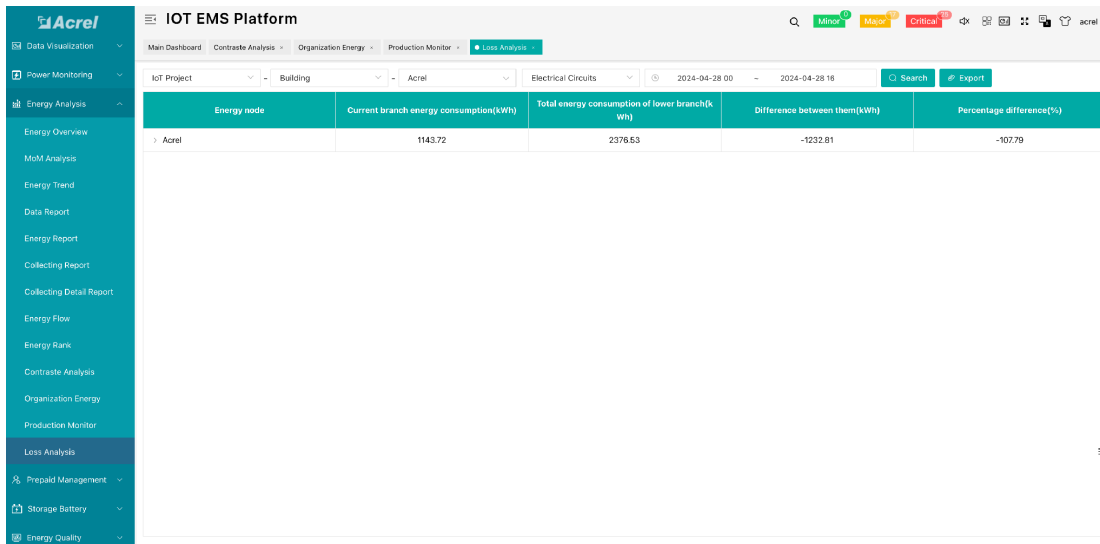


Figure 6-14 Loss Analysis

6.13 Multiple Rate Report

This page displays peak, high, flat, low, and off-peak electricity consumption and costs for project energy nodes. Multi-rate reports can be queried by energy topology node and by day, week, month, quarter, year, or custom period, with export functionality.

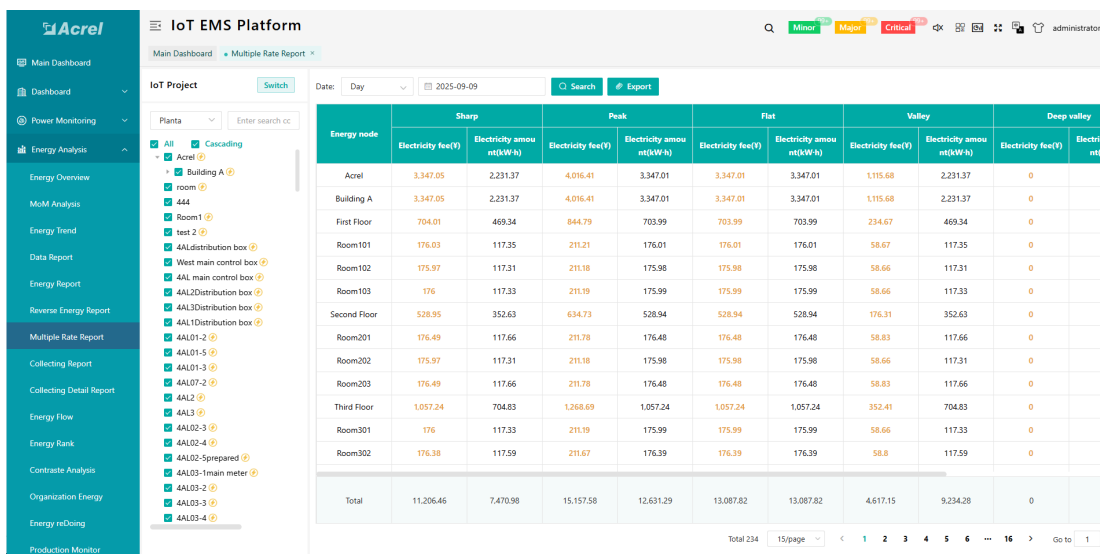


Figure 6-15 Multiple Rate

Prepaid Management

7.1.Prepaid Welcome

This page shows the energy consumption of all meters in the project, as well as the amount used this month and the amount recharged in each payment method. This page also has quick access to various functions, such as new account opening, recharge and payment , batch operation

of electric meters, real-time monitoring, batch operation of water meters, energy consumption analysis, etc., as shown in Figure 7-1.

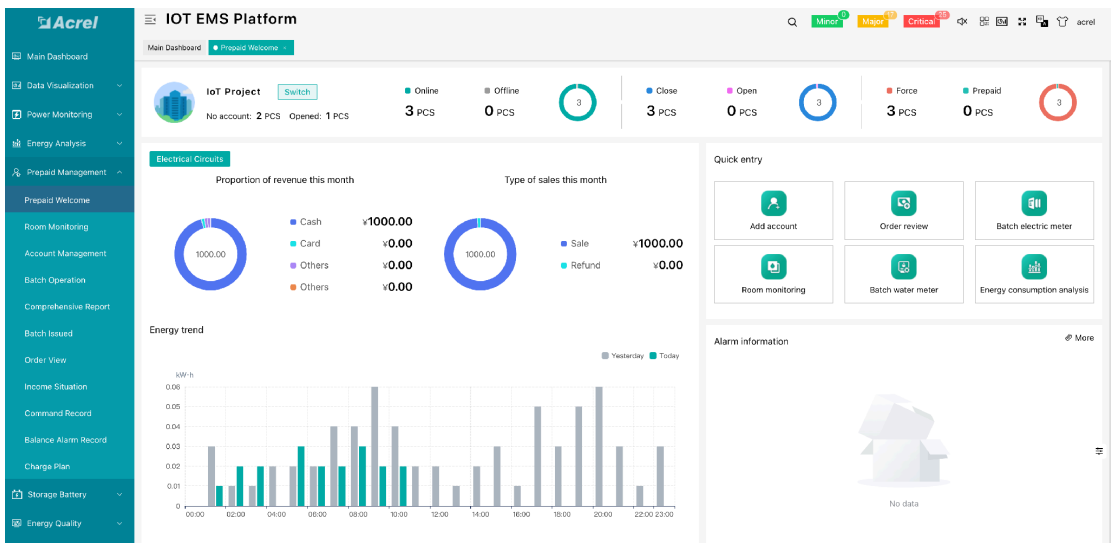


Figure 7-1 Prepaid welcome

7.2.Room Monitoring

Room monitoring displays all meter room numbers, bound user names, today's power consumption, remaining balance, and real-time status information under the corresponding topology. Users can enter the monitoring details page by selecting the room corresponding to the meter, as shown in Figure 7-2. Real-time monitoring of a single meter, as shown in Figure 7-3.

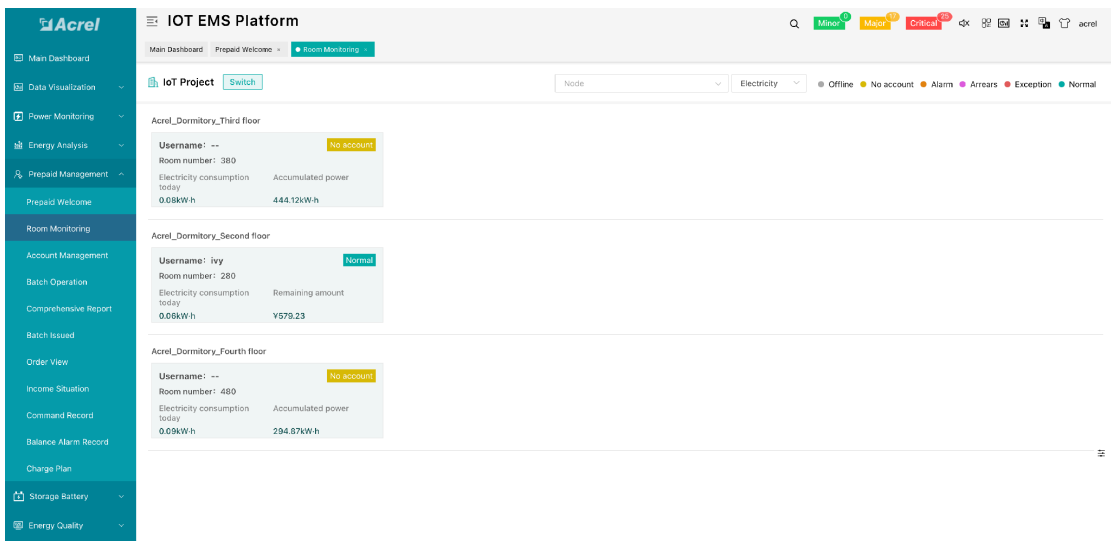


Figure 7-2 Real-time Monitoring

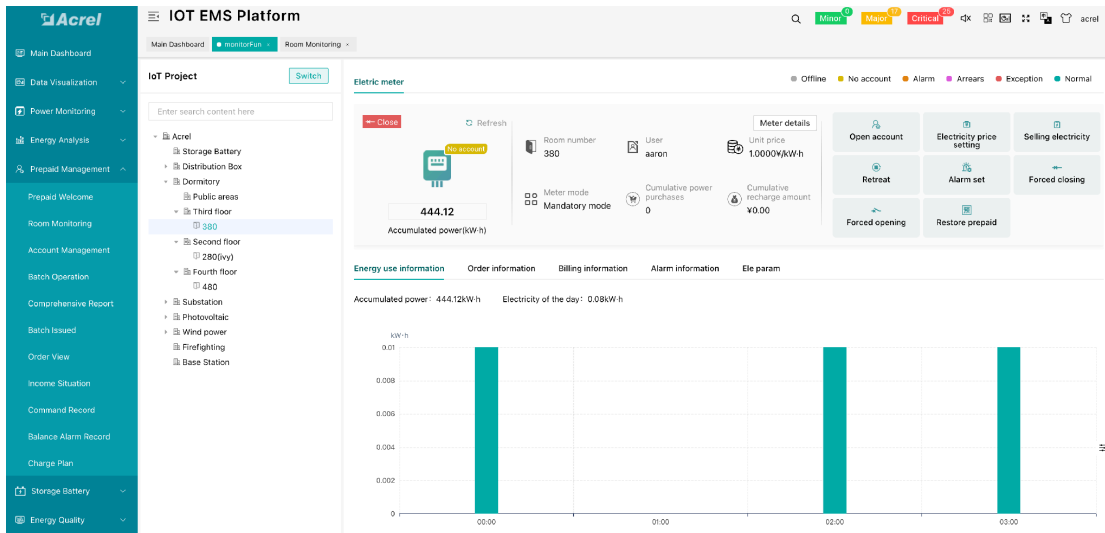


Figure 7-3 Monitoring Details

7.3. Account Opening Management

Account opening management provides users with the ability to query the room information corresponding to the meter, user information, electricity meter information, and property fee setting information. At the same time, the user can perform "binding of the meter to the room", "binding of the room to the user", "opening an account of the meter", and "setting of the property fee collection scheme".

Room information is used for "device and room binding", displaying room number, user name, meter serial number, room area and other information. Users can add, edit, delete, query and other operations, as shown in Figure 7-4.

The screenshot shows the 'Account Management' interface. The left sidebar contains a navigation menu with options like 'Main Dashboard', 'Data Visualization', 'Power Monitoring', 'Energy Analysis', 'Prepaid Management', 'Room Monitoring', 'Account Management', 'Batch Operation', 'Comprehensive Report', 'Batch Issued', 'Order View', 'Income Situation', 'Command Record', 'Balance Alarm Record', 'Charge Plan', 'Storage Battery', and 'Energy Quality'. The 'Account Management' section is active, showing a search bar and a tree view of the project structure. The main area displays a table of room information with columns: Room number, Username, Serial number, Area(m²), Create time, and Remark. The table contains three rows of data.

	Room number	Username	Serial number	Area(m²)	Create time	Remark
☐	380	aaron	02122042700210_3_30;	1	2024-04-17 13:55:42	
☐	280	ivy	02122042700210_2_30;	1	2024-04-17 13:55:42	
☐	480	july	02122042700210_1_30;	1	2024-04-17 13:55:43	

Figure 7-4 Room Information

Add a room: Enter the room number, area, select the meter, belong to the topology, and click OK, as shown in Figure 7-5; the edit and add operations are the same.

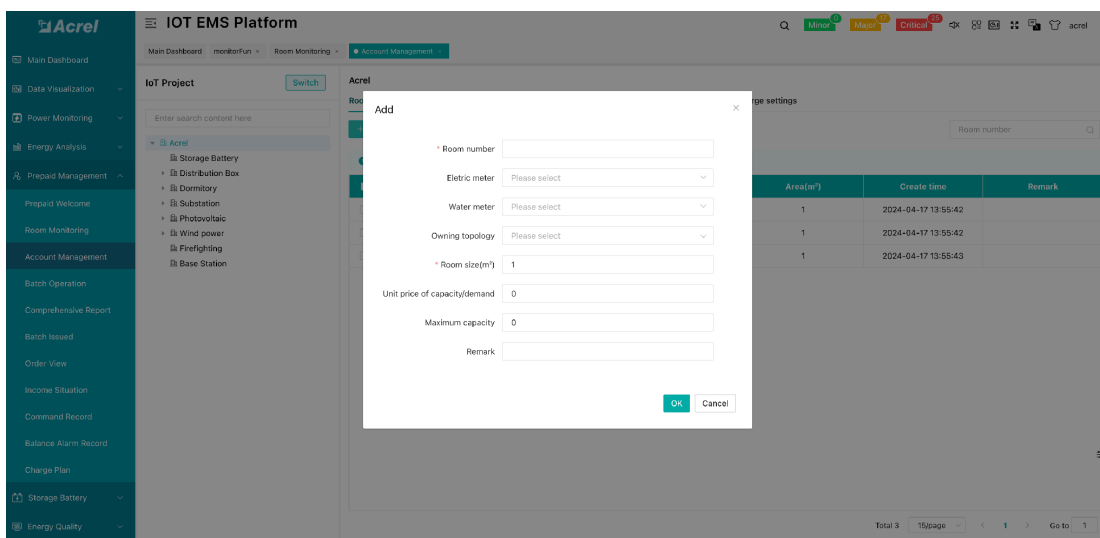


Figure 7-5 Room addition

User information is used for "room and user binding", showing all users' name, room number, contact number, address, whether to combine metering and other information, users can add, edit, cancel, query, export and other operations, such as As shown in Figure 7-6.

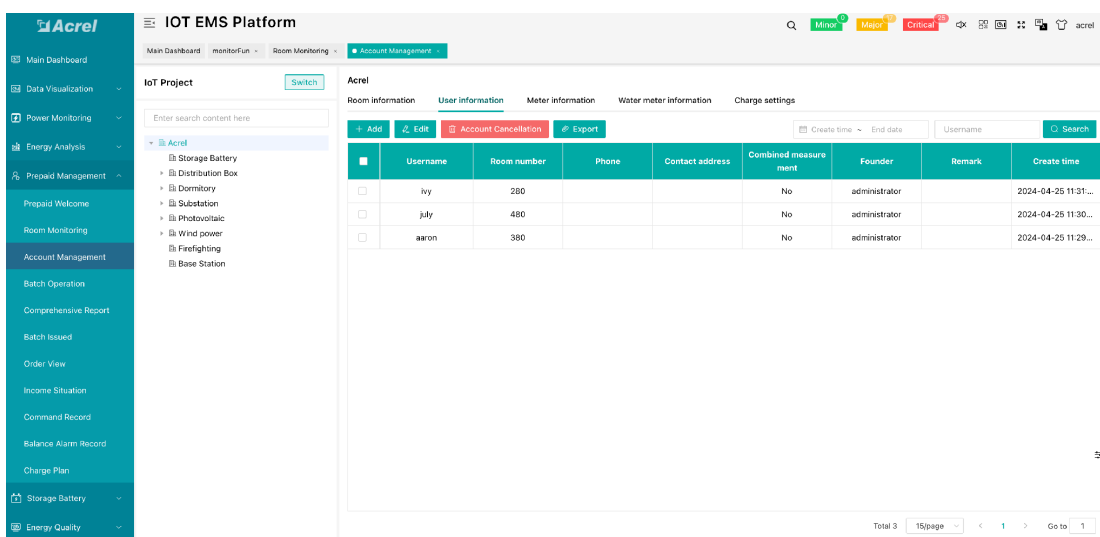


Figure 7-6 User information

Add user: Click the add button to enter the create user account interface. Enter the user name, password, contact number, address, choose whether to combine metering, whether to open an account immediately, and click OK, as shown in Figure 7-7; the editing and adding operations are the same.

Add meter: Click Add meter, select the room number, the electricity price plan, enter the alarm amount, whether to check the prepayment mode, etc., as shown in Figure 7-8; if you choose to open an account immediately, you need to enter the initial value in the newly added electric meter. Amount and select the processing method of electricity consumption amount, click OK.

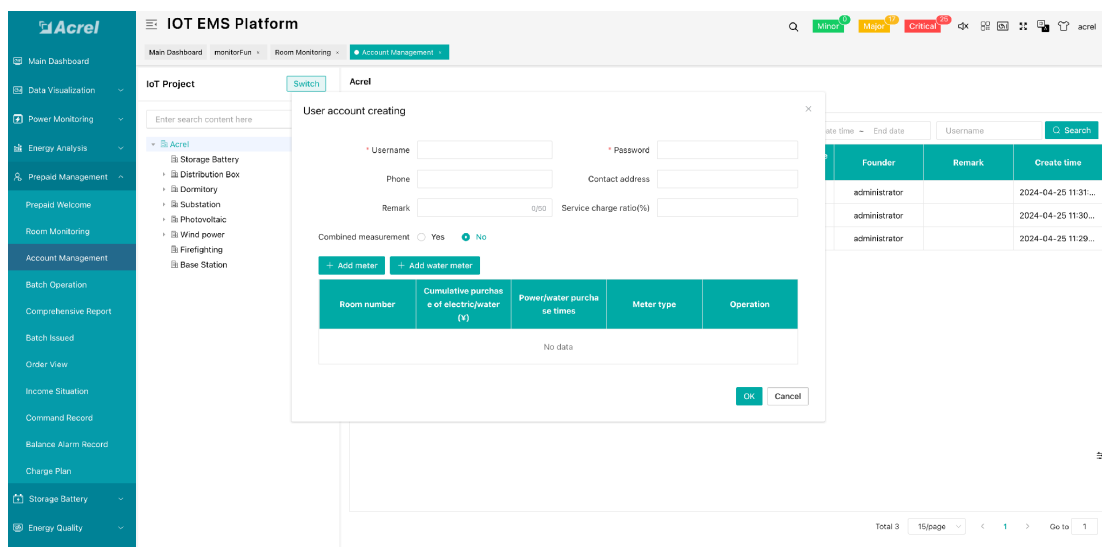


Figure 7-7 Create User Account

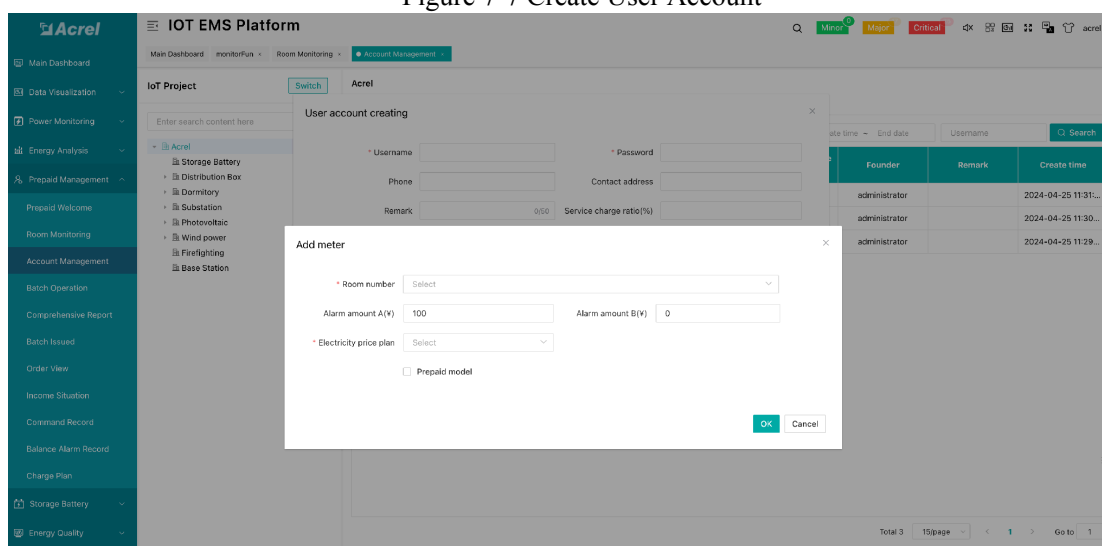


Figure 7-8 Add Meter

Meter unbundling: Select a user record, click Edit, click Delete in the meter operation column, and the meter unbinding page will pop up, select whether the amount is cleared to 0, and click OK, as shown in Figure 7-9.

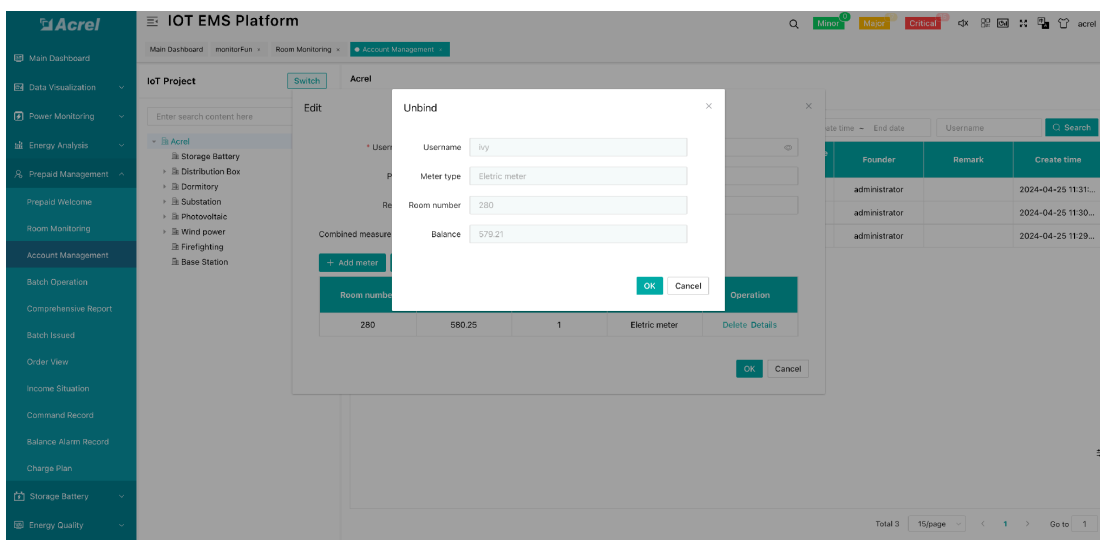


Figure 7-9 Unbundling Meter

Account opening details: For a room that has already opened an account, select a user record, click Edit, and click Details in the meter operation column to view the account opening details of the room, as shown in Figure 7-10.

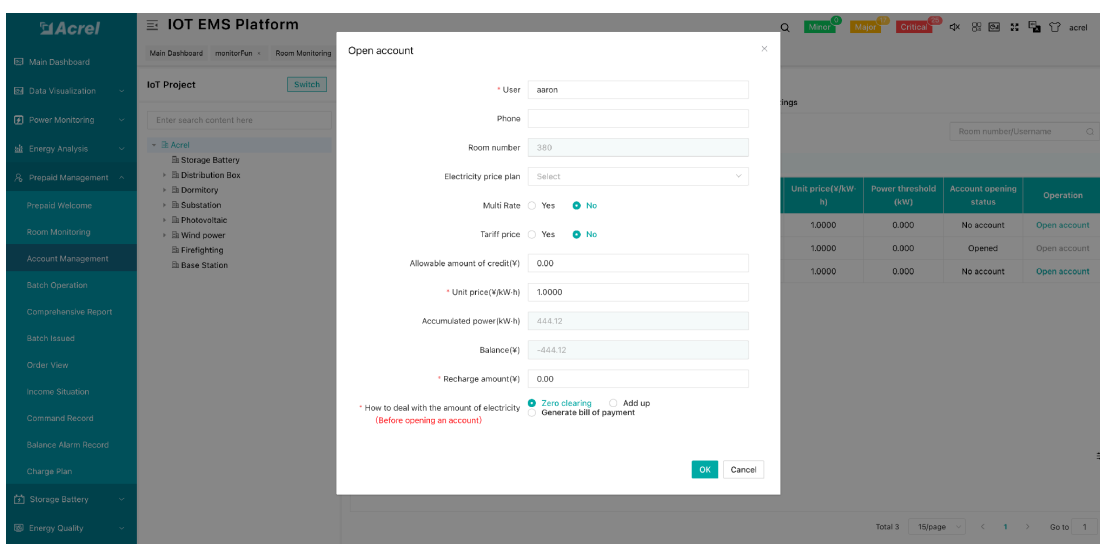


Figure 7-10 Account Opening Details

Cancel account: select a user record, click cancel account, after confirming the information, click OK, and the prompt is successful, as shown in Figure 7-11.

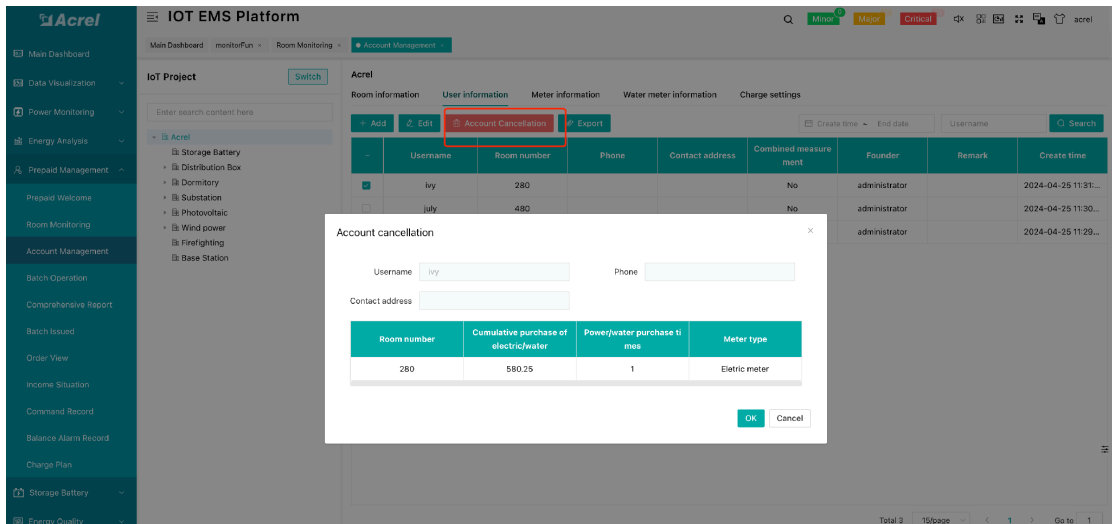


Figure 7-11 Cancel Account

Meter information is used for "meter account opening", displaying all meter room numbers, user names, electricity consumption, balance, alarm amount, unit price, power threshold, account opening status and other information. Users can perform "single meter account opening" and "batch account opening" and other operations, as shown in Figure 7-12.

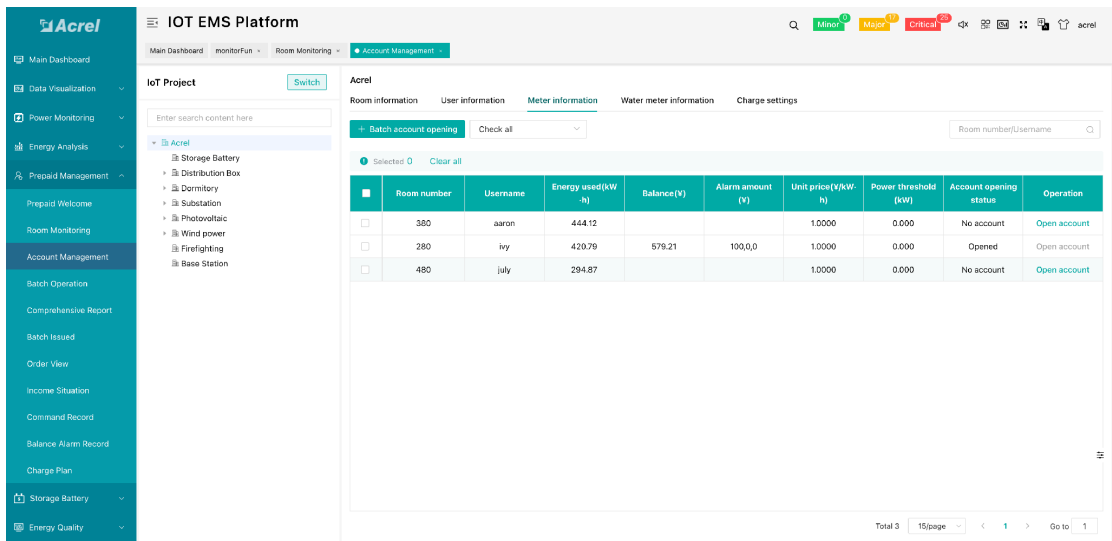


Figure 7-12 Meter Information

Single meter account opening: Click the account opening button in the operation column of a record, the account opening page displays the meter room number, unit price, accumulated power, balance, enter the initial amount, select the processing method of the electricity amount, and click OK to open an account, as shown in Figure 7-13.

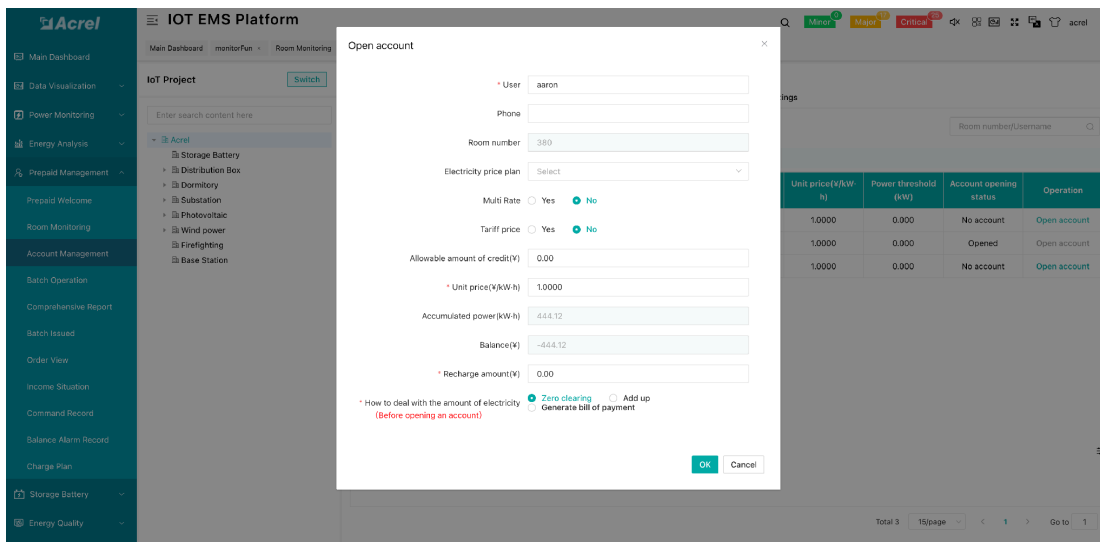


Figure 7-13 Single Meter Account Opening

Batch account opening: select multiple records, click the batch account opening button, select the room number, enter the initial amount, select the processing method of the electricity amount, and click OK to open accounts in batches, as shown in Figure 7-14;

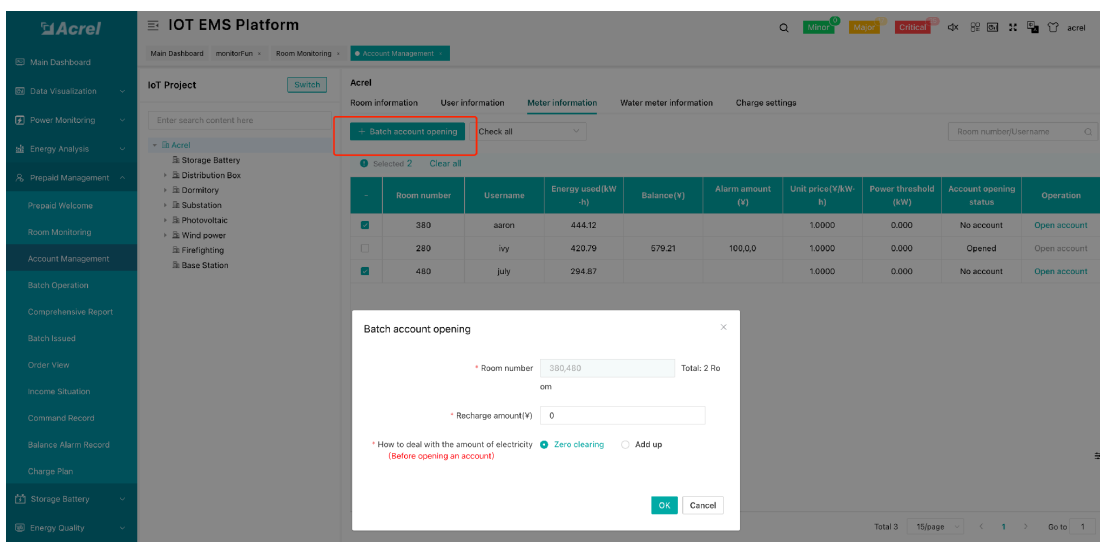


Figure 7-14 Batch Account Opening

Charging setting provides users with the function of "property fee collection scheme setting", which can query the room number, charging scheme, single collection amount, execution time, operator and other information that need to be deducted. Users can add, delete, and query Operation, as shown in Figure 7-15.

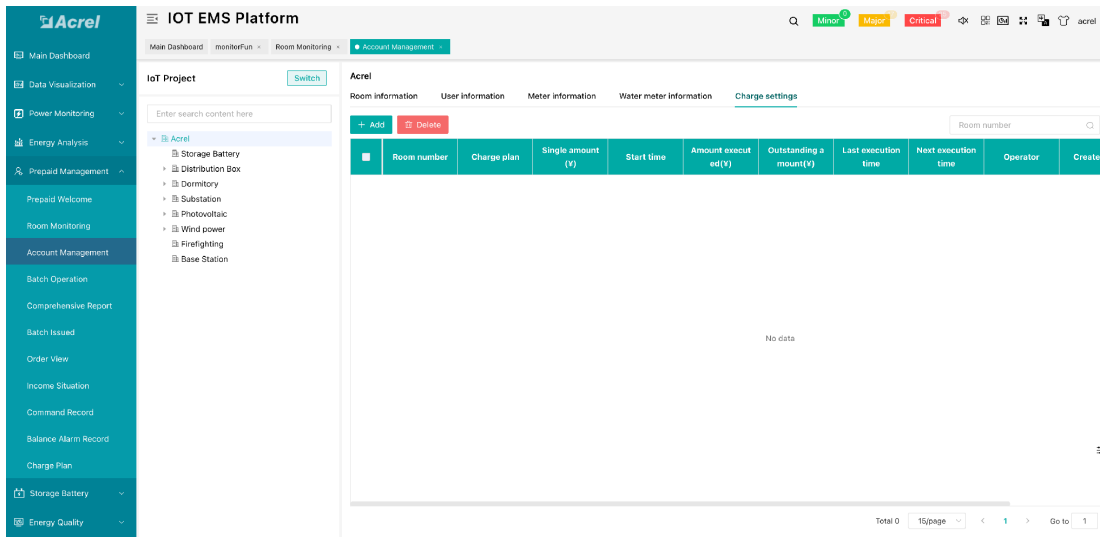


Figure 7-15 Charge Settings

Add: Select the room number, plan name, deduction method, charge type, time, charge interval, charge date, charge calculation method, unit price, and click OK, as shown in Figure 7-16;

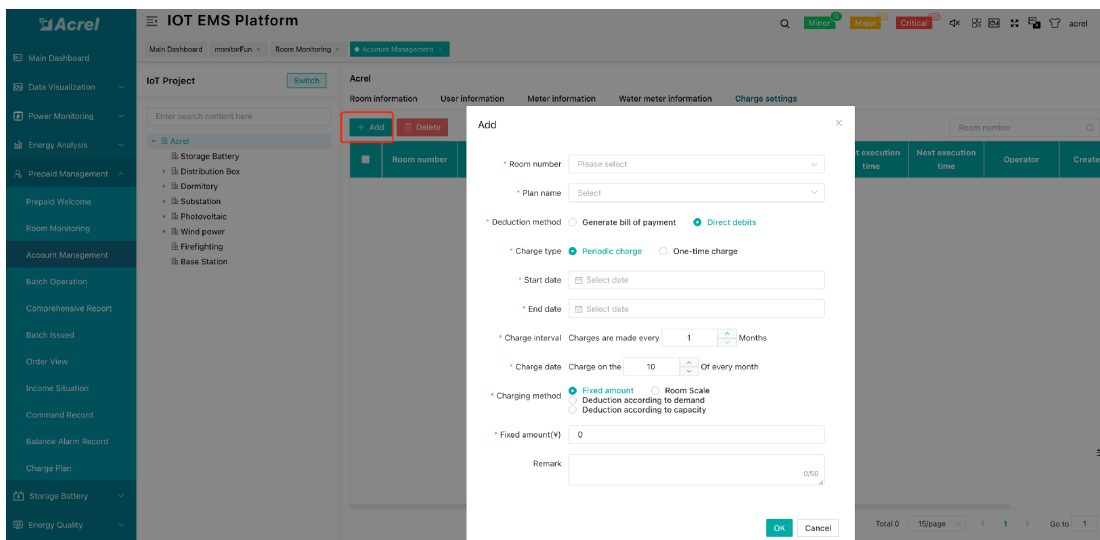


Figure 7-16 Add Charging Settings

7.4. Batch Operation

The meter batch operation page provides functions such as power on and off in batches, settings delivery, status screening, query, and export. Simultaneously perform "electricity price setting", "alarm setting", "forced closing", "recovering prepayment", "power threshold setting", "alarm setting", "Operations such as selling electricity, recharging, withdrawing power, refreshing meter status, viewing historical meter reading records, setting credit amount, and allowing tripping time period, as shown in Figure 7-17 .

Noun Note

Forced closing: that is to turn on the battery protection mode for the meter, and it will not trip

after arrears, and continue to measure in a negative amount state;

Forced switch-on: The switch-on operation is performed on the meter immediately, and is not affected by other states, and the power supply cannot be restored until the meter receives a switch-on command or a command to restore prepayment;

Restore prepayment: restore the meter to the prepayment mode, and at the same time force the mode to be closed. If the meter amount is positive at this time, the meter will immediately resume the normal power supply state. If it is in the open state, it will be closed immediately; if the meter amount is negative, it will Trip immediately.

Power threshold setting: modify the power threshold of the meter, setting it to 0 means no limit, you can set the threshold through this function, and the meter will switch off if the power threshold is exceeded;

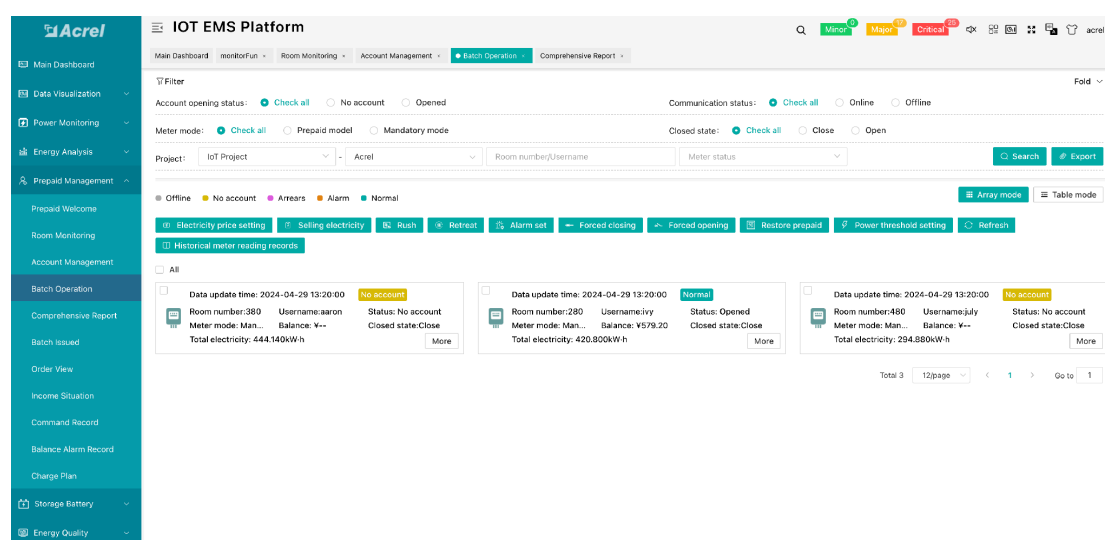


Figure 7-17 Batch Operation of Meters

Electricity price setting: select one or more electricity meters, click electricity price setting, and display the electricity price setting page, select a plan and click confirm, and the command sending page will appear, click confirm, there will be a prompt whether the operation is successful, as shown in Figure 7-18;

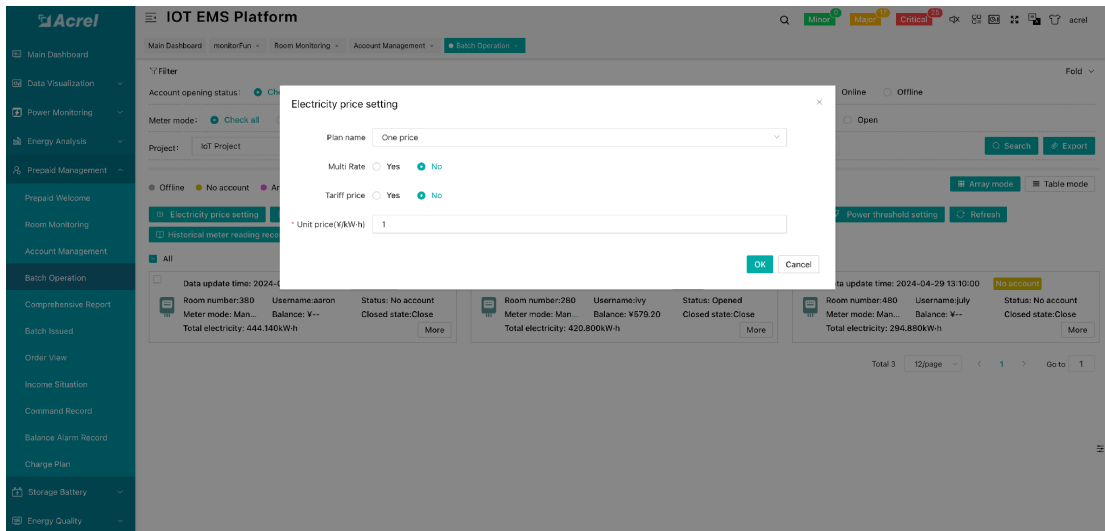


Figure 7-18 Electricity Price Setting

Electricity sale: select one or more electricity meters, click on selling electricity , display the selling electricity page, enter the amount, select the payment method, click OK, and the order issuing page will appear, click OK, there will be a prompt that the operation is successful, as shown in Figure 7-19 display; resetting and withdrawing operations are consistent with electricity sales;

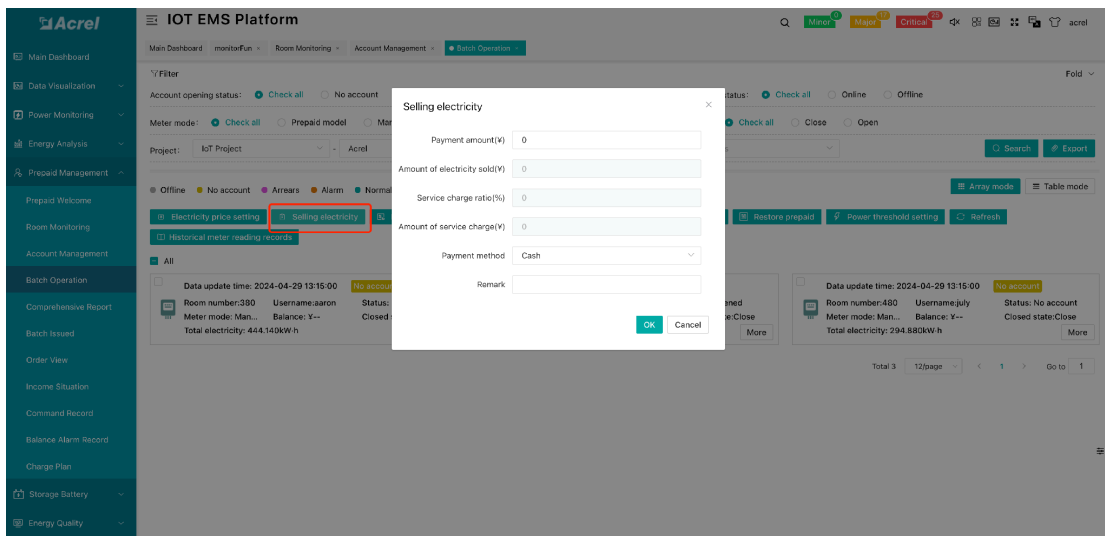


Figure 7-19 Electricity Sales

Alarm setting: select one or more electric meters, click on the alarm setting to display the alarm setting page, enter the value of the alarm amount 1, enter the value of the alarm amount 2, choose whether to enable the prompt of the alarm amount A and B, click OK, and the command will appear page, click OK, there will be a prompt whether the operation is successful, as shown in Figure 7-20;

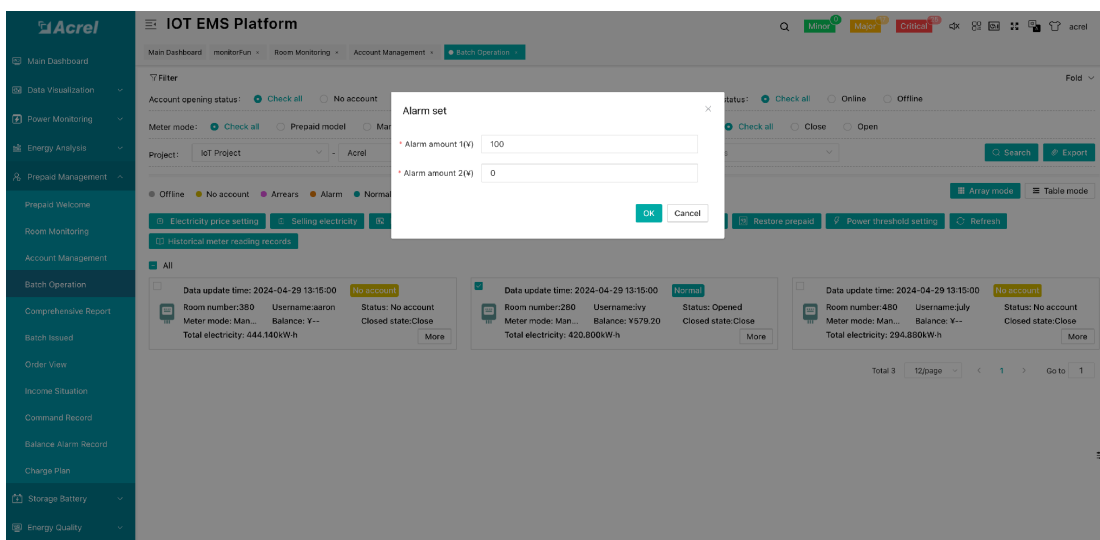


Figure 7-20 Alarm Settings

Forced closing: Select one or more meters, click Forced switch-on, the information of the meters that need to be forced to switch-on will be displayed, click OK, it will prompt whether the operation is successful, as shown in Figure 7-21; Forced switch-on and restore prepayment The operation is consistent with the forced closing;

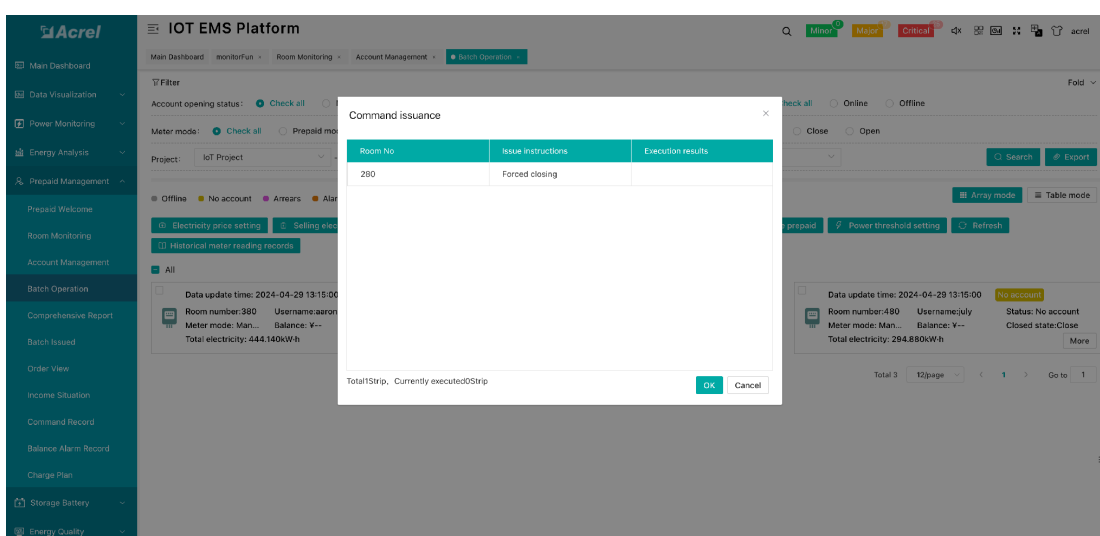


Figure 7-21 Forced Closing

Power threshold setting: select one or more electric meters, click Power Threshold Setting, enter the threshold to be set, click OK, and the command sending page will appear, click OK, it will prompt whether the operation is successful, as shown in Figure 7-22;

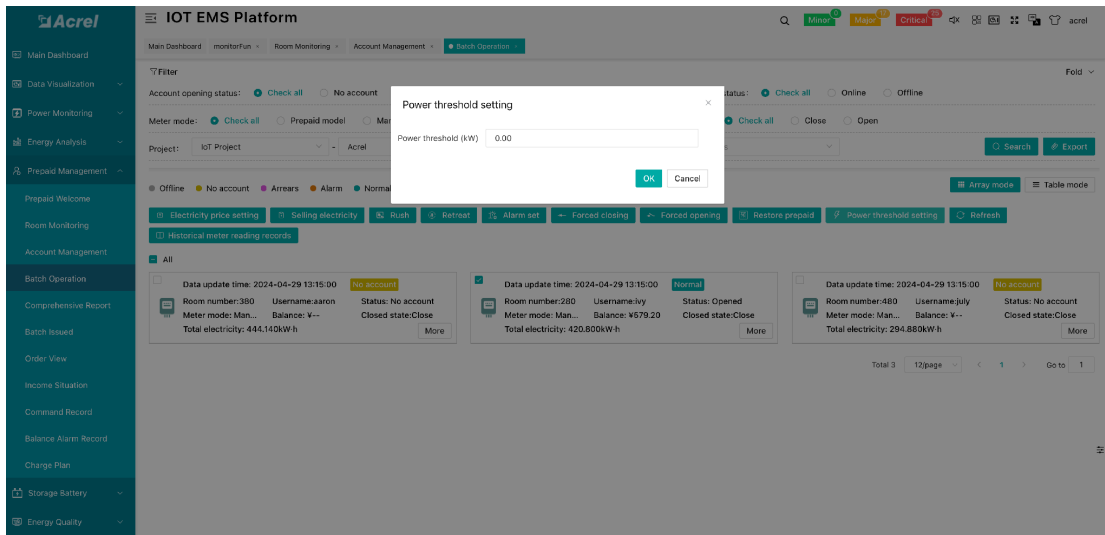


Figure 7-22 Power Threshold Setting

Restore prepayment: click Restore prepayment, it will prompt that the operation is successful, as shown in Figure 7-23;

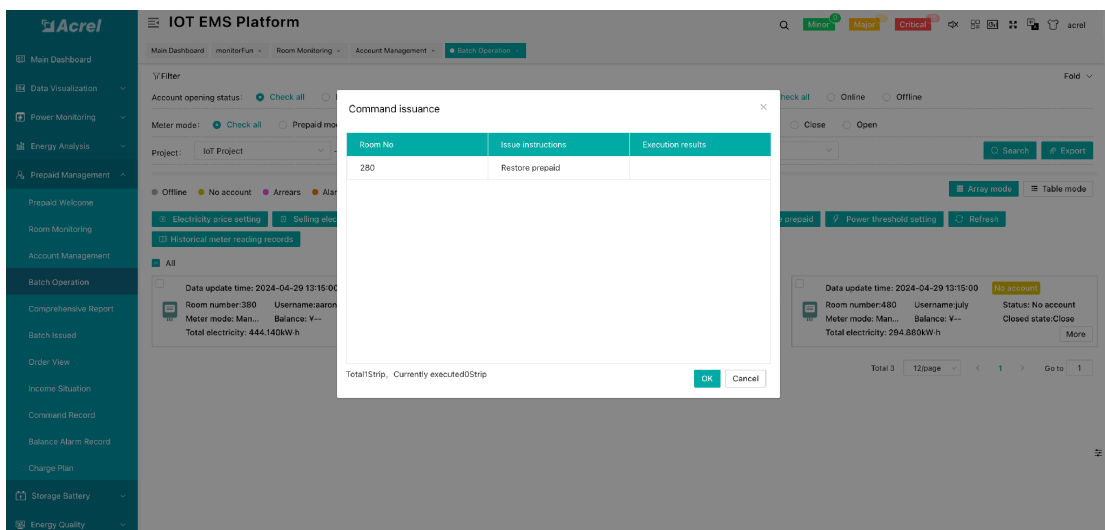


Figure 7-23 Restoring Prepaid

Historical meter reading records: Select a room, click the historical meter reading records, you can view the historical remaining amount, electricity consumption, electricity price, deducted amount and other information, as shown in Figure 7-24.

Room number	Acquisition time	Closed state	Meter mode	Meter code	Balance(V)	Deducted amount(x)	Energy used(kW-h)	Sharp Electric energy(kW-h)
280	2024-04-29 13:20...	Close	Force	02122042700210_2_30	579.2	0	420.800	90.430
280	2024-04-29 13:15...	Close	Force	02122042700210_2_30	579.2	0	420.800	90.430
280	2024-04-29 13:10...	Close	Force	02122042700210_2_30	579.2	0	420.800	90.430
280	2024-04-29 13:05...	Close	Force	02122042700210_2_30	579.2	0	420.800	90.430
280	2024-04-29 13:00...	Close	Force	02122042700210_2_30	579.2	0	420.800	90.430
280	2024-04-29 12:55...	Close	Force	02122042700210_2_30	579.2	0	420.800	90.430
280	2024-04-29 12:50...	Close	Force	02122042700210_2_30	579.2	0	420.800	90.430
280	2024-04-29 12:45...	Close	Force	02122042700210_2_30	579.2	0	420.800	90.430
280	2024-04-29 12:40...	Close	Force	02122042700210_2_30	579.2	0	420.800	90.430
280	2024-04-29 12:35...	Close	Force	02122042700210_2_30	579.2	0	420.800	90.430

Figure 7-24 Historical meter reading records

7.5.Comprehensive Report

The comprehensive report provides users with the ability to query the electricity consumption and electricity usage in the time period according to the time period and room, including the meter reading power consumption at the start time and end time of the room, and the peak, peak, flat, and valley meter reading power consumption. Amount, peak, peak, flat, valley power consumption within the time period, last balance, current balance, electricity cost, transformer ratio and other information, and provide the function of "export report", as shown in Figure 7-25.

Start date	End date	Type	Gateway id	Username	Room number	Meter id	Total usage (kW-h)	Unit price(V/kW-h)	Initial meter charges(V)	useAmount (V)	Last metering(V)
2024-04-1...	2024-04-2...	Cancel Account	02122042700...	Account ...	380	3_30	2.63	--	0	0	44
2024-04-1...	2024-04-2...	Cancel Account	02122042700...	Account ...	280	2_30	2.09	--	0	0	41
2024-04-2...	2024-04-2...	Account open	02122042700...	Ivy	280	2_30	-419.75	1.0000	0	1580.25	41
2024-04-1...	2024-04-2...	Cancel Account	02122042700...	Account ...	480	1_30	2.46	--	0	0	29
Total							-412.57			1580.25	

Figure 7-25 Comprehensive Report

7.6.Batch Issued

The batch distribution page is used to perform batch distribution operations on instruments in the room and record them. The distribution details can be viewed, and direct distribution and scheduled distribution are supported. Timed distribution only supports hourly distribution and can be queried based on date, command type, and distribution status, as shown in the figure.

Electricity meter operations include "electricity price setting", "alarm setting", "forced closing", "forced opening", "Restore prepaid", "power threshold setting", "alarm setting", "selling electricity ", "retreat", and other operations.As shown in Figure 7-26

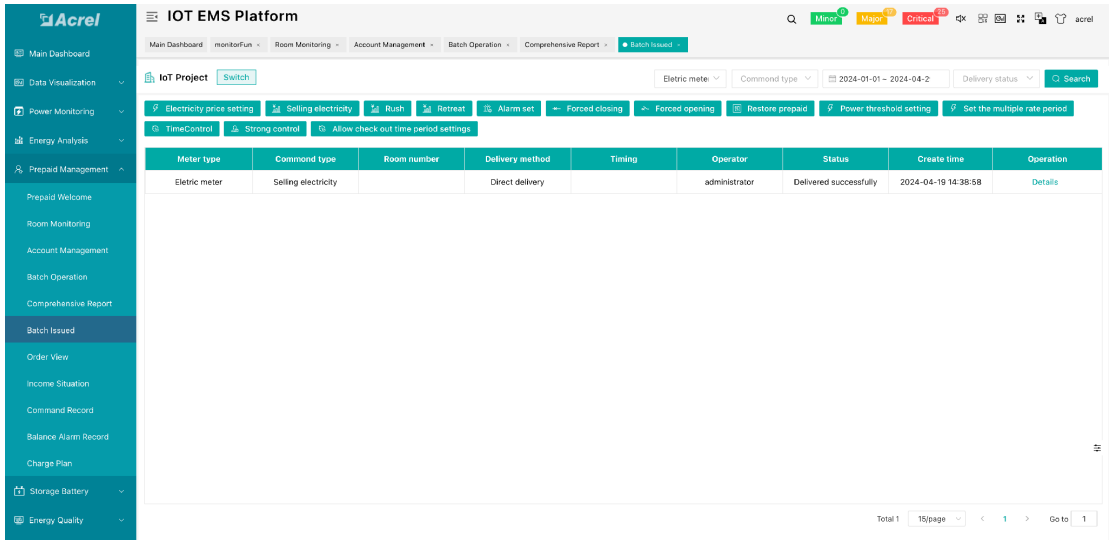


Figure 7-26 Batch Issued

7.7.Order View

The order overview page displays the monthly order information of all users under the selected project, including username, amount, payment method, order type, sales type, and other related information. Users can query based on date, username, order type, payment method, and sales type. At the same time, it provides functions such as "export report", "review", "batch review", "download and import recharge template", "import recharge", "document printing", and "re issue failed orders", as shown in the figure.As shown in Figure 7-27

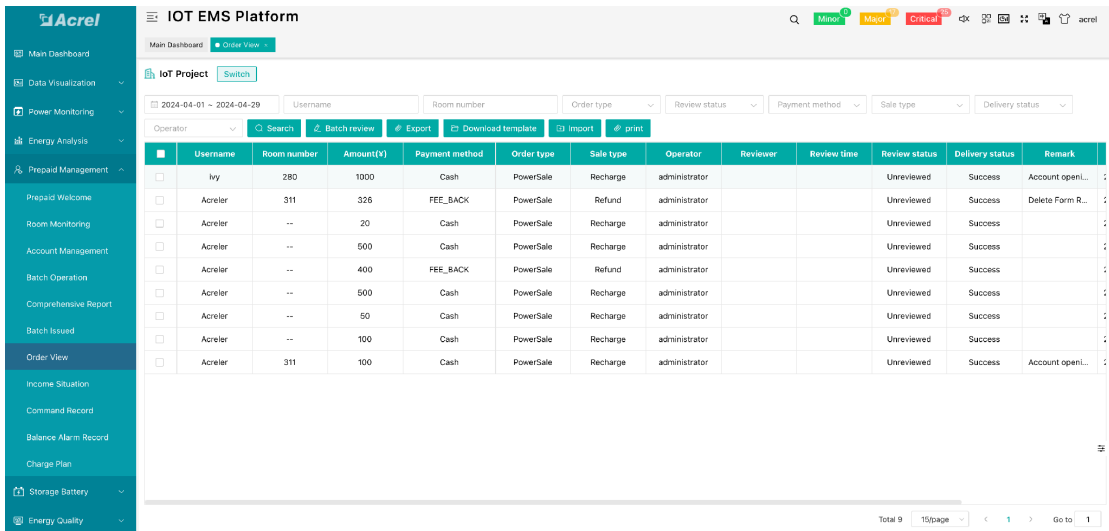


Figure 7-27 Order View

7.8.Income Situation

This page clearly and intuitively displays the income obtained by different income methods

in each room in three forms: histogram, proportion chart and report. Users can select the type (electricity, water, others), date and room number to query. There are four types of income types, including cash, Alipay, WeChat, and others, as shown in the figure. As shown in Figure 7-28.

Note: Reversals, refunds, and shared income are not included in the income.

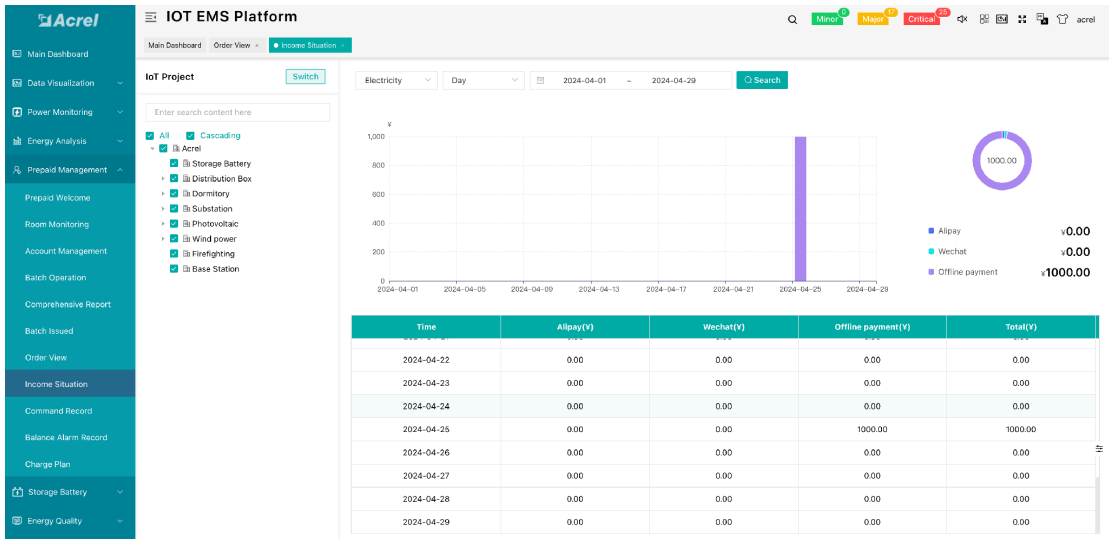


Figure 7-28 Income Situation

7.9.Command Record

Operation records are used to query the records of users issuing commands to instruments. They can be queried based on date, project, instrument type, command type, issuance status, and room number. As shown in the figure 7-29.

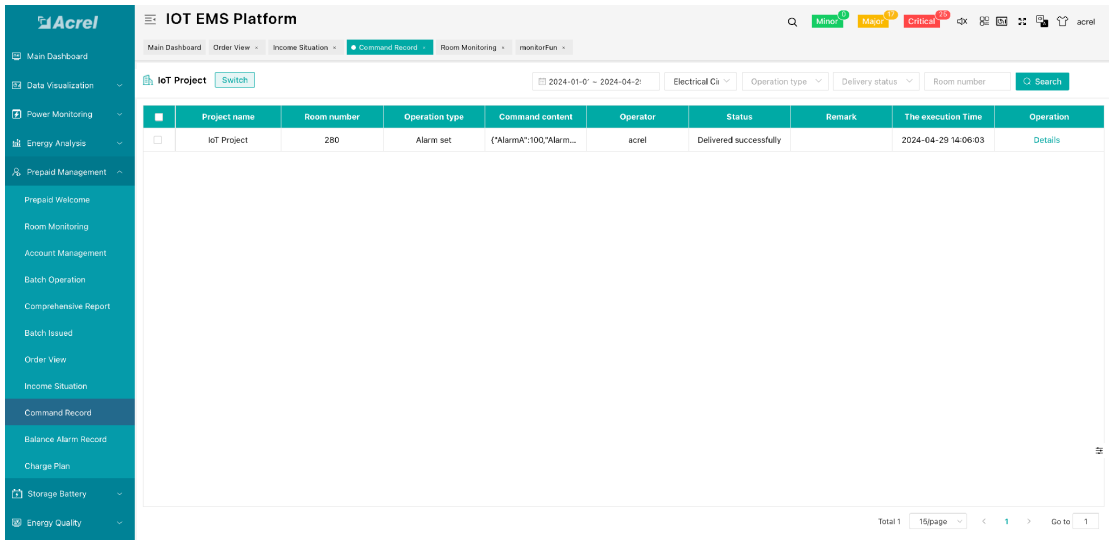


Figure 7-29 Command Record

7.10.Balance Alarm Record

Balance alarm record, displaying all prepaid rooms under the project when the alarm amount is lower than the set value, including project name, room name, circuit name, details, and alarm date, as shown in the figure 7-30

Project name	Room name	Cell phone number	Circuit name	Detailed description	Date
IoT Project	311		311	Balance of Room 311 is -180.69	2024-04-17 17:06:39
IoT Project	311		311	Balance of Room 311 is -430.37	2024-04-17 16:56:30
IoT Project	311		311	Balance of Room 311 is -180.68	2024-04-17 09:05:39

Figure 7-30 Balance Alarm Record

7.11.Charge Plan

This page displays all charging scheme information, and users can add, edit, enable, delete, and query operations. Multiple charging schemes can be set up, making it convenient for users to change and use them at any time when setting electricity prices or adding electricity meter selection schemes, as shown in the figure 7-31

Plan name	Charge type	Status	Founder	Create time	Operation
Multi tariff price	Electricity price plan	Enable	administrator	2022-02-20 18:57:44	
One price	Electricity price plan	Enable	Adpower ltd.	2022-02-17 12:37:06	

Figure 7-31 Charge Plan

7.12 Account Cancellation Record

The account cancellation records page shows all canceled user accounts. Users can search by username to view closure date and related information, as shown in the figure 7-32.

Acrel

IoT EMS Platform

Minor

Major

Critical

Q

🔍

📄

🔧

👤

administrator

Main Dashboard

Account Cancellation Record

IoT Project

Switch

Username

Q

Username	Phone	Contact address	Room number	Operator	Remark	Account cancellation time
uset			room	administrator		2025-08-28 01:57:29
user1			test	administrator		2025-08-28 00:57:47
manuel		Sampaka-Maria Cano	BE2 314	acrel		2025-02-12 05:31:14
DERA	07066243734		480	administrator		2025-02-12 05:31:11
I am you	01022225555		7777			2024-09-02 00:56:46
test110			test111	administrator		2024-07-01 19:09:33
wee	09015763780		480			2024-07-01 19:09:27
111		https://iot.acrel-eem.com	test111,111	acrel		2024-06-27 00:28:52
chi	09015763780	awka	test111	acrel	acrel	2024-06-23 02:38:24
120			120	administrator		2024-05-15 04:27:21
test111			111,222	administrator		2024-05-15 04:25:59
aaron			380	administrator		2024-04-24 19:29:42
Acreler			311	administrator		2024-04-24 18:55:46

Total 1315/page<1>Go to1

Figure 7-32 Account Cancellation Record

7.13 Return Record Query

Meter return records page tracks meter unbinding after account canceled or meter deletion, showing username, room number, meter type, account balance, and whether meter amount was cleared. Users can filter by date, room number, or username, as shown in the figure 7-33.

Acrel

IoT EMS Platform

Minor

Major

Critical

Q

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🔧

👤

administrator

Main Dashboard

Account Cancellation Record

Return Record Query

IoT Project

Switch

Enter search content here

Test1(viy)

BE2 314

2

209

One

room(user1)

444

Room1

test 2

Test1(viy)

2025-01-01

2025-09-09

Username

Search

Operation time	Operator	Username	Room number	Meter type	Account balance(¥)	Is it seroed?	Operation
No data							

Total 015/page<1>Go to1

Lighting

8.1.Lighting Dashbord

This page shows an overview of all items in the lighting project, as well as equipment status, item list information and alarm classification, power consumption trend, lighting rate, and the page also shows the point information of the equipment on the map, as shown in Figure 8-1.

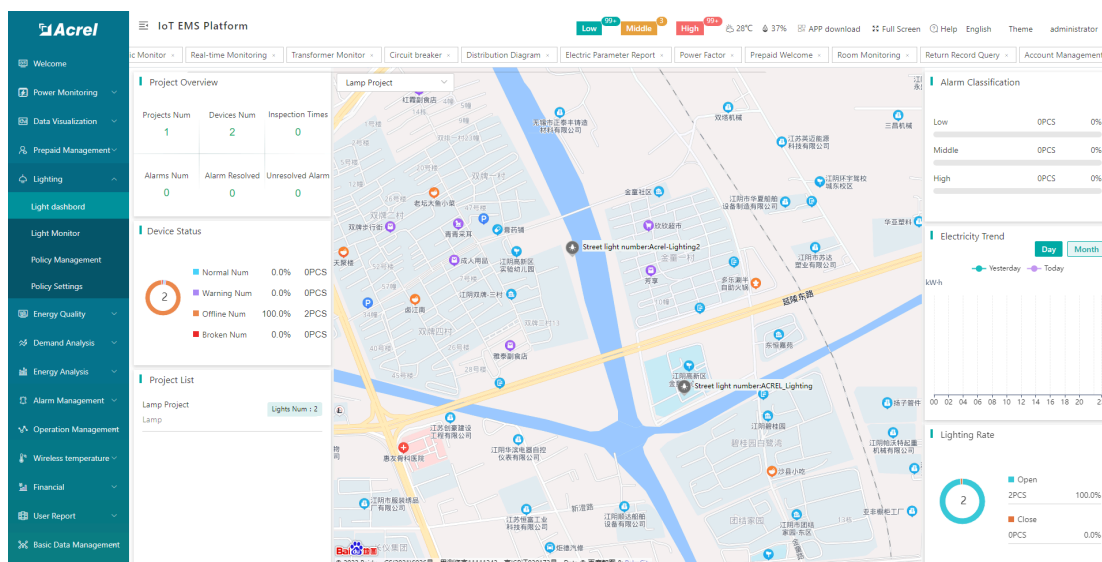


Figure 8-1 Lighting Dashboard

8.2.Lighting Monitoring

This page shows the relevant information of all meter under the lighting project. Users can issue various commands in batches through this page, such as switching lights and adjusting the brightness of lights, as shown in Figure 8-2. Click the details to view real-time electricity Parameters, and can view the current strategy, historical curve, alarm information, switch log, strategy log. As shown in Figure 8-3.

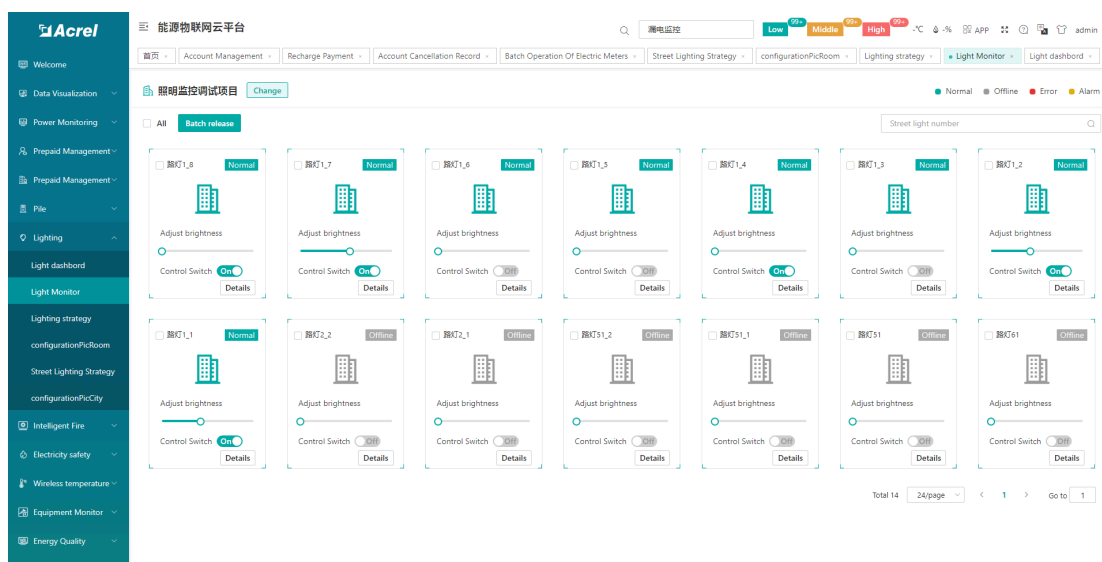


Figure 8-2 Lighting monitoring

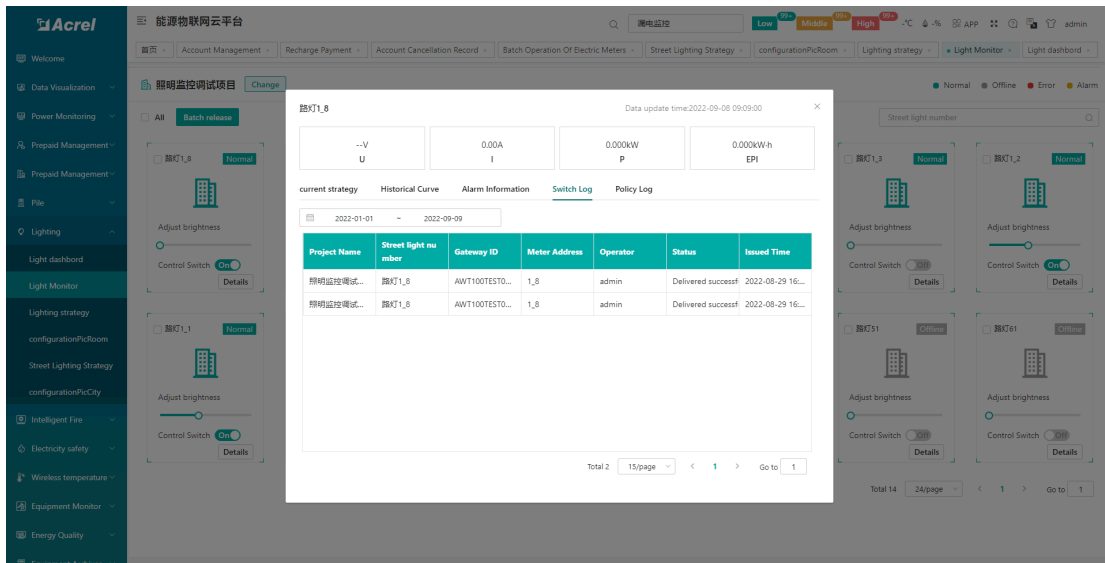


Figure 8-3 Lighting monitoring details

8.3.Policy Management

On this page, you can view the delivered policy details by selecting the project name and delivery mode, as shown in Figure 8-4.

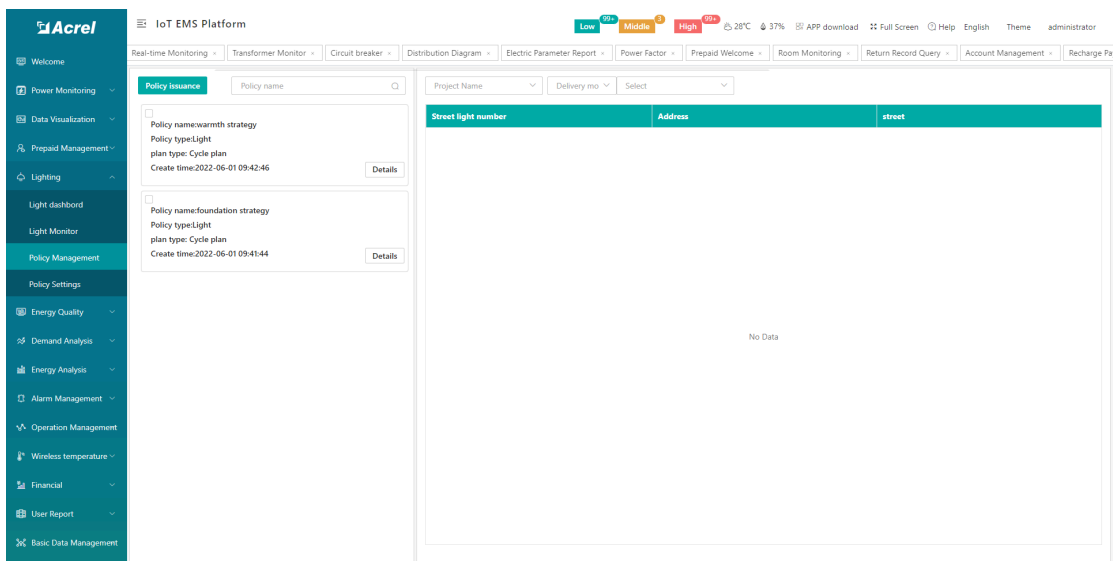


Figure 8-4 Policy Management

8.4.Policy Setting

This page can display existing policies, as shown in Figure 8-5, click Add to add a new policy, as shown in Figure 8-6, select an existing policy, and click Edit to edit an existing policy, as shown in Figure 8-7, click Delete to delete the existing policy, as shown in Figure 8-8.

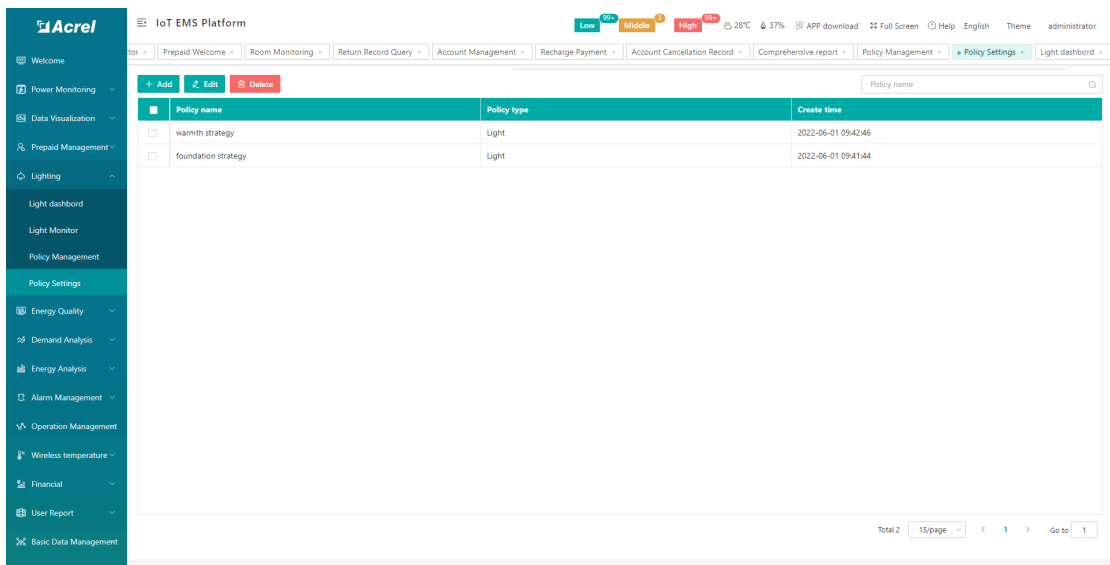


Figure 8-5 Policy settings

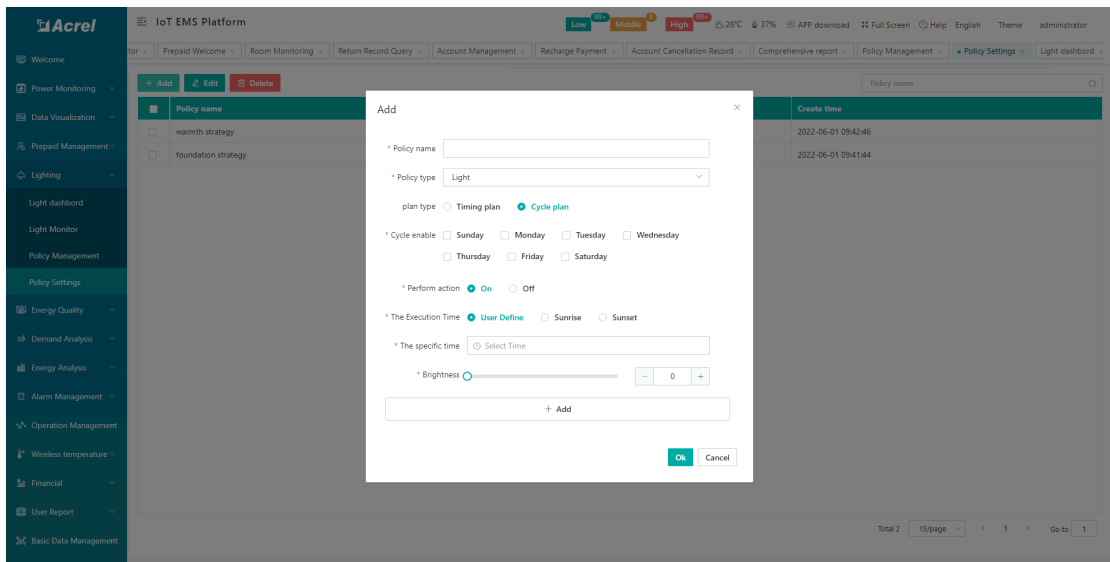


Figure 8-6 Policy addition

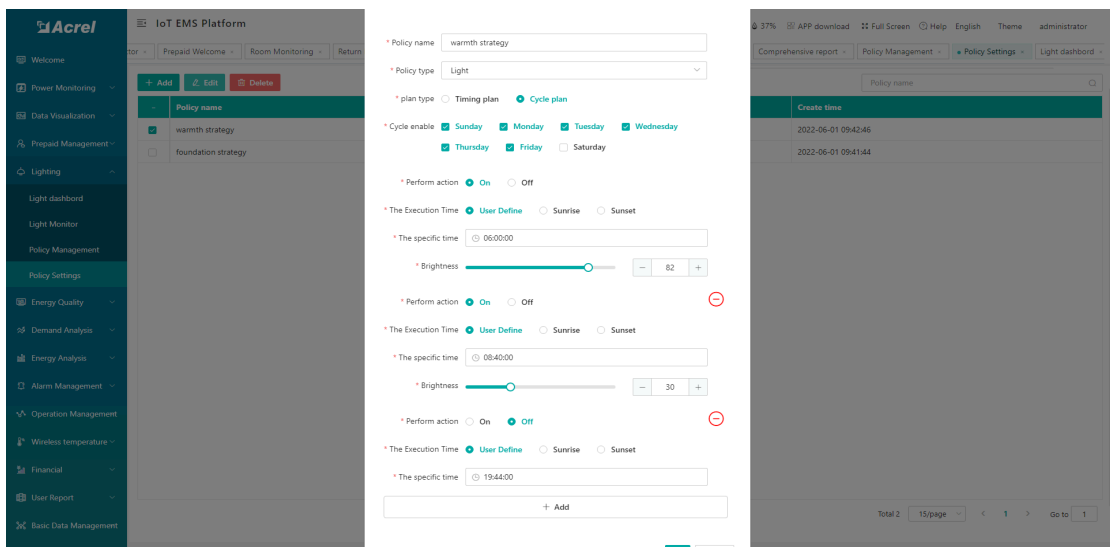


Figure 8-7 Edit policy

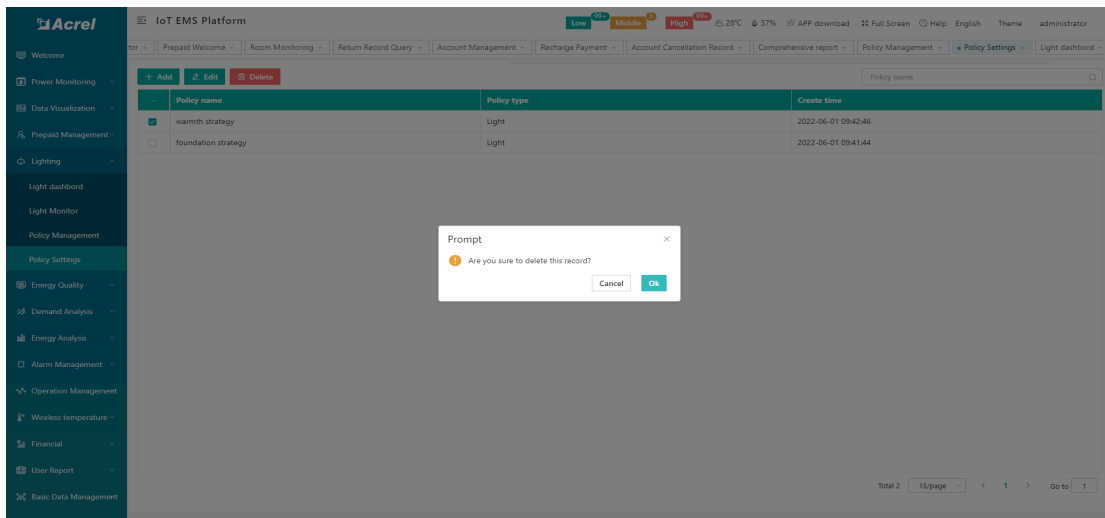


Figure 8-8 Delete policy

Storage Battery

9.1.Battery Park

This page shows overview of the battery park. Switch the UPS group on the left to switch to the corresponding UPS group, and the page directly displays the basic status of the battery pack under the current UPS: group voltage, charge and discharge current, SOC, SOH, as shown in Figures 9-1. Click on details to jump to the analysis page of the specific battery pack, corresponding to various detailed indicators, performance, voltage, current, and temperature analysis charts, as shown in Figures 9-2 and 9-3

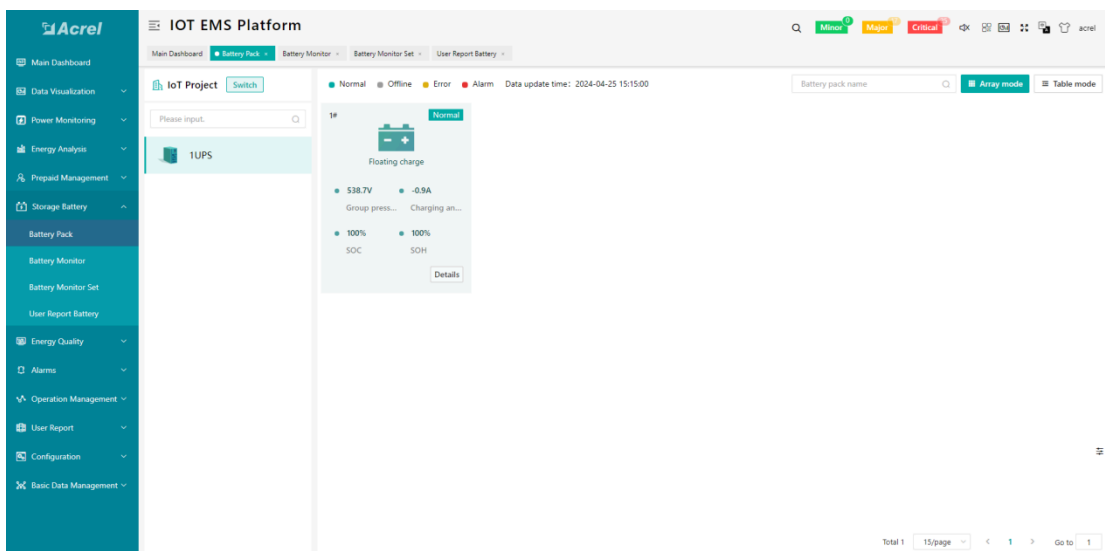


Figure 9-1 Battery Pack

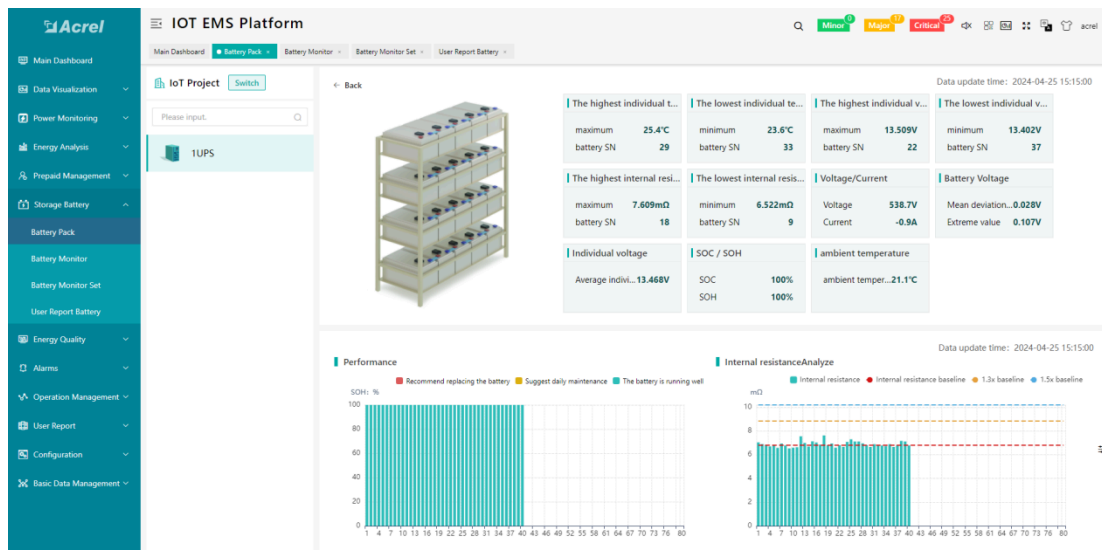


Figure 9-2 Chart

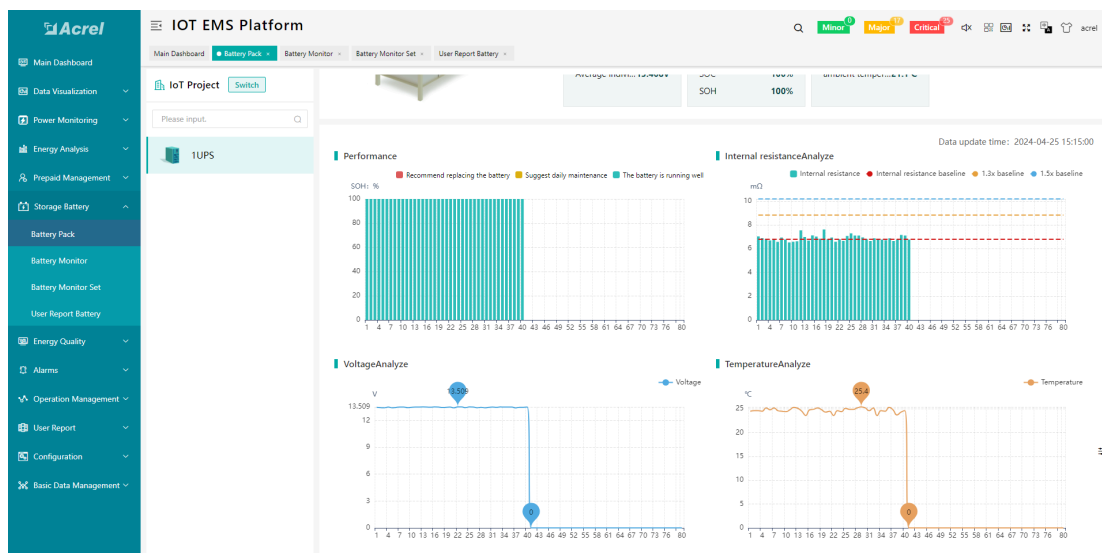


Figure 9-3 Chart

9.2.Battery Monitor

this page shows overview of each battery. Switch specific battery packs on the left, and the page on the right directly displays the basic information and status of each battery under the current battery pack, as shown in Figure 9-4. Click on details to display a detailed diagram of specific parameters. The upper left corner can filter out corresponding time periods according to requirements, as shown in Figure 9-5.

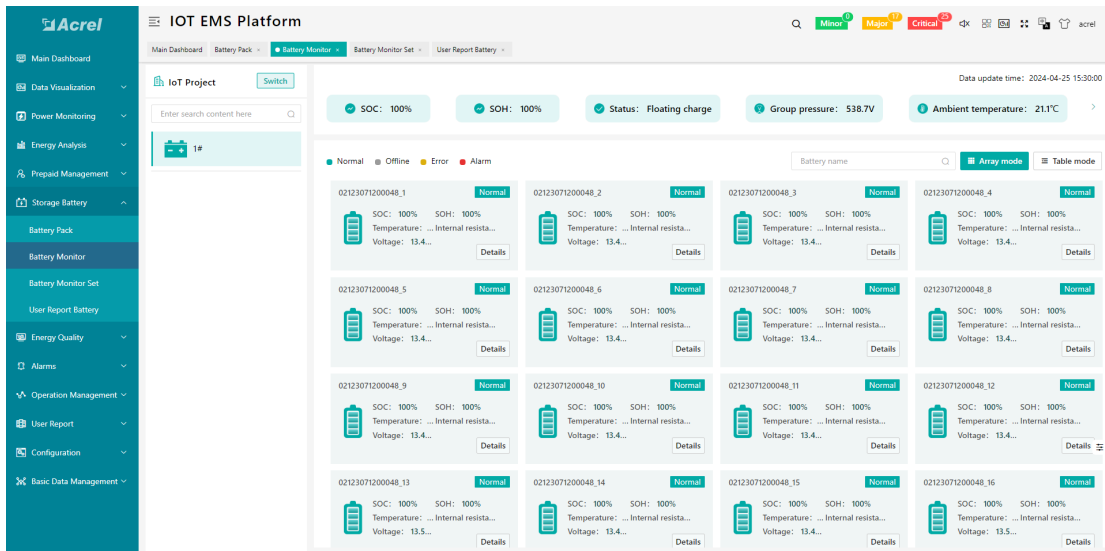


Figure 9-4 Battery Monitor

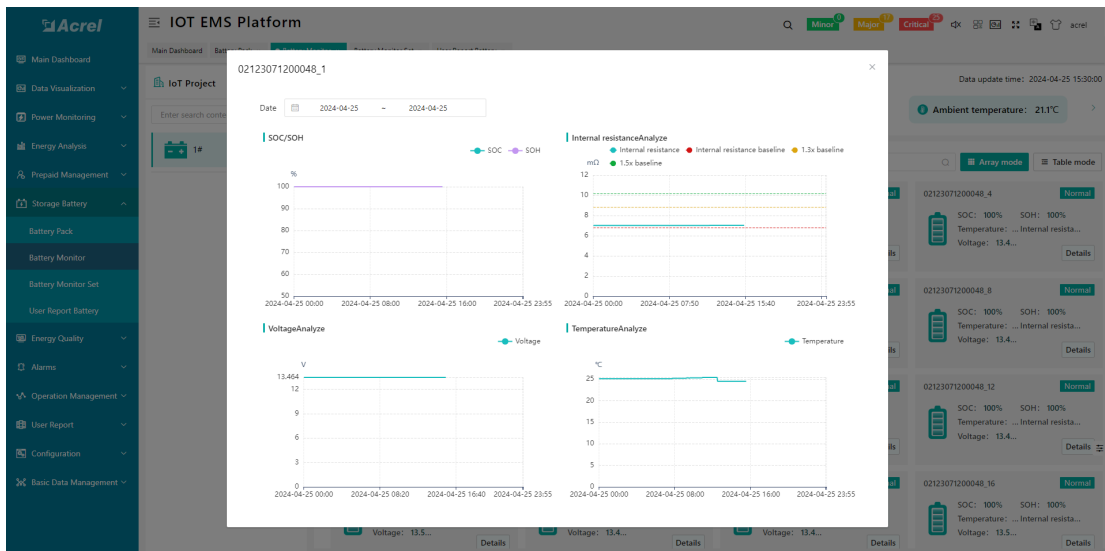


Figure 9-5 Chart

9.3. Battery Monitor Set

This page can manage the parameters of the battery and issue relevant instructions, as shown in Figures 9-6.

(1) Basic Settings

Input basic information of the battery to calculate indicators, including the number of battery cells, individual capacity, and individual voltage specifications. What must be set in the initialization settings.

(2) Set internal resistance reference value

A benchmark for internal resistance can be set for the entire set/single battery. For the entire set of batteries, all inputs are suitable for the new battery, and the average input is suitable for the old battery; For individual batteries, it refers to setting the current resistance value as the reference value. The benchmark value will be used to calculate the rate of change indicator of individual internal resistance.

(3) Set Reset

Refers to restarting the module, which is divided into HS module and single battery module

(4) Low power consumption mode

When the UPS battery is not used for a long time, the monitoring module needs to be configured as a low-power mode to prevent deep discharge of the battery. When the battery is officially used, the low-power mode needs to be turned off.

(5) Modify current direction

By default, the discharge direction is the positive current and can be switched as needed. Click on settings to change direction

(6) Battery Internal Resistance Test

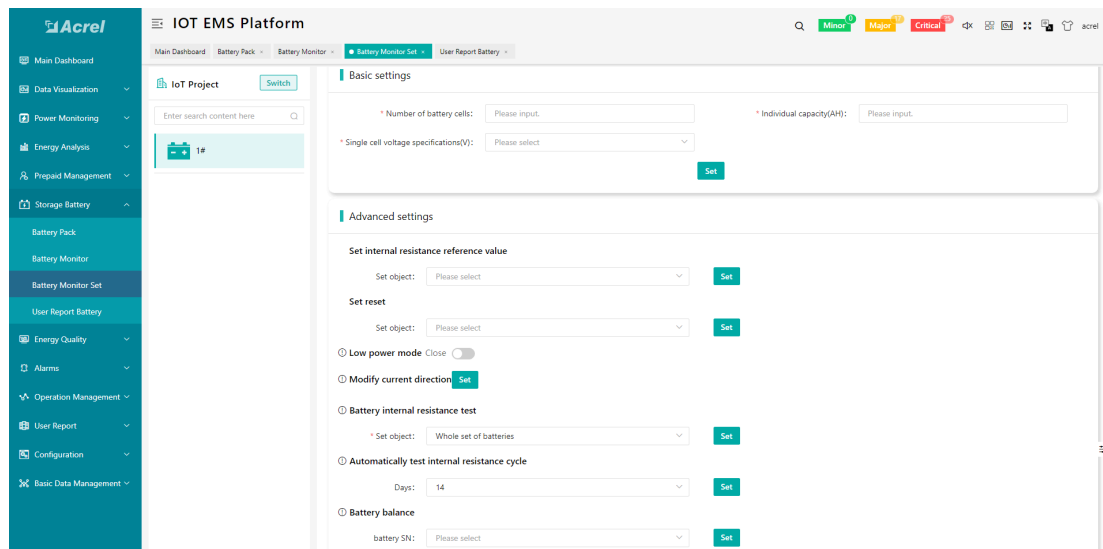
When installing battery monitoring for the first time, it is necessary to manually activate the "Automatic All Internal Resistance Test" function. After activation, the internal resistance will be tested in cycles according to the set cycle. Internal resistance testing will damage battery life, please set it carefully in the future.

(7) Automatic testing of internal resistance cycle

It is recommended to maintain an interval of 7 days or more for battery internal resistance testing. High current discharge during internal resistance testing can cause significant damage to the battery, thereby affecting its capacity and lifespan. Default 30 days, it is recommended not to change.

(8) Battery balancing

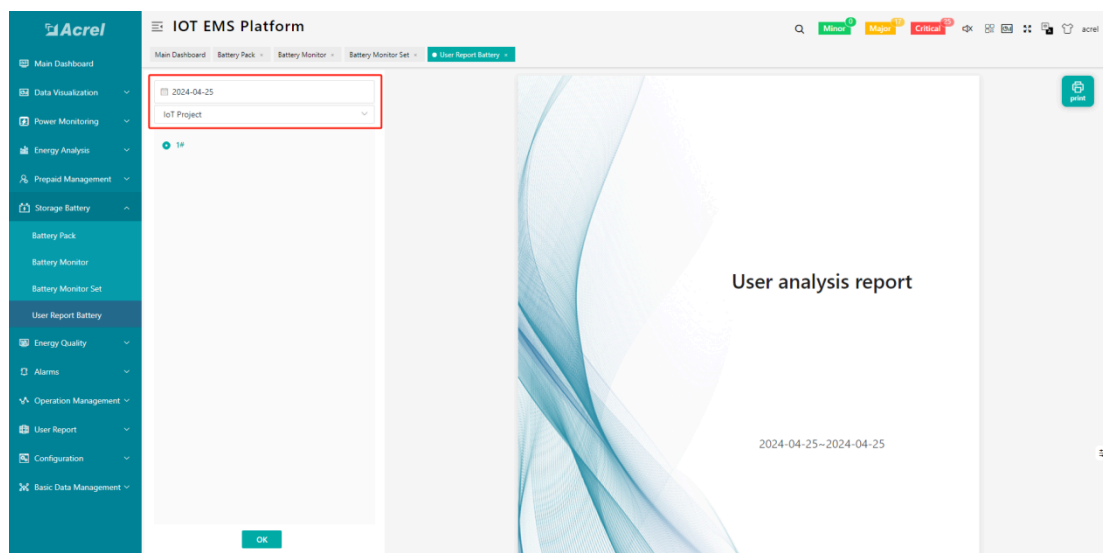
Based on the voltage data of a single (group) series of batteries, the energy of the high voltage battery is discharged through a resistor to maintain equal charge between the high voltage battery and the low voltage battery, achieving consistency in the battery cells.



Figures 9-6 Battery Monitor Set

9.4.Battery User Report

Users can filter the battery packs corresponding to the time and project on the left side, click confirm, and obtain a complete analysis report. The analysis report consists of three parts: first, an overview of the battery, second, performance data analysis of individual batteries, and third, analysis of individual resistance data, as shown in Figures 9-7.



Figures 9-7 Chart

Energy Quality

10.1.Harmonic Monitoring

The harmonic monitoring page displays the harmonic monitoring data in chart form and data form respectively, and you can choose A-phase voltage harmonics, B-phase voltage harmonics, C-phase voltage harmonics, A-phase current harmonics, B-phase current harmonics, Phase C current harmonics are displayed in graphs or data lists, as shown in Figures 10-1 and 10-2.

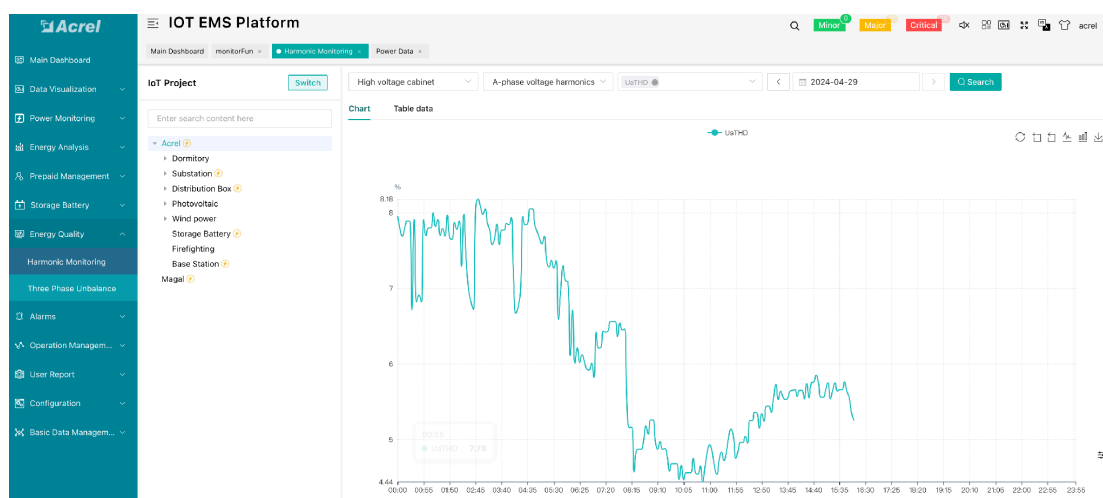


Figure 10-1 Harmonic Monitoring - Chart

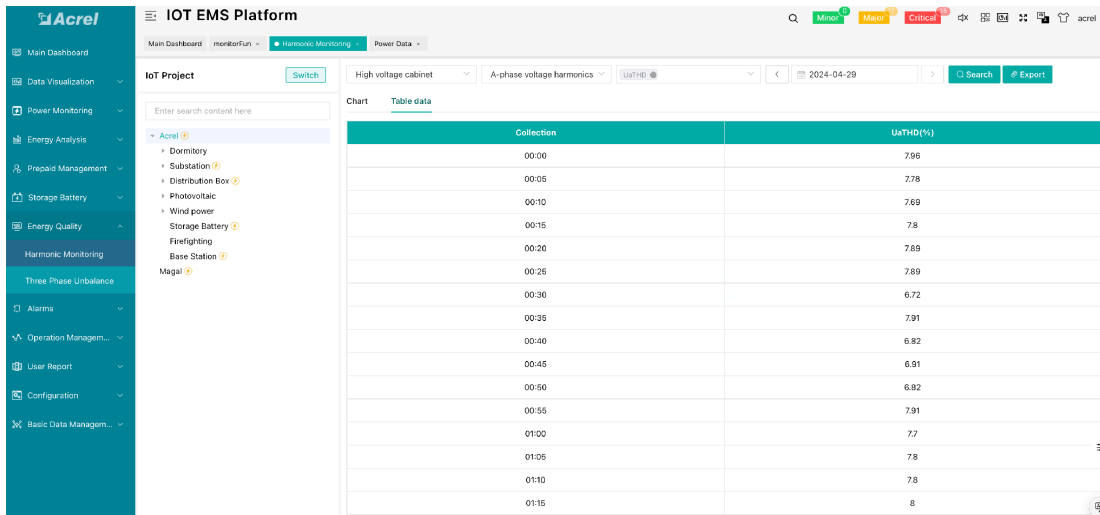


Figure 10-2 Harmonic Monitoring - Table

10.2.Three Phase Unbalance

The three phase unbalance degree includes the three phase voltage unbalance degree and the three phase current unbalance degree, supports viewing the vector diagram of the three phase current and three phase voltage of the day, and corresponds to the unbalance degree of the three phase current and three phase voltage, such as As shown in Figure 10-3.

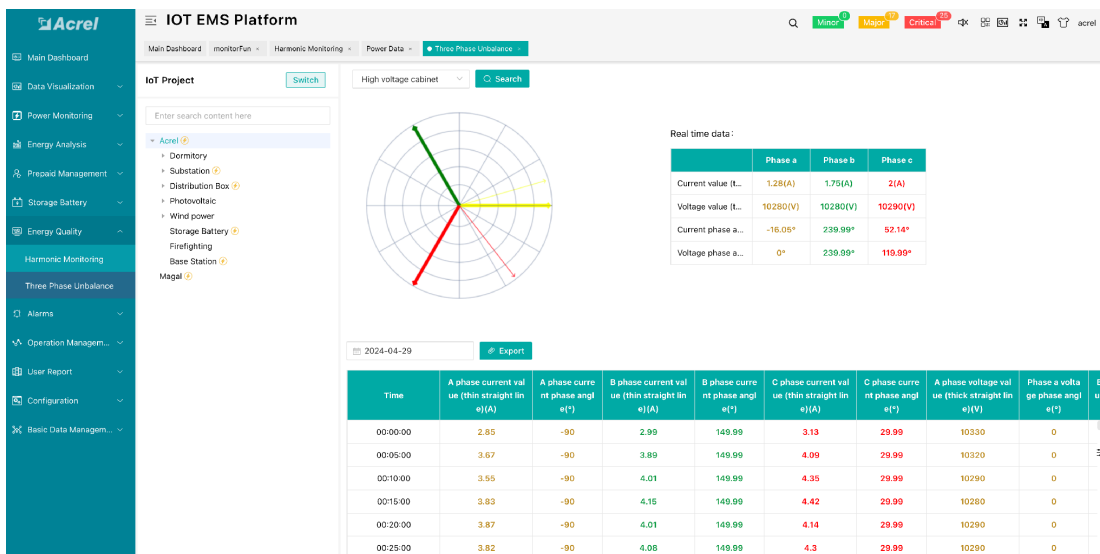


Figure 10-3 Three phase unbalance

Demand Analysis

Demand analysis includes maximum demand reports and demand monitoring functions.

11.1.Maximum Demand Report

The maximum demand report page shows the maximum demand per month. You can query the maximum demand per month and the time point of the demand according to the query conditions, as shown in Figure 11-1.

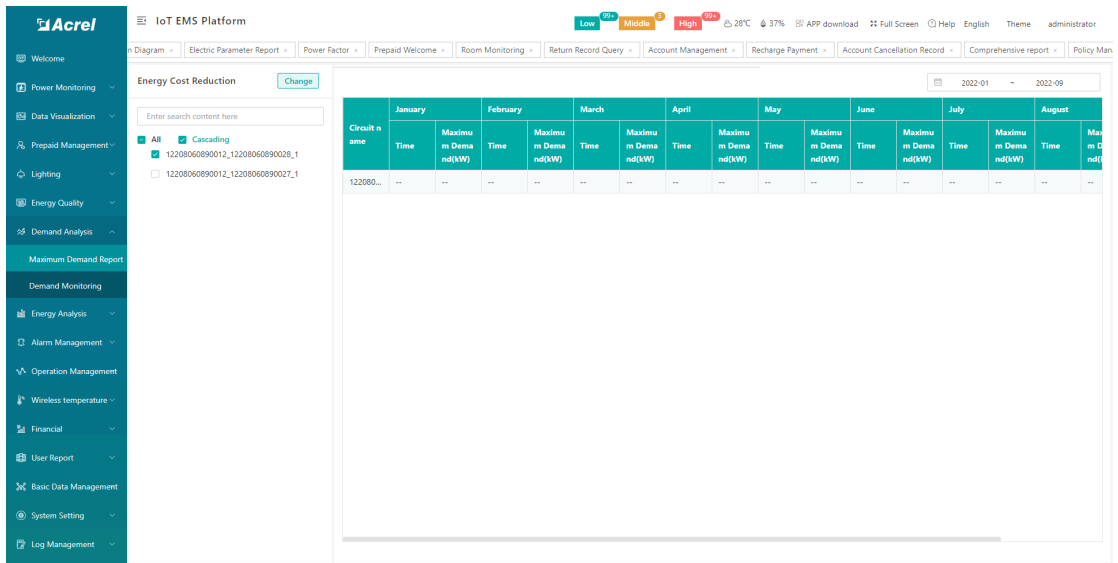


Figure 11-1 Maximum demand report

11.2.Demand Monitoring

The demand monitoring page shows the daily demand of the detector, which can be switched between charts and data, as shown in Figure 11-2 and 11-3.

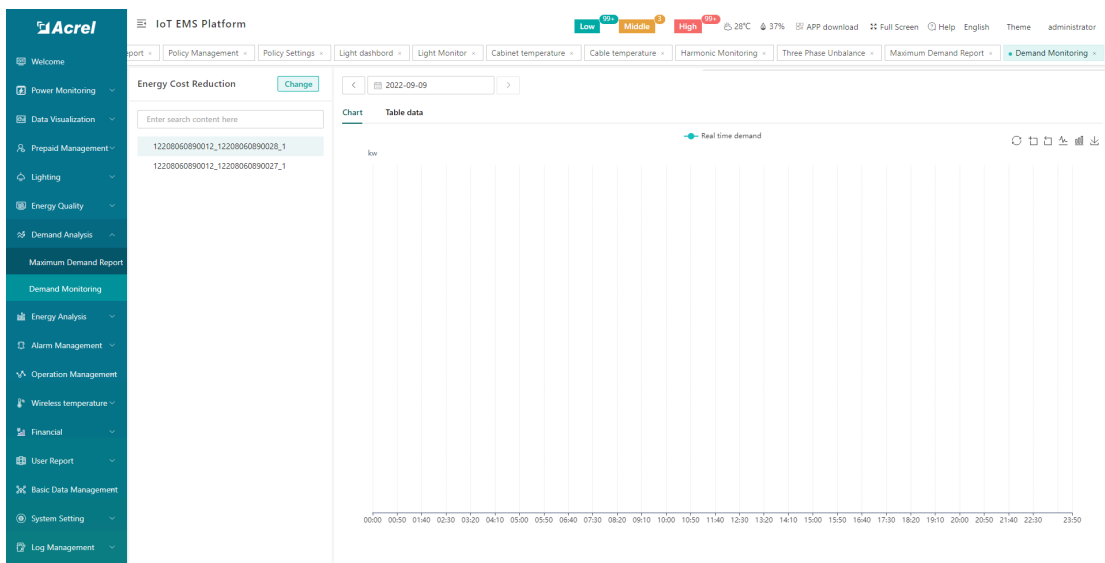


Figure 11-2 Demand Monitoring - Chart

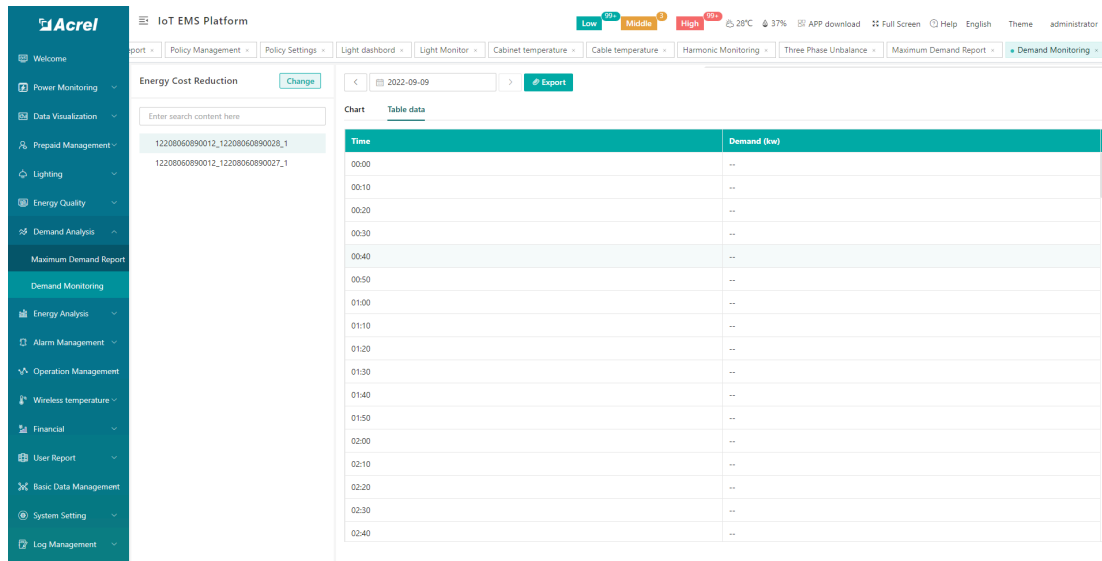


Figure 11-3 Demand Monitoring - Table

Distributed PV

PV Integrated Dashboard

This page shows the number of PV stations, total installed capacity, total power generation, generation statistics by time, social benefits, annual generation share, trends, and a map of station locations. Clicking a site on the map opens its dashboard.

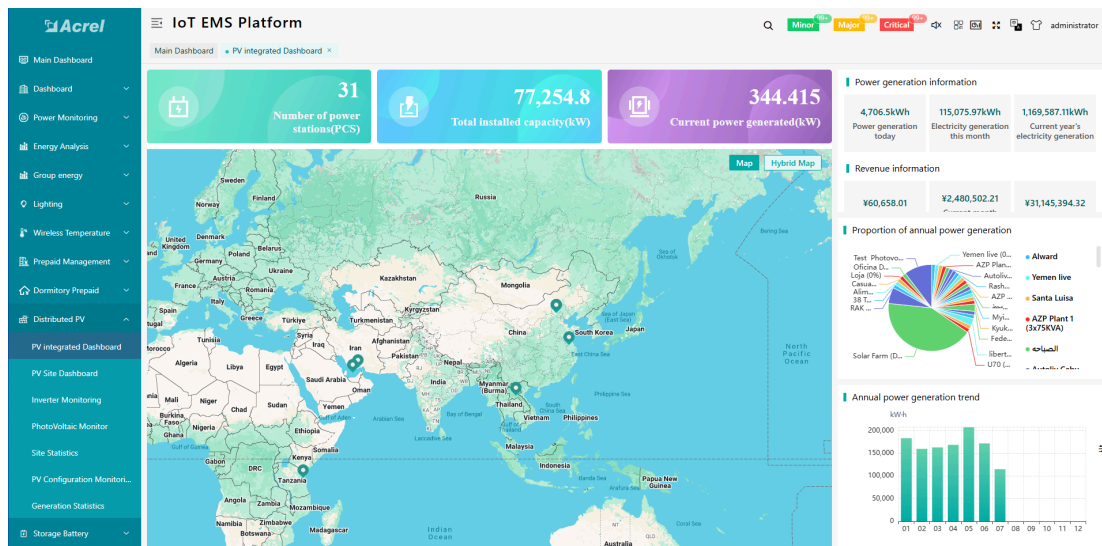


Figure 12-1 PV Integrated Dashboard

PV Site Dashboard

This page displays detailed information for a single PV station. Users can view station details, environmental data, generation trends, daily power curves, generation statistics, and revenue. The top-right toggle allows switching between hourly, daily, and monthly data by year, month, or day, as shown in Figure 12-2

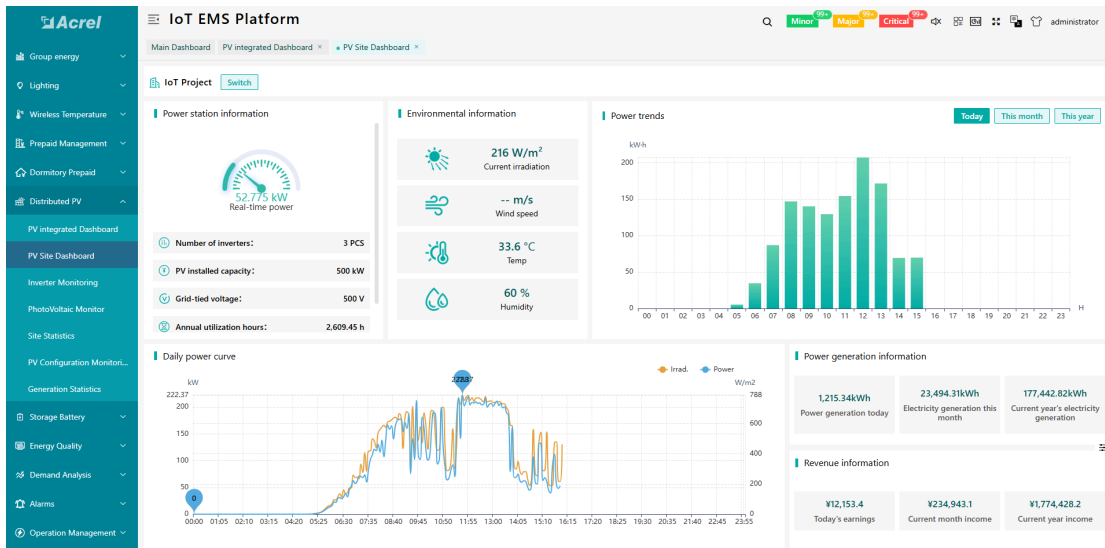


Figure 12-2 PV Site Dashboard

Inverter Monitoring

This page displays all inverters under the project. Users can view basic information and status of each inverter in the list, as shown in the inverter monitoring view. To see detailed information and generation statistics, click the “Details” button to enter the inverter detail page, as shown Figure 12-3 and Figure 12-4.

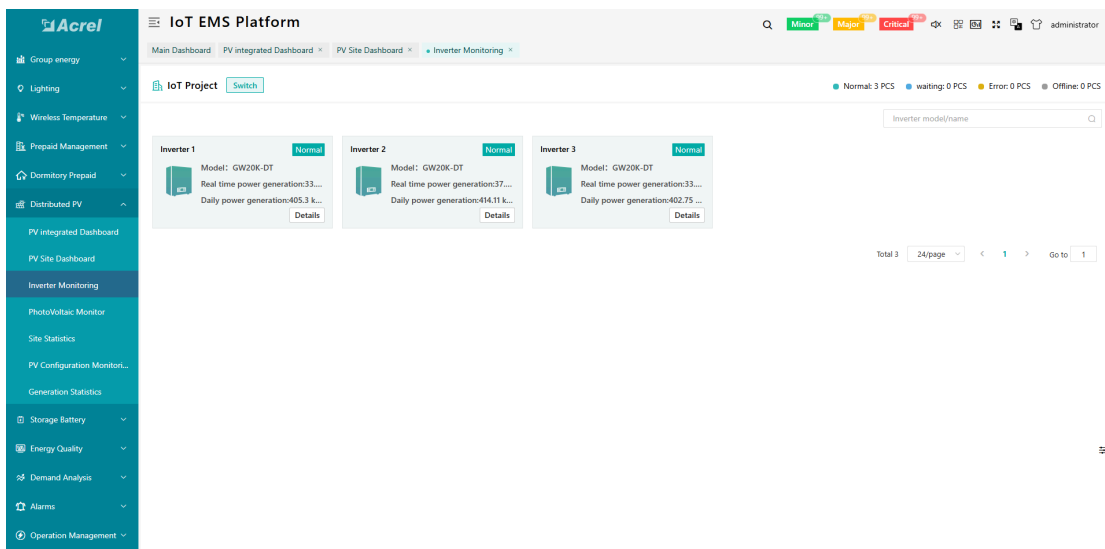


Figure 12-3 Inverter Monitoring

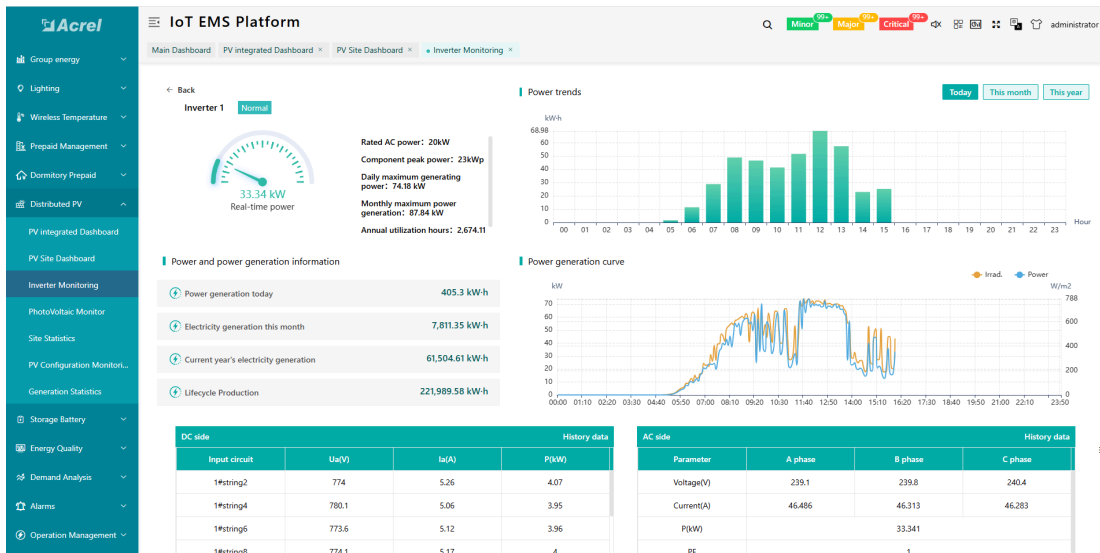


Figure 12-4 Inverter Details

Generation Statistics

This page presents inverter generation data in table format, as shown in the inverter generation statistics view. Users can switch between year, month, and day to view data for different time periods. Selecting one or more records generates corresponding charts, as shown Figure 12-6. Data can be exported in Excel format by clicking the export button.

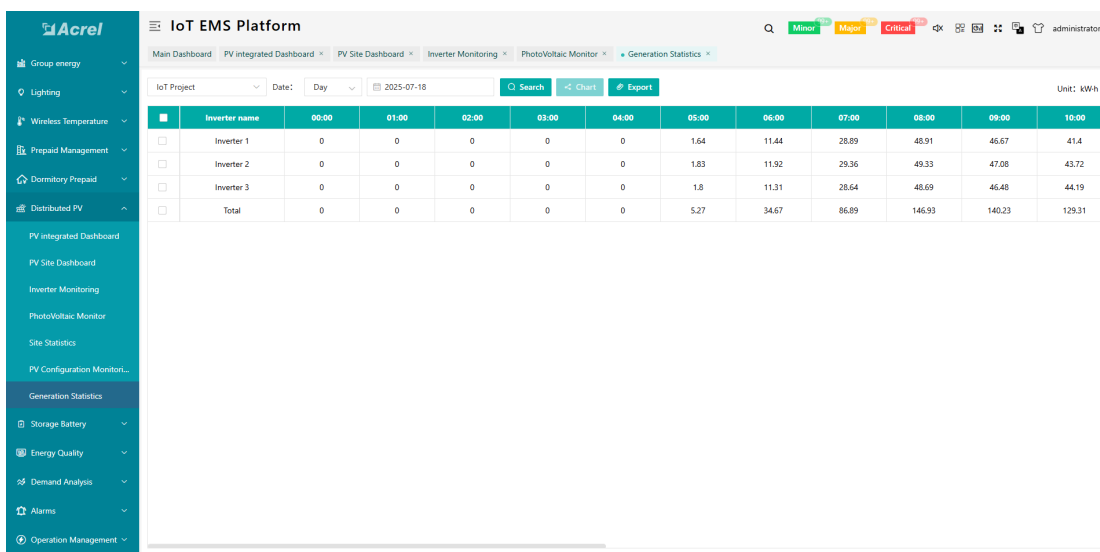


Figure 12-5 Generation Statistic

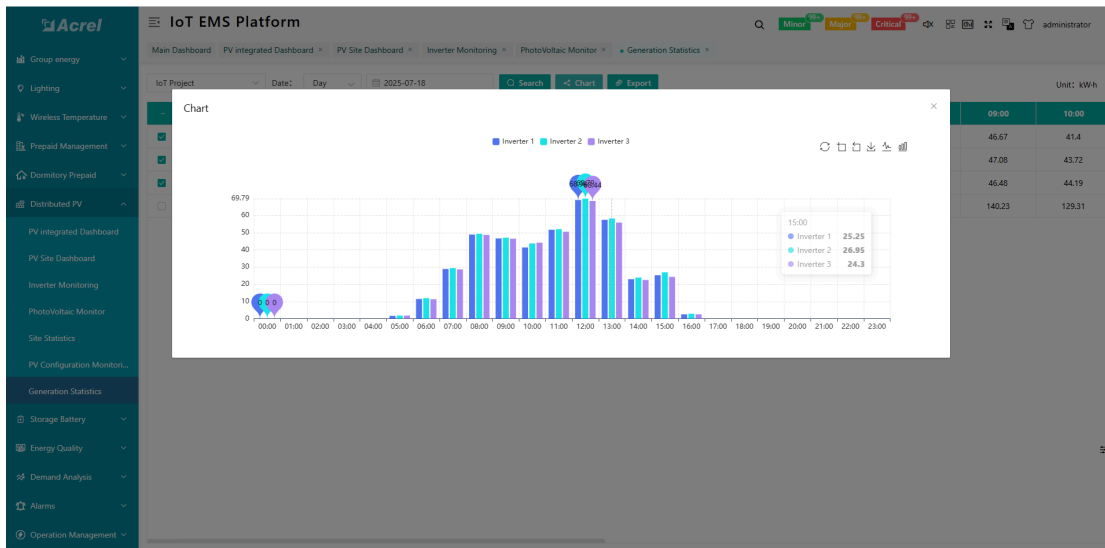


Figure 12-6 Inverter Charts

PhotoVoltaic Monitor

This page displays irradiance, PV generation, electricity consumption, and load data for the project. Users can view real-time data for the current day through charts, select PV groups to view data from other stations, and switch dates to access historical data, as shown Figure 12-7.

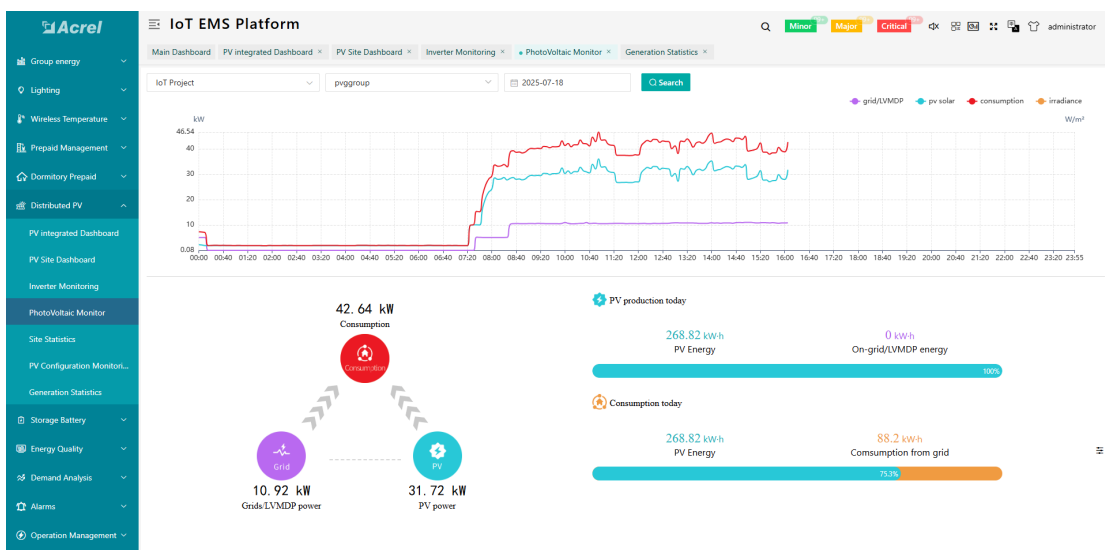


Figure 12-7 PV Monitor

Site Statistics

This page presents PV station generation data in both bar chart and table formats, as shown. Users can switch between year, month, and day to compare generation across different periods and historical data. Data can be exported in Excel format via the export button.

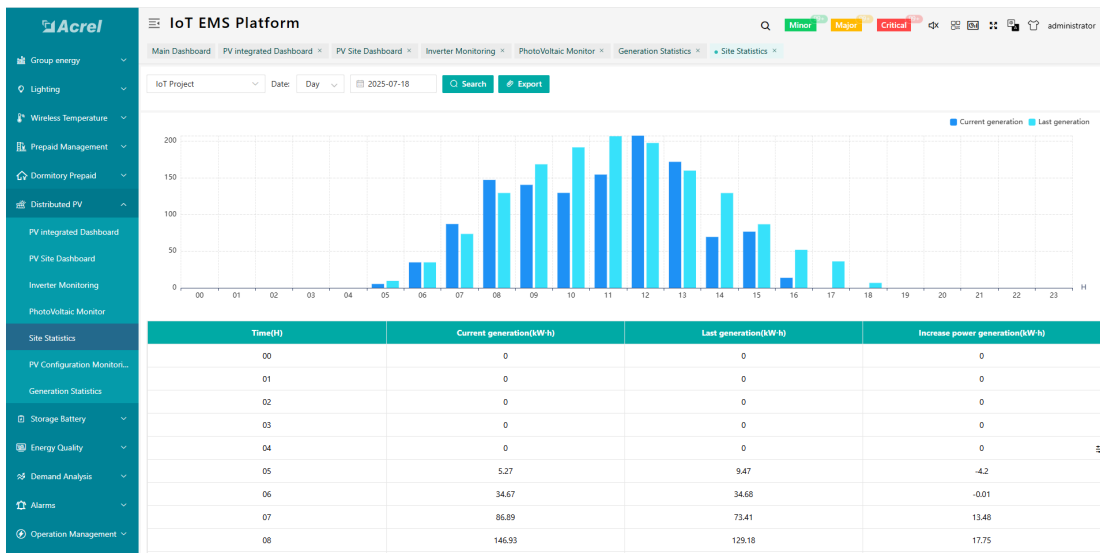


Figure 12-8 Site Statistic

Alarm Management

There will be some faults and alarms during the use of the equipment. For these faults and alarms, relevant personnel can check the hidden danger information in time and take corresponding measures.

13.1.Alarm Information

The alarm query page displays the hidden danger information of all devices under the associated project, and the corresponding alarm records can be searched according to the alarm type, work order status, project name, area location, and time, as shown in Figure 12-1.

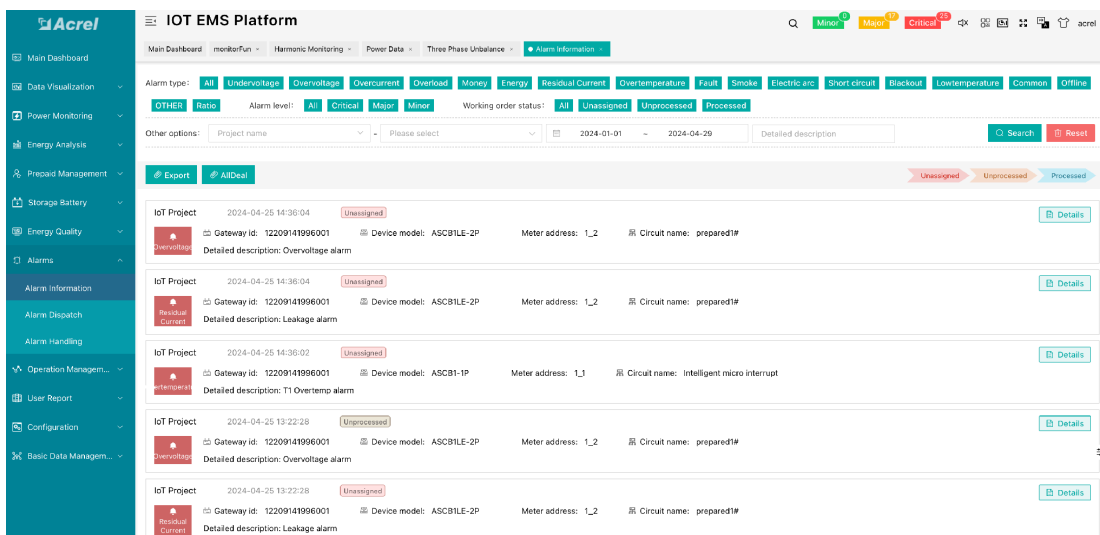


Figure 13-1 Alarm information

13.2.Alarm Dispatch

The alarm distribution page displays undistributed hidden danger records, and the corresponding alarm records can be searched according to the alarm type, project name, area

location, and time, as shown in Figure 13-2.

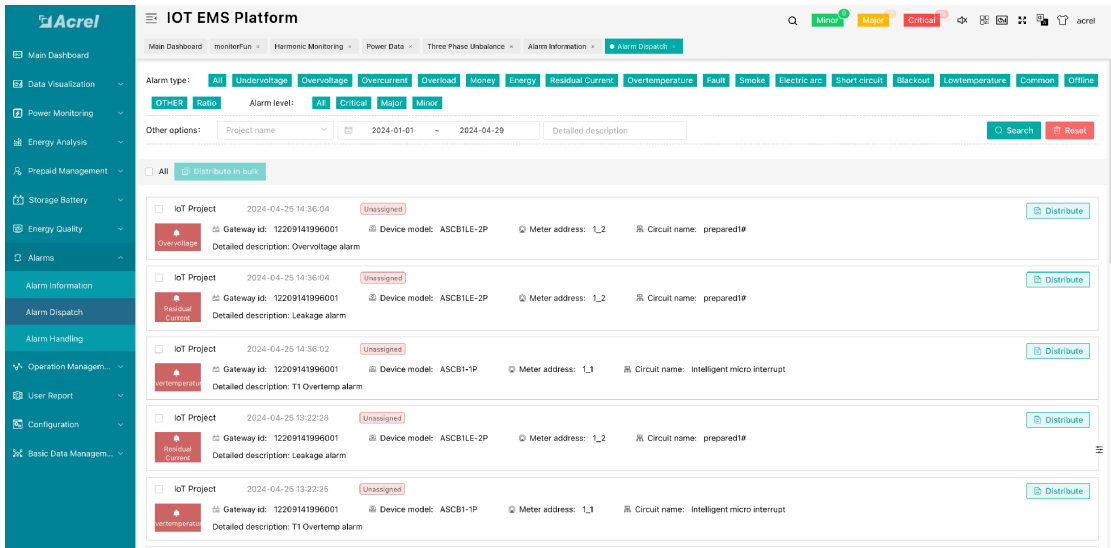


Figure 13-2 Alarm dispatch

Click the alarm information distribution button to enter the alarm distribution page, select the executor and the rectification period, if you need to fill in the work order task, you can fill in the work order task, and the system will send the work order information to the executor after submission. As shown in Figure 13-3.

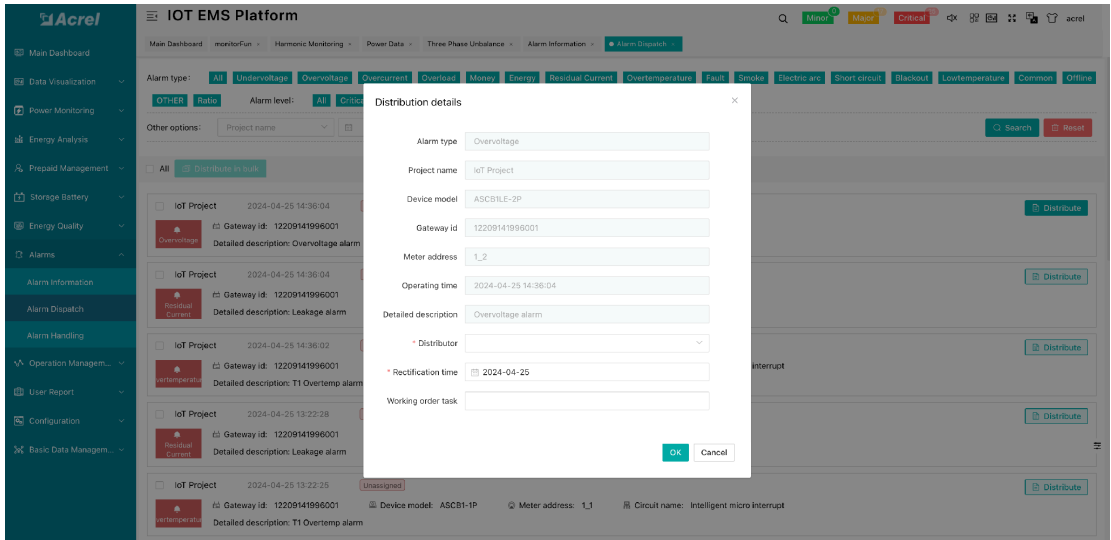


Figure 13-3 Alarm distribution details

13.3.Alarm Handling

The alarm handling page displays the alarms dispatched to the user that need to be processed, and the corresponding alarm records can be searched according to the alarm type, project name, area location, and time, as shown in Figure 13-4.

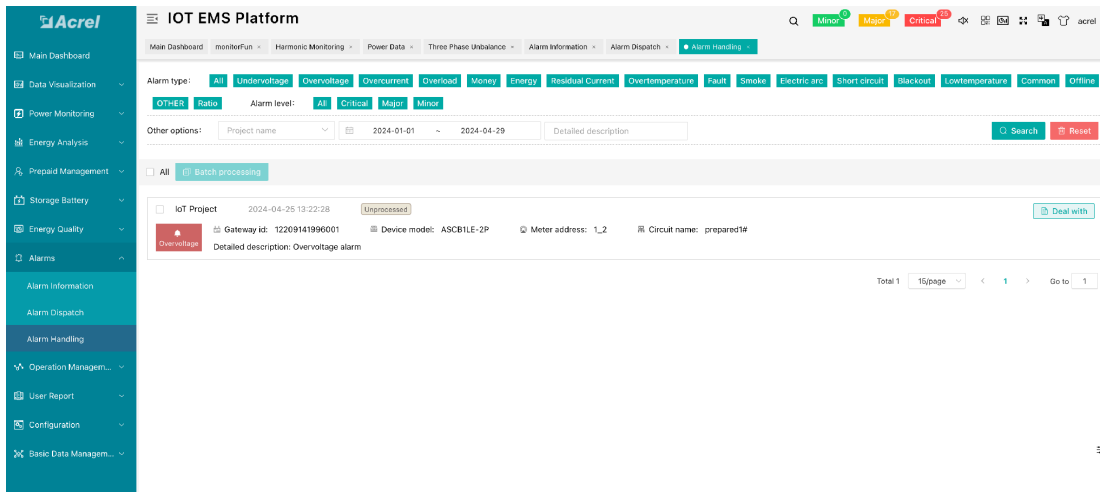


Figure 13-4 Alarm handling

Click the alarm information processing button to pop up the alarm processing page. The handler can fill in the abnormal reason and processing instructions, and upload the on-site processing picture. Click Save to complete the work order, as shown in Figure 13-5.

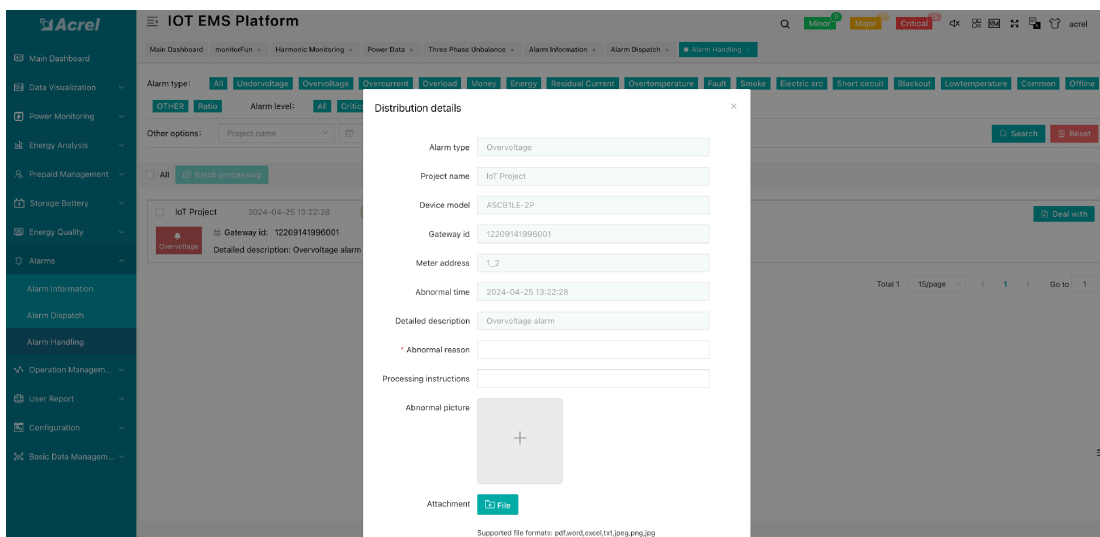


Figure 13-5 Alarm processing details

Operation Management

14.1. Inspection Plan

The inspection plan page shows the created inspection plan. The default is to display the inspection plan of the current month. You can query the data of other times by switching the date. It supports setting building nodes, plan name/plan content as filter conditions to filter eligible ones. The inspection plan also supports adding, modifying and deleting the inspection plan, as shown in Figure 14-1.

	Plan name	Plan task	Project name	Circuit name	Start date	End date	Cycle	Inspector	InspectionLeader	Reviewer	Create time	Remark
☐	Acrel Inspection	storage battery	IOT Project	Acrel_Storage...	2024-04-19	2024-04-25	Day	Ivy	admin	admin	2024-04-19	

Figure 14-1 Inspection plan

Click the Add button to pop up the new plan page, select the plan name, enter the plan content, select the circuit name, inspection cycle, start date and end date, time period and inspection person, inspection item content, inspection item team leader, Reviewer, Remarks, after clicking OK, the system will automatically generate inspection plan records for each area in the corresponding time period. As shown in Figure 13-2. Click the edit button to pop up the edit plan page, and the operation method is the same as that of creating. After the inspection plan is deleted, the corresponding inspection record page will be deleted. (The name of the loop refers to the location of the area that needs to be inspected, and the content of the inspection is the work that needs to be done during the inspection. The day of the inspection cycle represents the daily inspection in days, and the week of the inspection cycle represents the weekly inspection in weeks. inspection on a certain day, and the inspection cycle month represents the inspection on a certain day of each month in units of months).

Figure 14-2 Add inspection plan

14.2. Inspection Record

The inspection record page displays all inspection records. Users can query data according to three states: uninspected, normal inspection, and reported defects. They can also use building nodes, switching dates, and plan name/plan content as filter conditions. To query data, at the same time, this page also supports output. As shown in Figure 14-3. (Reporting the defect status refers to finding defects during the inspection process and reporting the defects to the platform)

Plan name	Plan task	Project name	Branch name	Cycle	Planned patrol time	Actual patrol inspection time	Inspector	Sign in deviation distance(m)	Remark	Operation
Acrel inspection	storage battery	IoT Project	Acrel_Storage Bath	Day	2024-04-18 17:0...		ivy			Details
Acrel inspection	storage battery	IoT Project	Acrel_Storage Bath	Day	2024-04-19 17:0...		ivy			Details
Acrel inspection	storage battery	IoT Project	Acrel_Storage Bath	Day	2024-04-20 17:0...		ivy			Details
Acrel inspection	storage battery	IoT Project	Acrel_Storage Bath	Day	2024-04-21 17:0...		ivy			Details
Acrel inspection	storage battery	IoT Project	Acrel_Storage Bath	Day	2024-04-22 17:0...		ivy			Details
Acrel inspection	storage battery	IoT Project	Acrel_Storage Bath	Day	2024-04-23 17:0...		ivy			Details
Acrel inspection	storage battery	IoT Project	Acrel_Storage Bath	Day	2024-04-24 17:0...		ivy			Details

Figure 14-3 Inspection records

14.3. Gateway Status

By querying the project, gateway identification number, and whether it is online, the communication status data of the gateway under the existing project is summarized and displayed, including the current communication status of the device, etc., as shown in Figure 13-4.

Project name	Gateway id	Offline time	Communication status	Software number	Version	Remark
IoT Project	24049706690002		🔴			
IoT Project	12306286900310		🟢			
IoT Project	12209141996001		🟢			
IoT Project	10100001019		🟢			
IoT Project	10100002001		🟢			
IoT Project	02122042700210		🟢			
IoT Project	ZM202306081025		🟢			
IoT Project	24021804990002	2024-03-16 01:30:14	🔴			
IoT Project	70100001001		🟢			

Figure 14-4 Gateway status

14.4.Meter Status

By querying the project, gateway identification number, instrument address, circuit name, and whether it is online, it summarizes and displays the communication status data of the equipment under the existing project, including displaying the current communication status of the equipment, etc., as shown in Figure 14-5.

	Project name	Gateway id	Meter address	Meter type	Circuit name	Communication status	Offline time	Offline duration	Last collection time	Operation
☐	IoT Project	12306280690310	0_3	AMC16-DETT		✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	70100001001	T001056	ADF400LS	prepared#1-5	✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	70100001001	T001055	BTU_KR	prepared#1-4	✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	70100001001	T001010	ADF400LS	prepared#1-3	✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	70100001001	T001009	ADF400LS	prepared#1-2	✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	70100001001	T001008	ADF400LS	prepared#1-1	✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	12209141996001	1_4	ASCB1-4P	prepared3#	✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	12209141996001	1_3	ASCB1-3P	prepared2#	✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	12209141996001	1_2	ASCB1LE-2P	prepared1#	✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	12209141996001	1_1	ASCB1-1P	Intelligent micro in...	✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	10100001010	G101001	AEM96	High voltage cabl...	✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	10100001010	T101024	ACR1	Heat Pump Room	✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	10100001010	T101023	ACR1	IPD5	✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	10100001010	T101022	ACR1	IPD3	✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	10100001010	T101021	ACR1	prepared7	✓			2024-04-29 16:1...	Details Transparent transmission

Figure 14-5 Meter status

Model setting is used to set the model in batches for devices that do not have a matching model after uploading the device. Select one or more meters, click Model Setting, select the corresponding model, and click OK, as shown in Figure 14-6.

-	Project name	Gateway id	Meter address	Meter type	Circuit name	Communication status	Offline time	Offline duration	Last collection time	Operation
☒	IoT Project	12306280690310	0_3	AMC16-DETT		✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	70100001001	T001056	ADF400LS	prepared#1-5	✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	70100001001	T001055	BTU_KR	prepared#1-4	✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	70100001001	T001010	ADF400LS	prepared#1-3	✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	70100001001	T001009	ADF400LS	prepared#1-2	✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	70100001001	T001008	ADF400LS	prepared#1-1	✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	12209141996001	1_4	ASCB1-4P	prepared3#	✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	12209141996001	1_3	ASCB1-3P	prepared2#	✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	12209141996001	1_2	ASCB1LE-2P	prepared1#	✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	12209141996001	1_1	ASCB1-1P	Intelligent micro in...	✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	10100001010	G101001	AEM96	High voltage cabl...	✓			2024-04-29 16:1...	Details Transparent transmission
☐	IoT Project	10100001010	T101024	ACR1	Heat Pump Room	✓			2024-04-29 16:1...	Details Transparent transmission

Figure 14-6 Model Settings

Wireless Temperature Measurement

15.1.Cabinet Temperature

This page displays the details of the cabinet temperature, as shown in Figure 15-1.

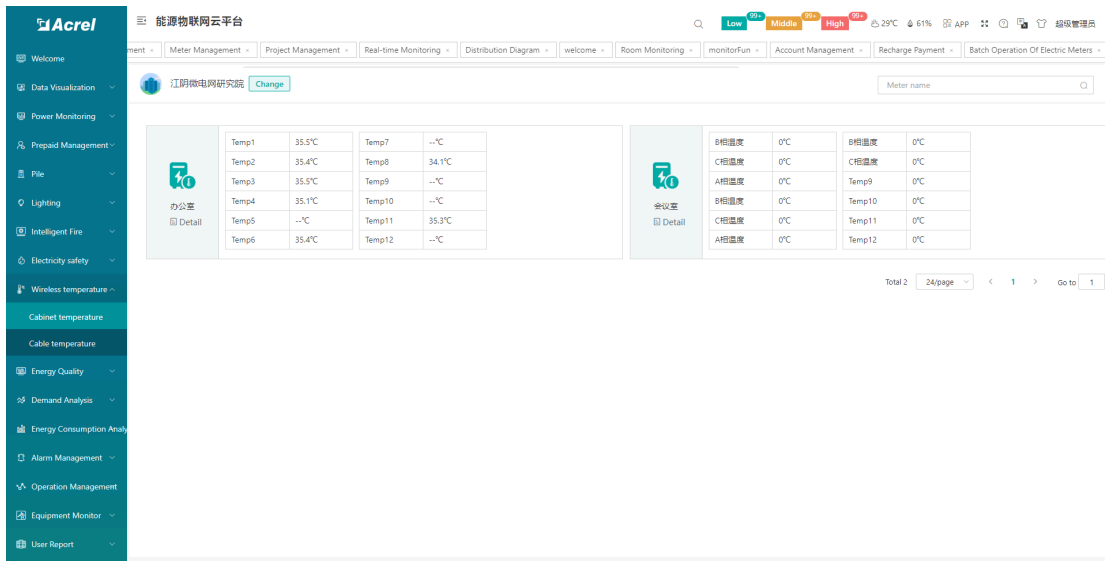


Figure 15-1 Cabinet Temperature

15.2.Cable Temperature

This page displays the temperature information of the cables, as shown in Figure 15-2.

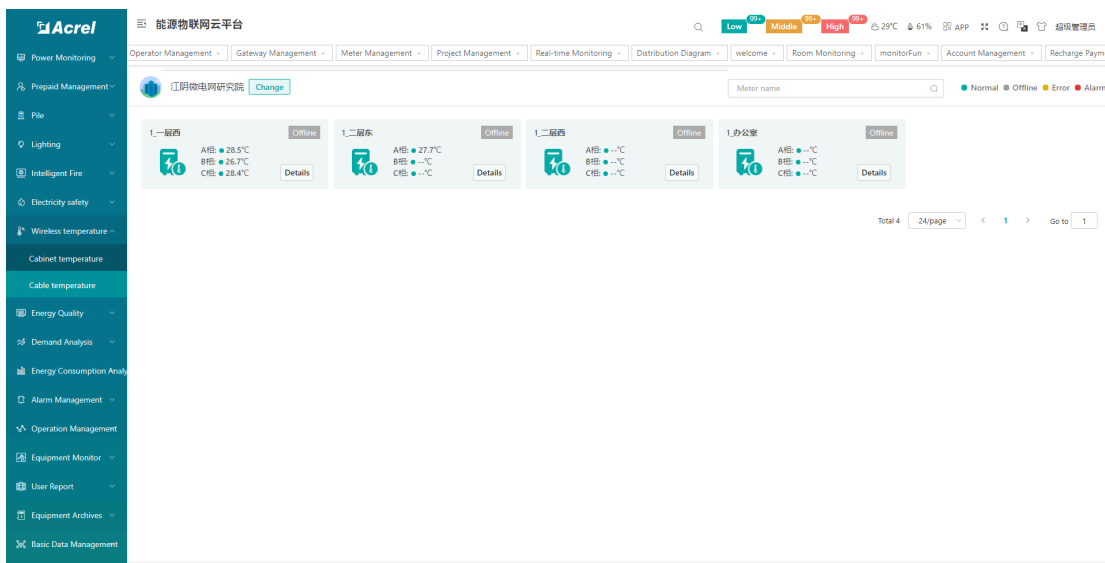


Figure 15-2 Cable Temperature

User Report

16.1.User Report

The user report can filter and generate project overview, energy consumption analysis, energy consumption ranking, financial report and financial details according to the project and time period specified by the user, and supports the printing function, as shown in Figure 16-1.

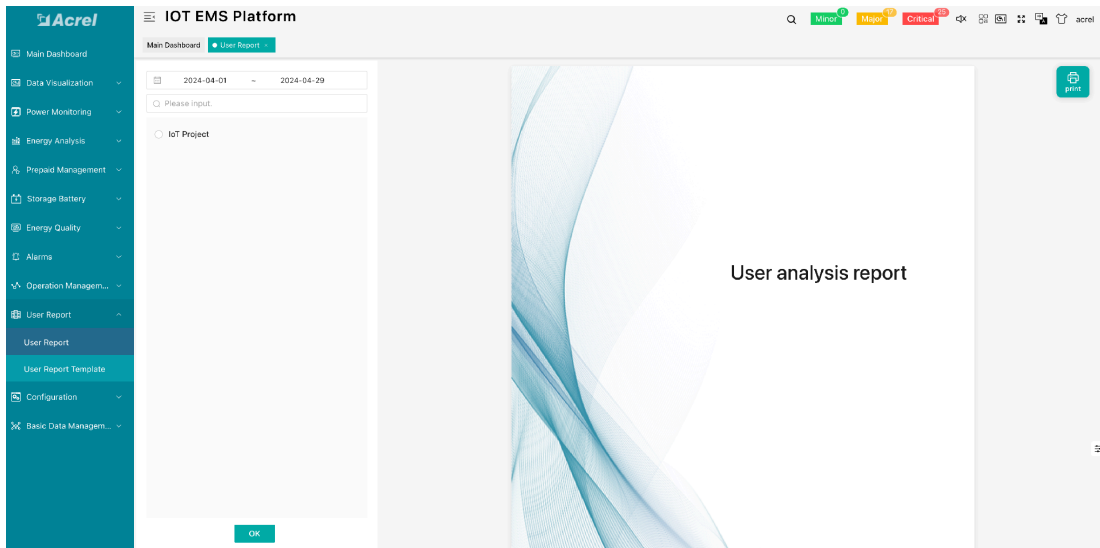


Figure 16-1 User report

16.2. User Report Template

Users can select the report information they need to view in the user report template according to their needs, and bind it to the project. The corresponding information can be seen in the user report, and batch binding is supported, as shown in Figure 16-2.

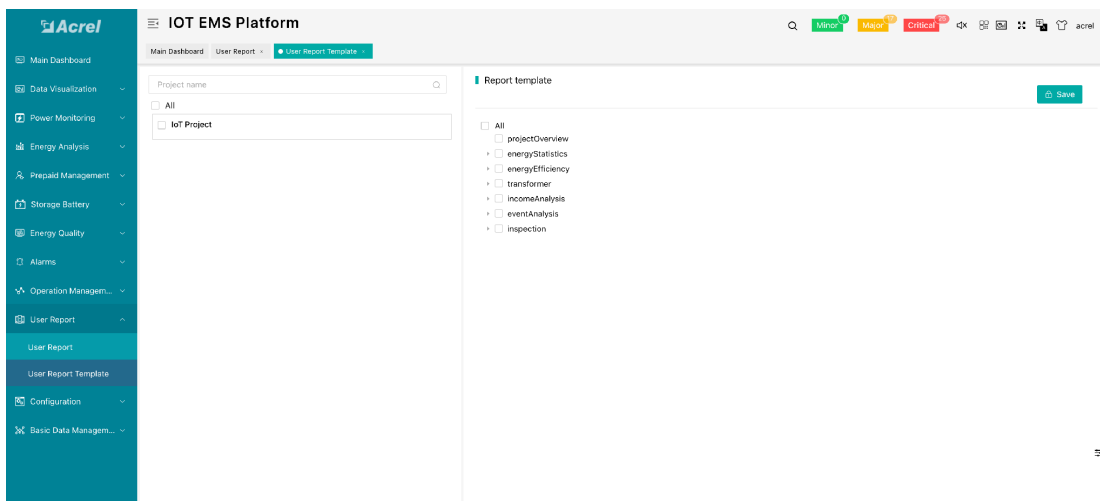


Figure 16-2 User Report Template

Basic Data Management

17.1. User Management

User management can add, modify, delete, and reset passwords for user information, and can also associate items with operators, as shown in Figure 17-1.

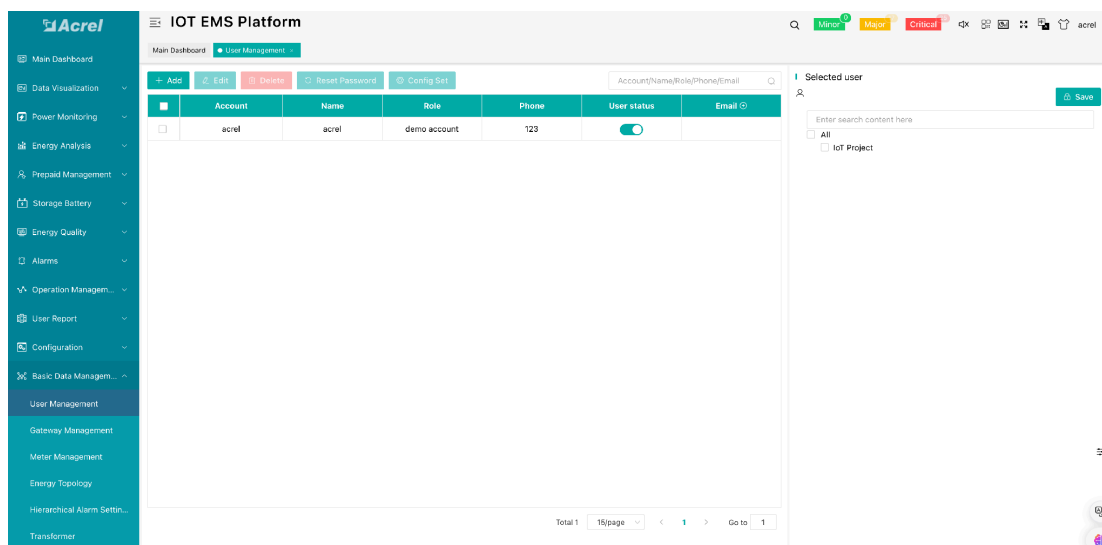


Figure 17-1 User Management

Click Add to pop up a new user box, enter the login account, password, name, platform name, role, account validity period, and effective date, etc., and click OK to create a new user, as shown in Figure 17-2. Editing a user is the same as creating a user.

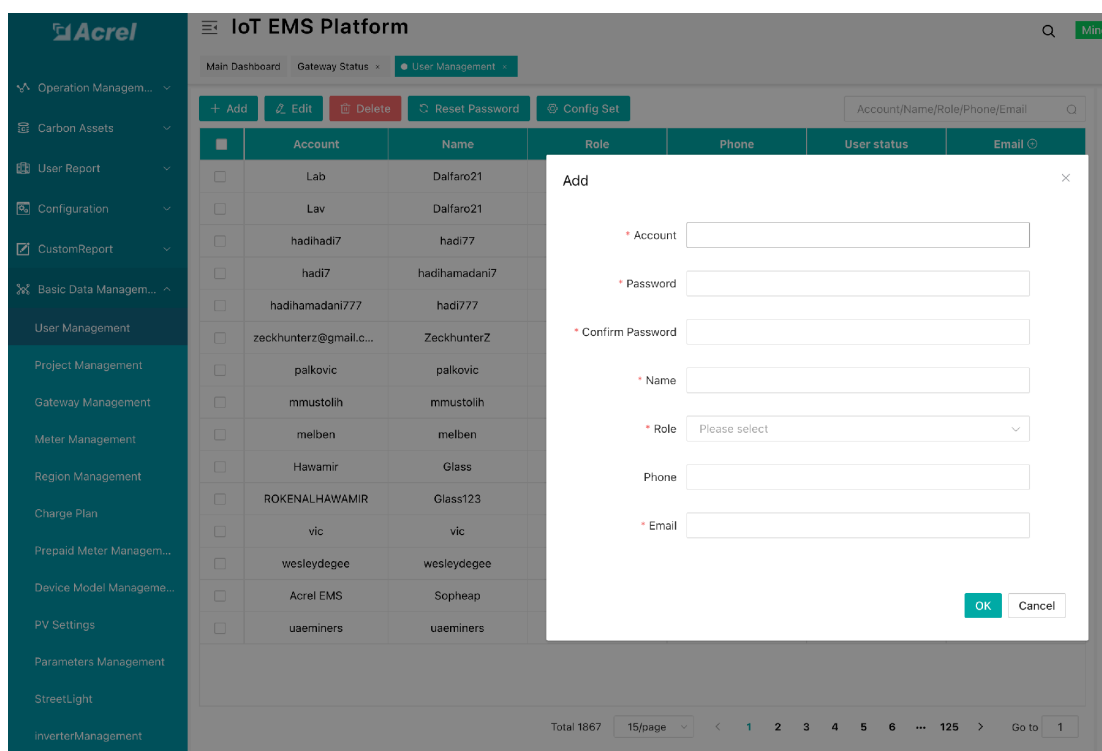


Figure 17-2 Adding an user

Select a user, click Delete, and a confirmation prompt box will pop up, click Confirm to delete the checked operator, as shown in Figure 17-3. Select a user, click Reset Password, a reset password box will pop up, enter a new password and confirm the password, and click Confirm to modify the operator login password, as shown in Figure 17-4.

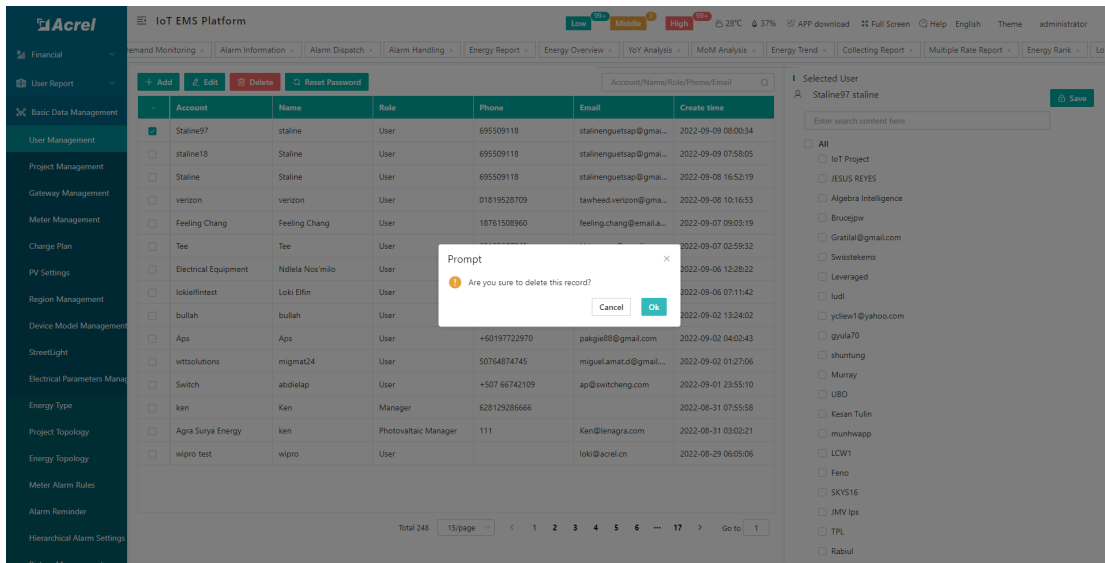


Figure 17-3 Delete user

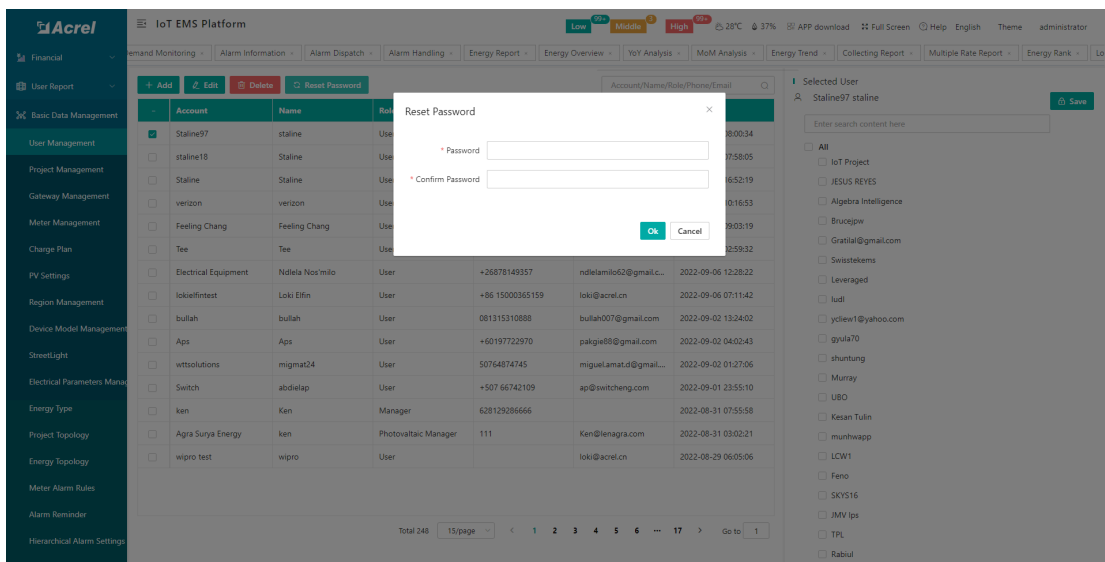


Figure 17-4 Reset Password

17.2. Project Management

The project management page displays all projects associated with the current user. Users can add, edit, and delete project information, and can also import project information according to the template. Click the export button to export the project information to an Excel table, and also support checked projects Set electricity prices. As shown in Figure 17-5.

The screenshot shows the Acrel IoT EMS Platform interface. The left sidebar contains various management modules. The main area displays a table of projects with the following data:

Project Name	Customer Name	Address	Principal	Phone	Create time
☐ Virect	Verizon	Verizon			2022-09-08 18:35:37
☐ Energy Cost Reduction	Tsandzanani Project	Nyakaflo Next to Komati River	ECR	+26878149357	2022-09-08 15:05:47
☐ Pbc	Hmt	Uttarkhan			2022-09-08 04:32:04
☐ Pbc	Hmt	Uttarkhan			2022-09-08 04:20:28
☐ Verizonrectifier	Verizon	Uttarkhan			2022-09-08 04:01:56
☐ Verizon pbc	Hmt	Uttarkhan	1	1	2022-09-08 03:11:16
☐ NEW	APS	Nilai			2022-09-07 11:24:21
☐ E Team Test	Loki Eflin	aaa			2022-09-06 15:18:11
☐ Proj2	Wtt	Panama			2022-09-02 09:41:38
☐ Agra@Lab	Ken	Jakarta, Indonesia	Ken	628129286666	2022-09-01 10:34:59
☐ WGTest	WGTest	WGTest	WGTest	1111111111	2022-08-30 11:16:13
☐ Wipro Test	wipro	aaa			2022-08-29 14:06:30
☐ plinbatam	gardu1	Baloi			2022-08-26 16:17:36
☐ Office Green testing	Green Electric City	Heliade intru VII 8	Laurentiu	+40746133833	2022-08-25 12:48:33
☐ Prototype	AEG	Nilai			2022-08-24 10:50:31

At the bottom of the table, it shows 'Total 161' and a pagination control for '15/page'.

Figure 17-5 Project Management

Click the Add button to enter the new project page. The project name, customer name, region, and detailed address are required. Click Save to create the project. The camera can be associated on the right, and the power distribution diagram, pipe network diagram, and equipment management model diagram can be uploaded. , the save button of each module only saves the data of the corresponding module, as shown in Figure 17-6.

The screenshot shows the 'Added project' form in the Acrel IoT EMS Platform. It is divided into two main sections: 'Basic information' and 'User association'.

Basic information:

- Project Name:** Required field.
- Billing model:** Radio buttons for 'Meter prepaid' (selected) and 'Platform prepaid'.
- Customer Name:** Required field.
- Address:** Required field with a 'Position' button.
- Longitude:** Input field.
- Latitude:** Input field.
- Organization:** Dropdown menu with 'Choose' selected.
- Construction area:** Input field.
- Picture:** Upload area with a '+' icon.
- Remark:** Text area with a character count of 0/200.

User association:

- Camera selection:** A list of cameras (staline, Staline, Staline, verizon, Feeling Chang, Tee) with checkboxes. A search bar 'Enter keyword' is present.
- Address book:** A section for associating users with the project. It includes fields for 'Project manager' (Username), 'member' (Phone, Email), and an '+ Add' button.

At the bottom, there are 'Save' and 'Cancel' buttons.

Figure 17-6 Added project

After the project information is saved, you can check the corresponding user in the user association below to associate with the project. After clicking Save, the associated user will have the permission to view the project. As shown in Figure 17-7.

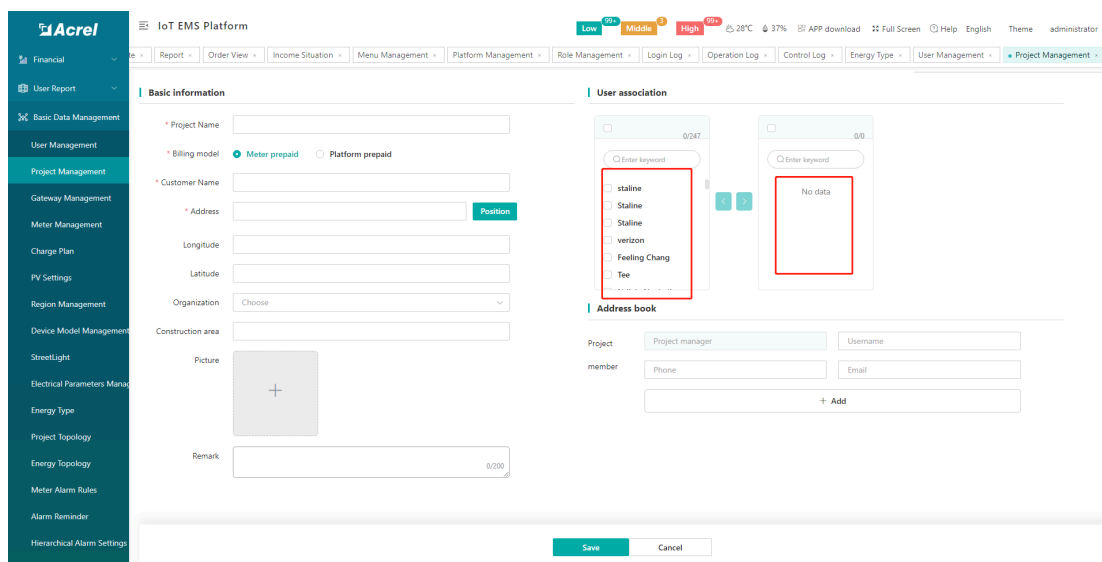


Figure 17-7

Contact information can be added to the address book below the host association, which can be displayed in the project information and is also convenient for exception subscription management to add alarm recipients, as shown in Figure 17-8. The operation method of modifying an item is the same as that of adding an item.

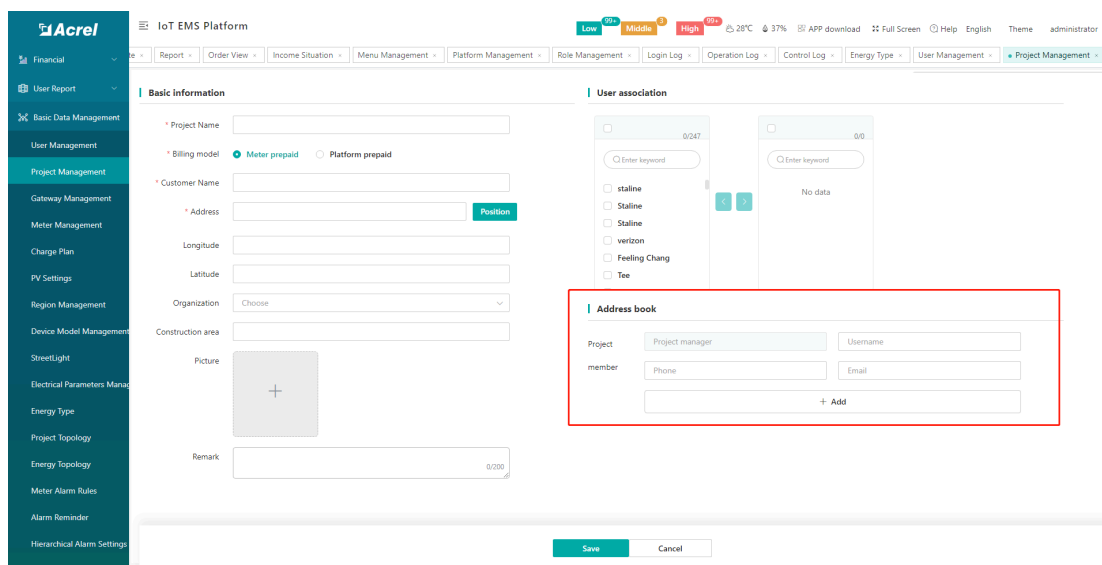


Figure 17-8

Click to download and import the template, and enter the parameters in the template. Among them, the four parameters of device model, gateway identification number, instrument address, and subsystem do not need to be filled in. Click Import and select the file, the platform will prompt that the import is successful.

Check the selected items and click "Price Setting", which supports multiple rate and single rate settings. After setting, click OK. As shown in Figure 17-9.

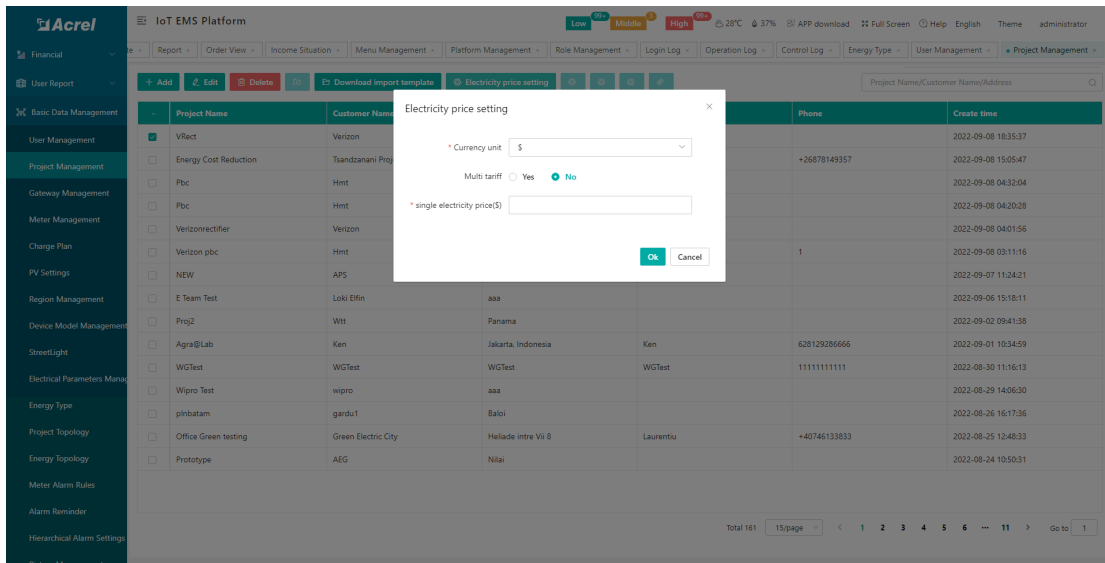


Figure 17-9

17.3. Gateway Management

The gateway management page displays all meter information under the associated project. The information includes project name, gateway identification number, time zone, creation time, remarks, etc. You can find the corresponding gateway according to the gateway identification number and project name.

You can add, edit, delete, reset the gateway, and set the time zone on the gateway information, as shown in Figure 17-10.

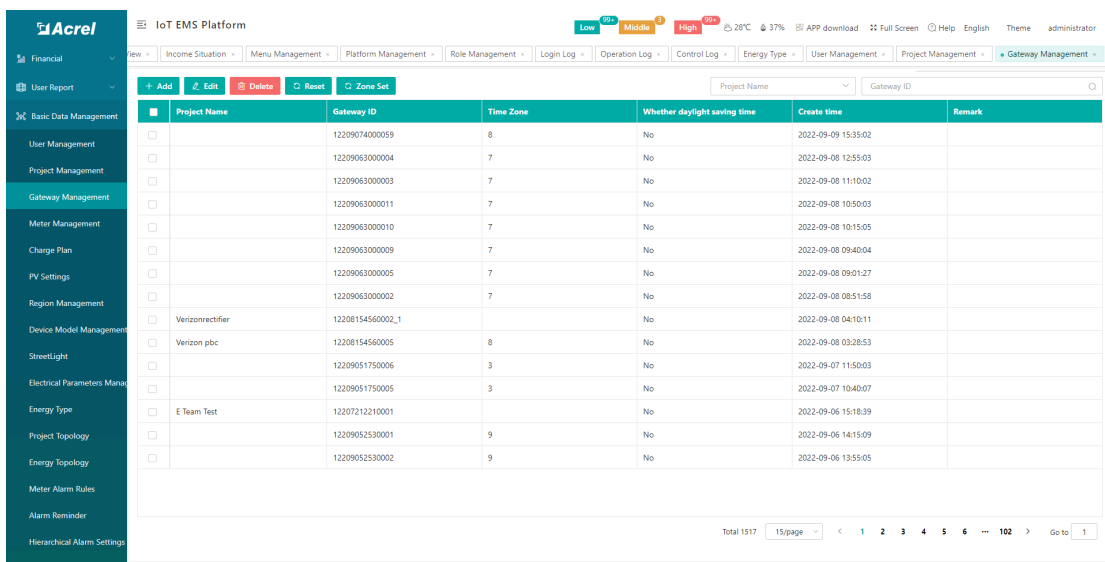


Figure 17-10 Gateway Management

Create a new gateway, click Add, and a pop-up box will pop up to create a new gateway. The project name, gateway identification number, and heartbeat interval are required. As shown in Figure 16-11. The operation method of editing a gateway is the same as that of creating a new one.

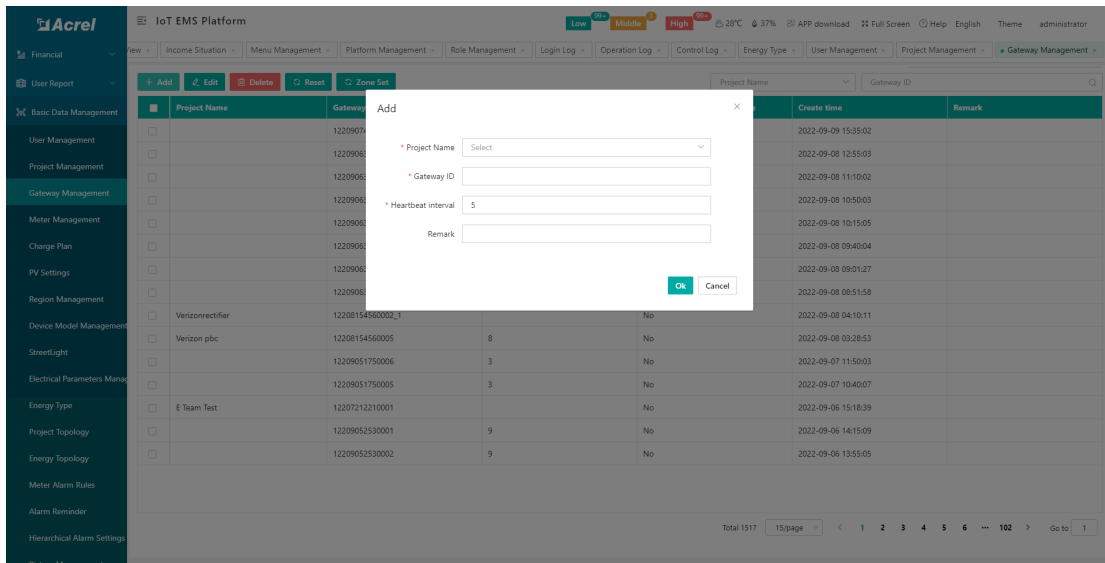


Figure 17-11 Adding a gateway

Check an project, click the "Time Zone Reset" button, and a box for entering a password will pop up. The password is the password when the platform is set. Set the numeric value for the time zone. The reset operation method is the same as setting the time zone. As shown in Figure 16-12.

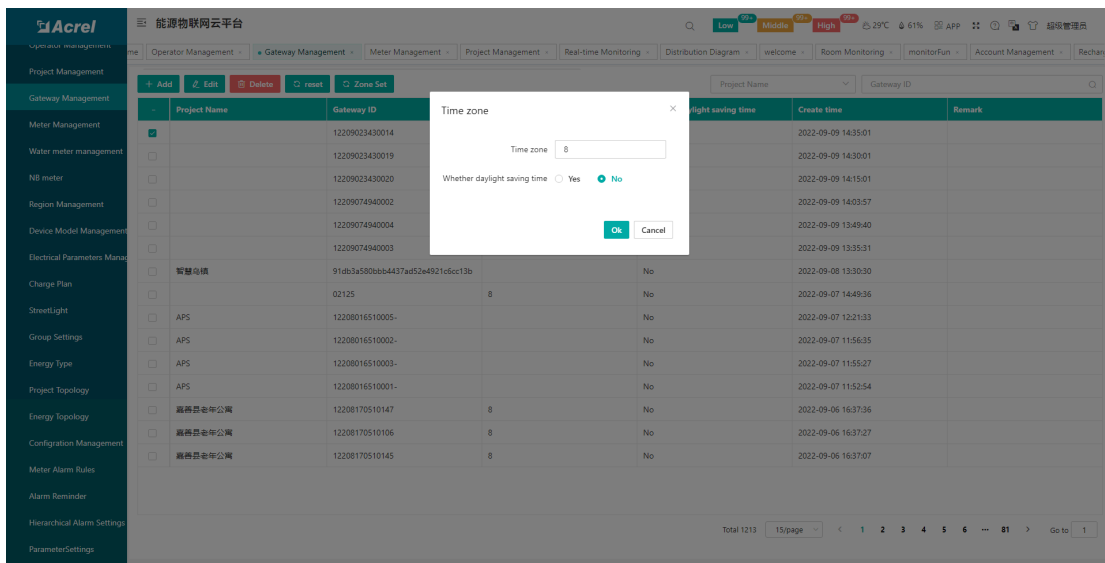


Figure 17-12 Time zone setting

17.4.Meter Management

The meter management page displays all meter information under the associated project, including project name, gateway identification number, meter address, circuit name, meter model, meter unique number, creation time, notes, etc. According to the project name/gateway identification number/meter address/circuit name, the corresponding meter can be queried.

Operations such as adding, editing, deleting, importing, exporting, and downloading import templates can be performed on meter information, as shown in Figure 17-13.

The screenshot shows the 'Meter Management' section of the Acrel IoT EMS Platform. A table lists various meters with the following columns: Project Name, Gateway ID, Meter Address, Circuit name, Meter Type, Meter unique number, Create time, and Remark. The table contains 15 rows of data, including meters of type ADF400LS and AMC96. At the bottom, there is a pagination bar showing 'Total 4084' and '15/page'.

Project Name	Gateway ID	Meter Address	Circuit name	Meter Type	Meter unique number	Create time	Remark
	12209074000059	12209074000060_12		ADF400LS	12209074000059_122090740	2022-09-09 16:00:42	
	12209074000059	12209074000060_11		ADF400LS	12209074000059_122090740	2022-09-09 16:00:41	
	12209074000059	12209074000060_10		ADF400LS	12209074000059_122090740	2022-09-09 16:00:40	
	12209074000059	12209074000060_9		ADF400LS	12209074000059_122090740	2022-09-09 16:00:39	
	12209074000059	12209074000060_8		ADF400LS	12209074000059_122090740	2022-09-09 16:00:38	
	12209074000059	12209074000060_7		ADF400LS	12209074000059_122090740	2022-09-09 16:00:37	
	12209074000059	12209074000060_6		ADF400LS	12209074000059_122090740	2022-09-09 16:00:35	
	12209074000059	12209074000060_5		ADF400LS	12209074000059_122090740	2022-09-09 16:00:34	
	12209074000059	12209074000060_4		ADF400LS	12209074000059_122090740	2022-09-09 16:00:31	
	12209074000059	12209074000060_3		ADF400LS	12209074000059_122090740	2022-09-09 16:00:30	
	12209074000059	12209074000060_2		ADF400LS	12209074000059_122090740	2022-09-09 16:00:28	
	12209074000059	12209074000060_1		ADF400LS	12209074000059_122090740	2022-09-09 16:00:21	
	12209074000059	12209074000062_1		AMC96	12209074000059_122090740	2022-09-09 16:00:02	
	12209063000004	12209063000001_12		ADF400L	12209063000004_122090630	2022-09-09 13:05:27	
	12209063000004	12209063000001_11		ADF400L	12209063000004_122090630	2022-09-09 13:05:26	

Figure 17-13 Instrument management

Create a new meter, click Add, and a new meter box will pop up. Item name, gateway identification number, meter address, meter model, device classification, circuit name, voltage transformation ratio, current transformation ratio, and offline alarm are required. As shown in Figure 17-14. The operation method of editing an instrument is the same as that of creating a new one.

The screenshot shows the 'Add' dialog box for creating a new meter. The dialog contains the following fields and options:

- * Project Name: Select
- * Gateway ID: Select
- * Meter Address: Text input
- * Meter Type: Select
- * Equipment classification: Select
- * Circuit name: Text input
- * PT Ratio: 1
- * CT Ratio: 1
- * Offline alarm: ☐ Yes ☒ No
- Installation picture: Image upload area with a plus icon
- Remark: Text input

At the bottom of the dialog are 'Ok' and 'Cancel' buttons.

Figure 17-14 Adding a meter

Click to download the import template, and enter the parameters in the template, including project name, gateway identification number, instrument address, instrument model, circuit name, current change, voltage ratio, offline alarm, and remarks. Click Import and select the file., the platform will prompt that the import is successful.。

17.5.Charge Plan

The charging plan management page displays all charging plan information, and users can add, delete, and enable charging plan information, as shown in Figure 17-15.

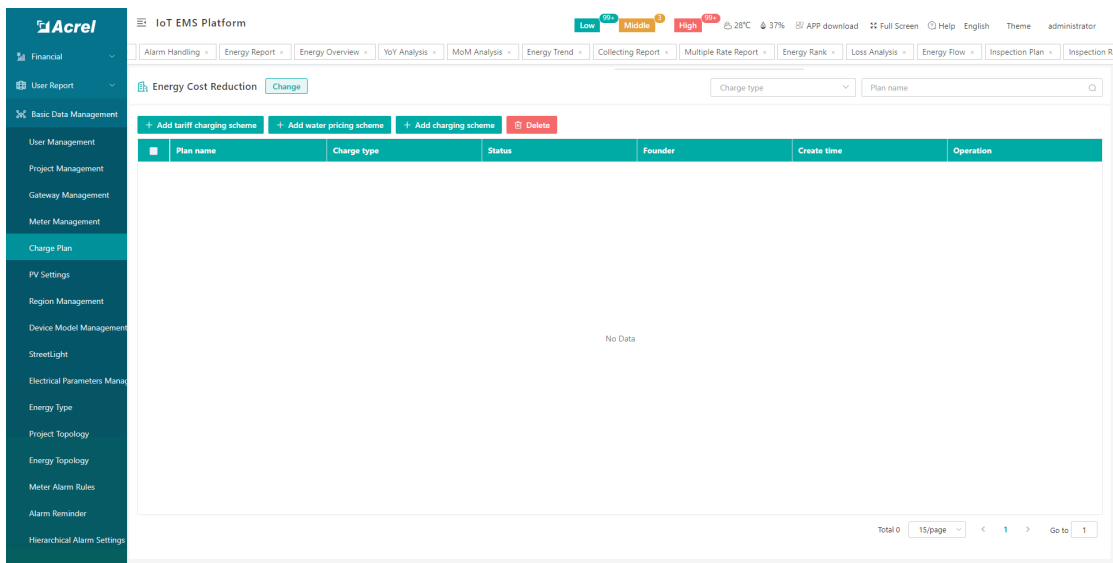


Figure 17-15 Charge Management

Click Add Electricity Price Plan, enter the name of the plan, allowable credit amount, whether to pay rate, whether to step electricity price, and unit price. As shown in Figure 17-16. The operation method of editing a plan is the same as that of creating a new one.

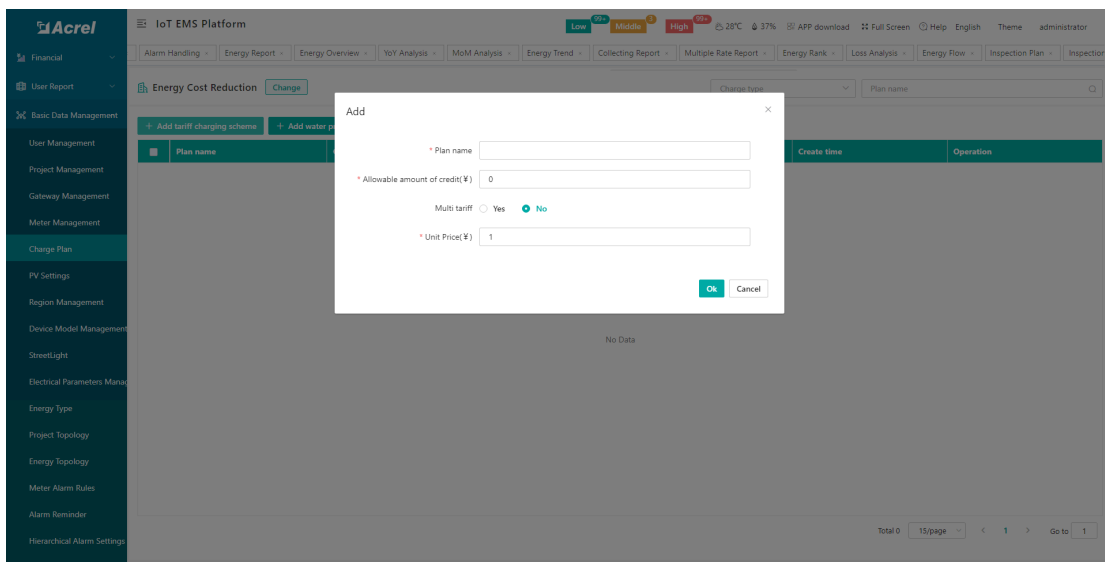


Figure 17-16 Add electricity price plan

Click Add Water Price Plan, enter the name of the plan, allowable credit amount, step-level electricity price or not, and unit price. As shown in Figure 17-17. The operation method of editing a plan is the same as that of creating a new one.

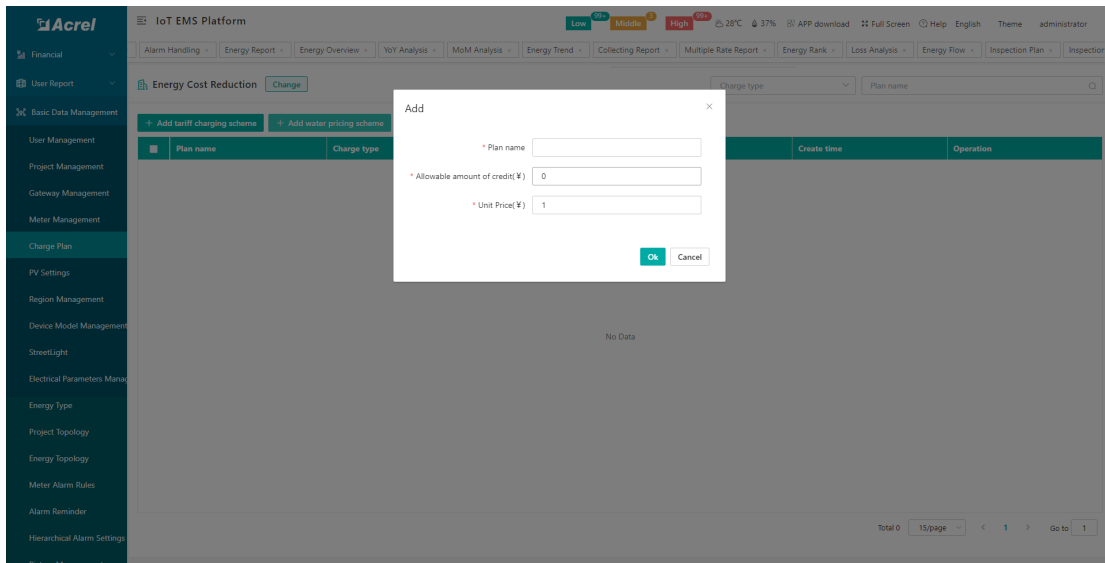


Figure 17-17 Add water price plan

Click Add Charging Plan, and enter the plan name, deduction method, charging type, charging interval, charging calculation method, fixed amount, and remarks. As shown in Figure 17-18. The operation method of editing a scheme is the same as that of creating a new one.

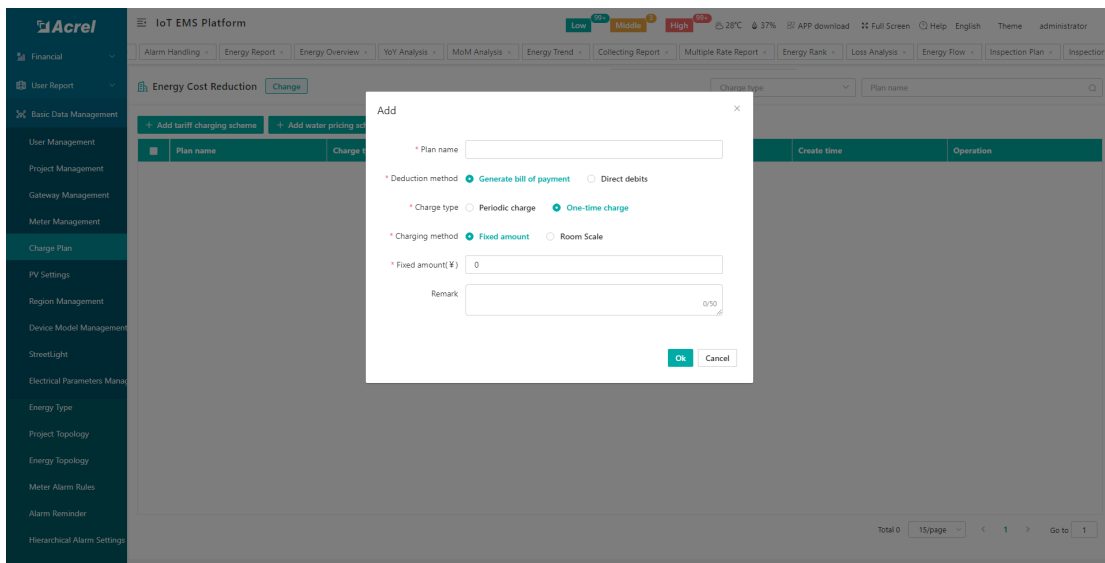


Figure 17-18 Adding a charging plan

17.6.Region Management

The Region management page displays all project organization information, and users can add and delete project organization information, as shown in Figure 17-19.

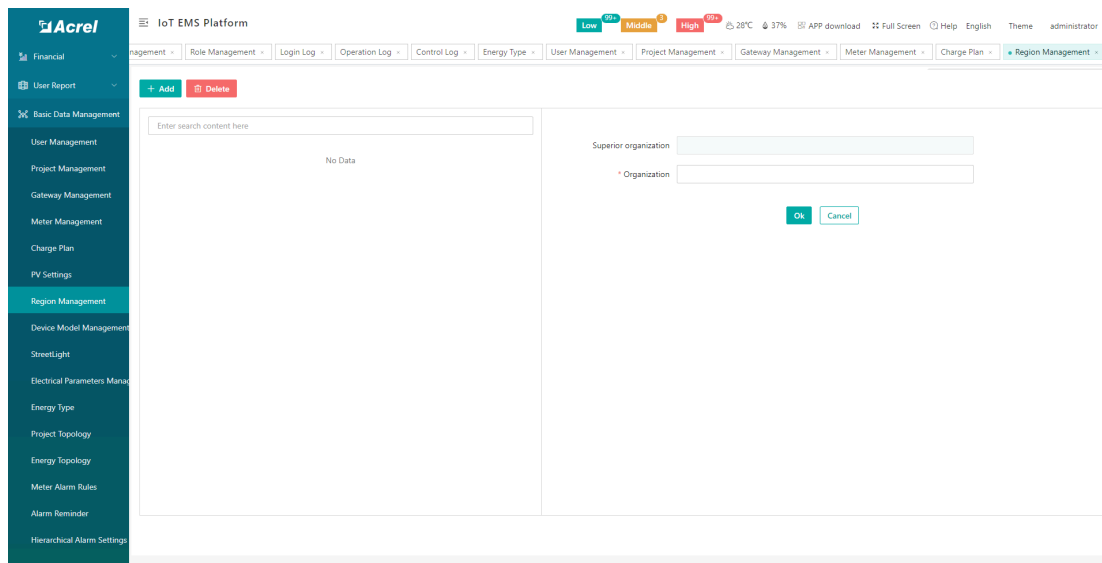


Figure 17-19 Region Management

17.7.Device Model Management

The device model management page displays all device model information under the associated project. The information includes actual model, display model, energy breakdown, creation time, etc. You can find the corresponding device based on the actual model and display model. As shown in Figure 17-20.

Actual model	Display model	SubEnergy	Create time
ARTU-K16	ARTU-K16	Electric	2022-09-05 12:30:05
AGF-AE-D	AGF-AE-D	Electric	2022-08-29 15:25:02
DTS01352-4	DTS01352-4	Electric	2022-08-24 11:17:03
DTS01352-4S	DTS01352-4S	Electric	2022-08-24 10:46:27
TEST	TEST	Electric	2022-08-24 09:32:02
AMB310	AMB310	Electric	2022-08-19 15:45:38
AMC72L	AMC72L	Electric	2022-08-10 13:55:01
AD400_HR	AD400_HR	Electric	2022-07-29 12:40:01
ADL400_HR	ADL400_HR	Electric	2022-07-29 11:30:02
TZTHT	TZTHT	Electric	2022-07-22 12:52:09
WATERSH	WATERSH	Electric	2022-07-22 11:22:05
ADW210_D	ADW210_D	Electric	2022-07-21 09:58:02
1	1	Electric	2022-07-19 11:29:53
AMC72LE4	AMC72LE4	Electric	2022-07-14 13:03:19
AMC96LE4	AMC96LE4	Electric	2022-07-14 11:23:28

Figure 17-20 Device model management

Create a new device model, click Add, and the Add Device Model box will pop up. The actual model and display model are required. As shown in Figure 17-21. The operation method of editing the device model is the same as that of editing.

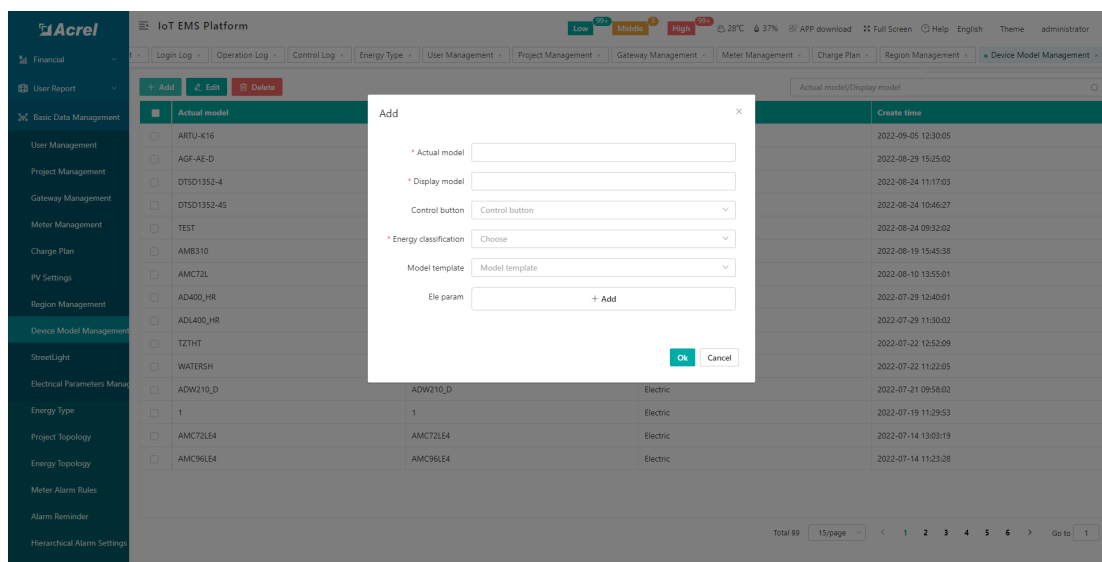


Figure 17-21 Add device model management

17.8. Street Light Management

The street light management page displays all street light information under the associated project. The information includes project name, street light code, meter address, detailed address, longitude, latitude, creation time, etc. You can find the corresponding street light according to the street light number. As shown in Figure 17-22.

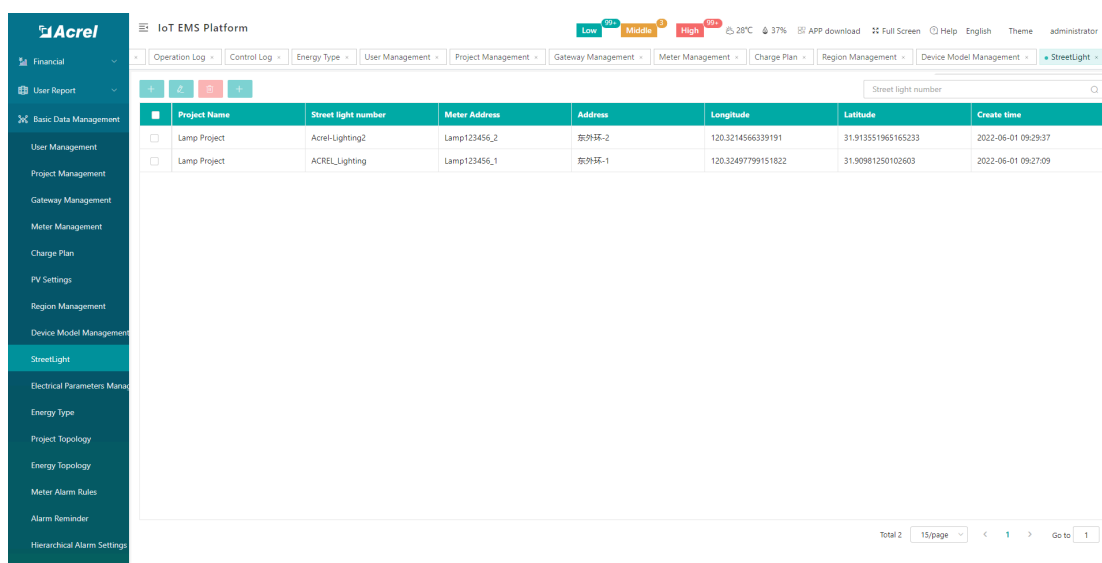


Figure 17-22 Street light management

Create a new street light, click Add, and the add street light box will pop up. Item name, instrument number, street light number, lighting type, detailed address, longitude, and latitude are required. As shown in Figure 17-23. The operation method of editing street lights is the same as that of adding.

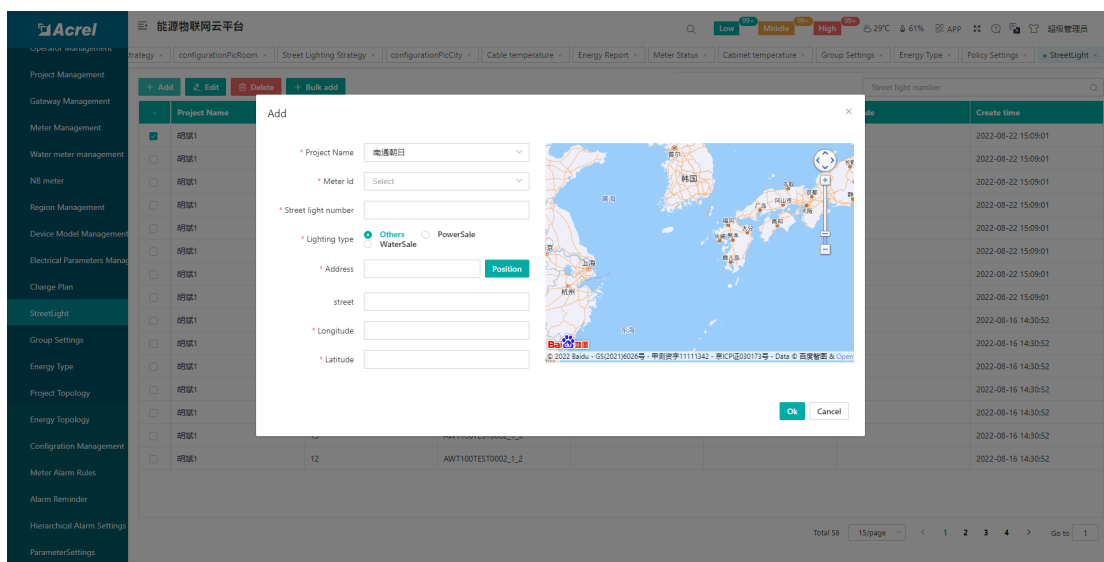


Figure 17-23 Add

17.9.Electrical Parameter Management

The electrical parameter management page displays all the electrical parameter information under the associated project. The information includes module type, parameter code, parameter name, parameter type, unit, whether to multiply PT, whether to multiply CT, creation time, etc., which can be selected according to parameter type and parameter code , parameter name to find the corresponding electrical parameter. As shown in Figure 17-24.

Model Type	Param Code	Param Name	Param Code	Unit	PT	CT	Create time
☐ YC	Ua	A相电压	相电压	V	Yes	No	2021-01-01 08:00:00
☐ YC	Ub	B相电压	相电压	V	Yes	No	2021-01-01 08:00:00
☐ YC	Uc	C相电压	相电压	V	Yes	No	2021-01-01 08:00:00
☐ YC	UPA	相电压平均值	相电压	V	Yes	No	2021-01-01 08:00:00
☐ YC	Uab	AB线电压	线电压	V	Yes	No	2021-01-01 08:00:00
☐ YC	Ubc	BC线电压	线电压	V	Yes	No	2021-01-01 08:00:00
☐ YC	Uca	CA线电压	线电压	V	Yes	No	2021-01-01 08:00:00
☐ YC	ULA	线电压平均值	线电压	V	Yes	No	2021-01-01 08:00:00
☐ YC	U	电压	电压	V	Yes	No	2021-01-01 08:00:00
☐ YC	UMax	最大电压	电压	V	Yes	No	2021-01-01 08:00:00
☐ YC	UMin	最小电压	电压	V	Yes	No	2021-01-01 08:00:00
☐ YC	U0	零序电压	电压	V	Yes	No	2021-01-01 08:00:00
☐ YC	U1	第1路输入电压	电压	V	Yes	No	2021-01-01 08:00:00
☐ YC	U2	第2路输入电压	电压	V	Yes	No	2021-01-01 08:00:00
☐ YC	U3	第3路输入电压	电压	V	Yes	No	2021-01-01 08:00:00

Figure 17-24 Electrical parameter management

Create a new electrical parameter, click Add, and the Add Electrical Parameter box will pop up. The parameter code, parameter name, parameter type, and module type are required. As shown in Figure 17-25. The operation method of editing electrical parameters is the same as that of adding.

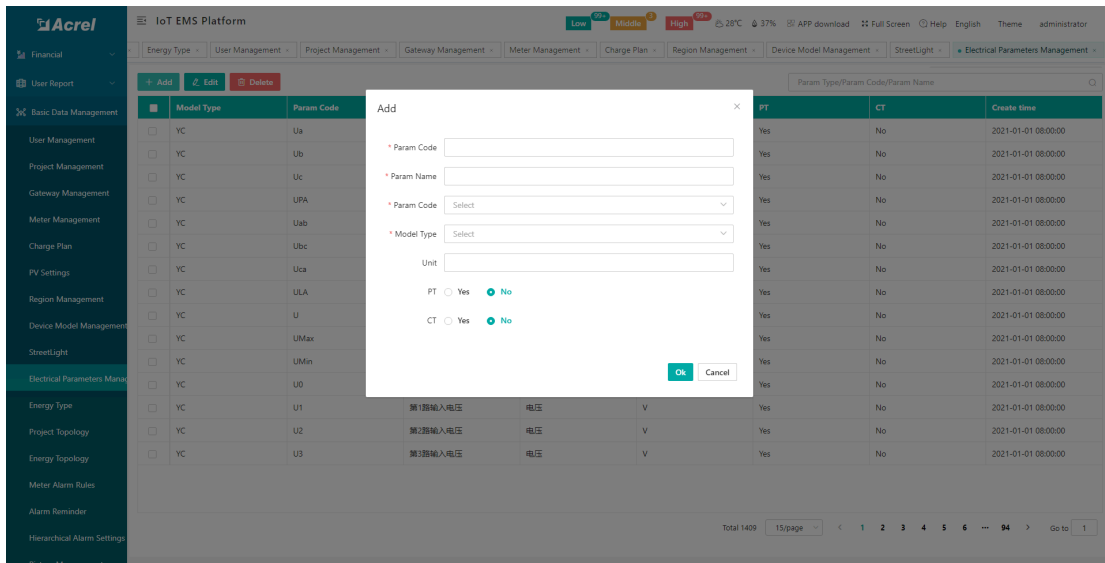


Figure 17-25 Add

17.10. Project Topology

The project topology display is the general node topology of the building under a certain project, and you can clearly see which general nodes and multi-level general nodes are under the project. As shown in Figure 17-26.

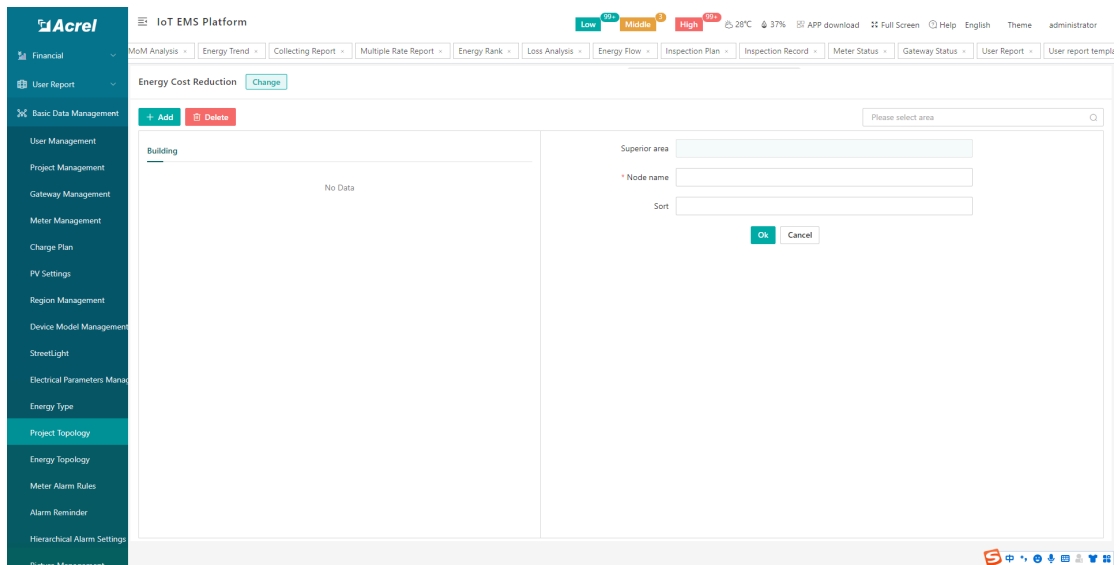


Figure 17-26 Project topology

Add a building node under the project. First switch the corresponding project, select the node that needs to be under the project, click the "Add" button, and add a node on the right side of the interface, fill in the node name and sort. As shown in Figure 17-27.

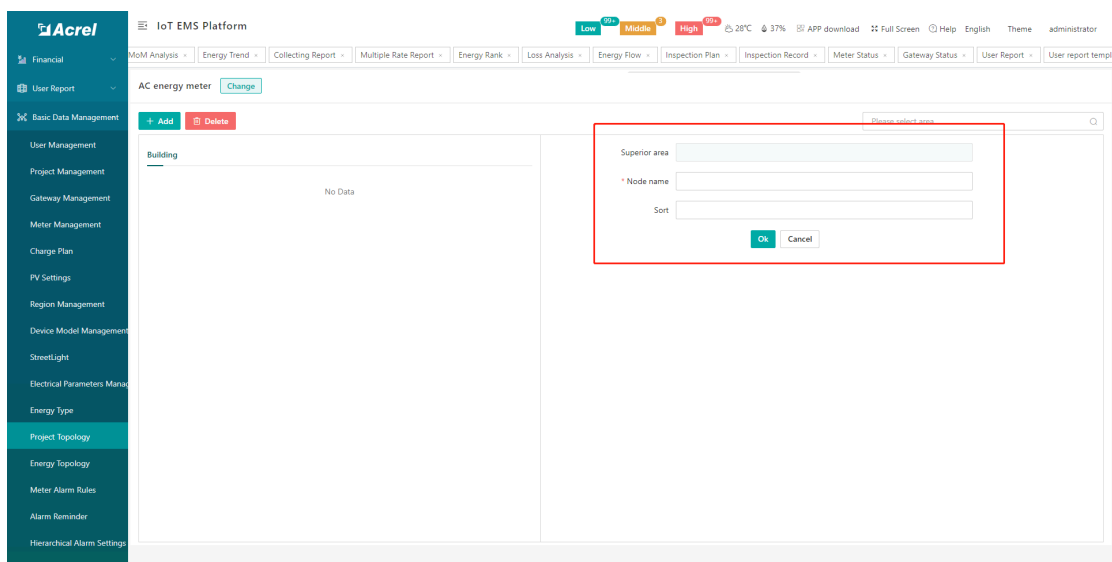


Figure 17-27 Adding building nodes

To delete a building node, first select the deleted building node, click the "Delete" button, a pop-up "Prompt" will appear, and click "Confirm". As shown in Figure 17-28.

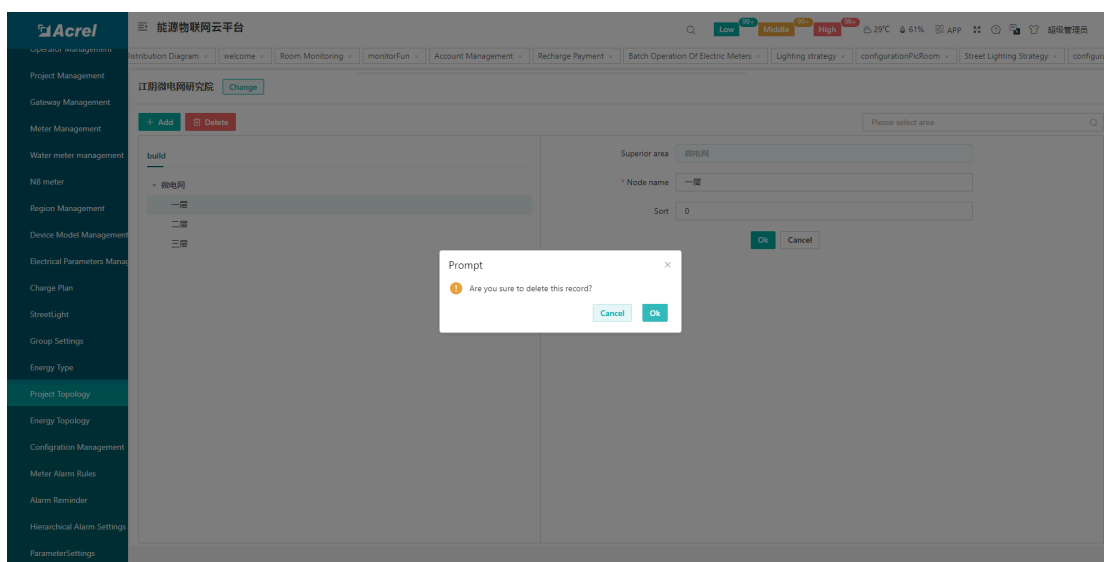


Figure 17-28 Delete the building node

17.11. Energy Topology

The energy topology display is the topology of the general building node under a certain project and each sub-node under the general building node. You can clearly see which general nodes and meters tied to the sub-nodes are under the project. As shown in Figure 16-29.

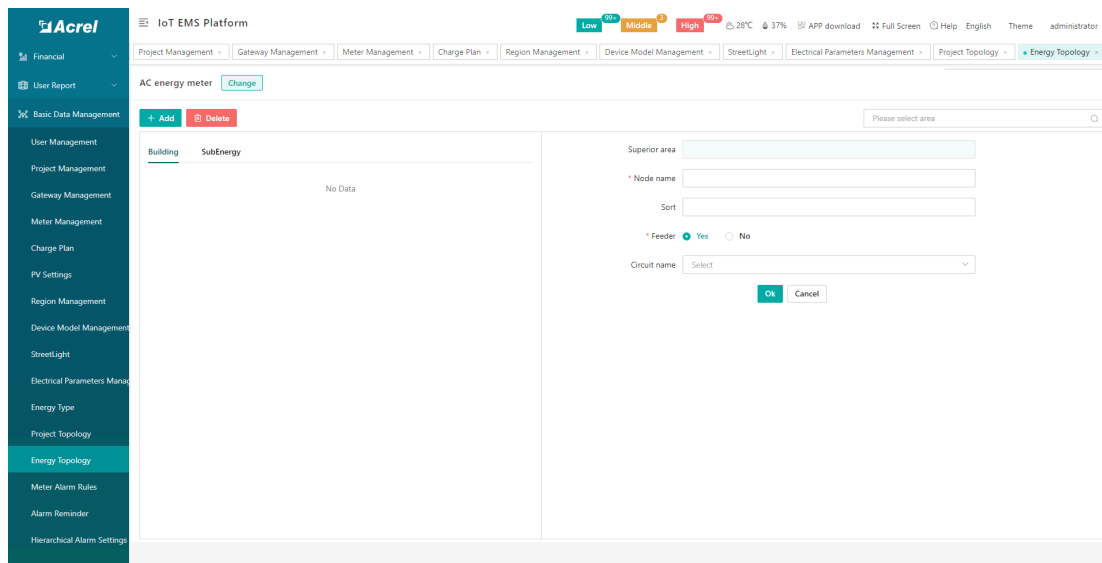


Figure 17-29 Energy topology

Add a building subnode under the project. First switch the corresponding project, select the general node that needs to be under the project, click the "Add" button, add a node on the right side of the interface, fill in the "node name", "sort", "incoming line", and select "circuit name". As shown in Figure 17-30.

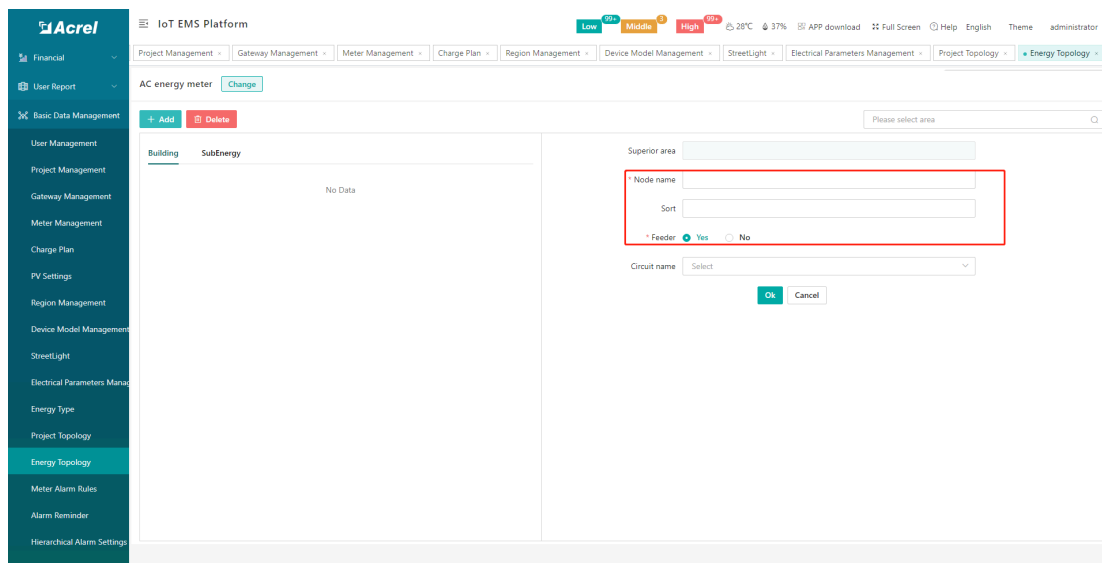


Figure 17-30 Adding a building child node

To delete a building energy consumption node, first select the deleted energy consumption sub-node, click the "Delete" button, a pop-up "Prompt" will appear, and click "Confirm". As shown in Figure 17-31.

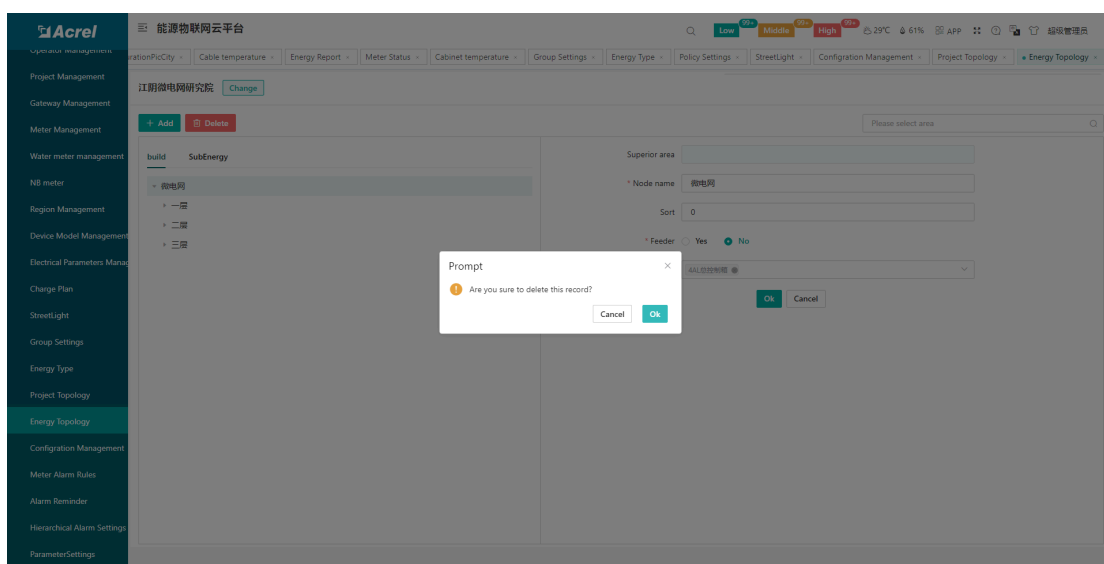


Figure 17-31 Deleting energy consumption child nodes

17.12.Meter Alarm Rules

The meter alarm rule page displays all alarm rule information, and users can add, edit, and delete alarm rule information, as shown in Figure 17-32.

	Project Name	Regional Location	Energy Type	Param Name	Meter Id	Alarm Types	Alarm level	Event type	Condition 1	Threshold 1	Condition 2	Threshold 2	Trigger event	Create time
☐	Office Green L...	--	--	DI0		Telecommunicat	High	Offline					Off	2022-08-26 13:46...
☐	Multicentre Pt...	--	--	Ia	1010000100...	Out-of-limit eve	Middle	Overcurrent	<=	180	>=	200		2022-08-21 07:02...
☐	MS Project	--	--	DI0		Telecommunicat	Middle	Offline					On	2022-08-11 13:50...
☐	Base station	--	--	U	1220429256...	Out-of-limit eve	High	Undervoltage	<=	35				2022-07-29 16:08...
☐	Base station	--	--	Ulb	1220429256...	Out-of-limit eve	High	Undervoltage	<=	235				2022-07-29 16:06...
☐	Base station	--	--	Ua	1220429256...	Out-of-limit eve	Low	Undervoltage	<=	235				2022-07-29 15:58...
☐	IoT Project	--	--	DI0	0212109070...	Telecommunicat	High	Overcurrent					On	2022-07-27 19:23...
☐	IoT Project	--	--	Ua	1211104532...	Out-of-limit eve	High	Overvoltage	>	210				2022-07-19 10:12...
☐	Remote Site ...	--	--	DO2	1220705355...	Telecommunicat	High	Fault					On	2022-07-14 18:13...
☐	PPAP Substat...	--	--	Temp		Out-of-limit eve	Middle	Overtemper...	>	30	<=	40		2022-07-13 18:20...
☐	Remote Site ...	--	--	DO1	1220705355...	Telecommunicat	High	Undervoltage					On	2022-07-13 18:02...
☐	Remote Site ...	--	--	U	1220705355...	Out-of-limit eve	High	Overvoltage	>	60				2022-07-13 15:15...
☐		--	--	DI3		Telecommunicat	Middle	Overvoltage					On	2022-06-29 04:22...
☐		--	--	DI1		Telecommunicat	Middle	Undervoltage					On	2022-06-29 04:22...
☐		--	--	DI3		Telecommunicat	Middle	Overvoltage					On	2022-06-29 04:22...

Figure 17-32 Meter alarm rules

Click Add, and enter the project name, instrument number, alarm type, alarm level, event type, electrical parameter, and trigger event. As shown in Figure 17-33. The operation method of editing a scheme is the same as that of creating a new one.

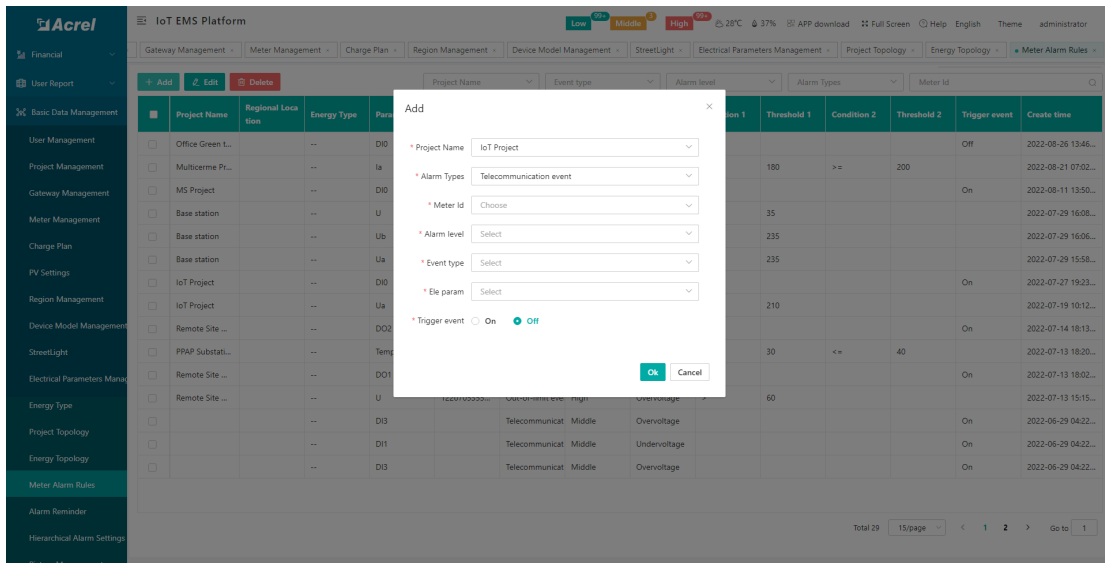


Figure 17-33 Add meter alarm rules

17.13.Alarm Reminder Template

The exception reminder template can manage the SMS, email, and app configuration of the exception reminder, as shown in Figures 17-34 and 17-35.

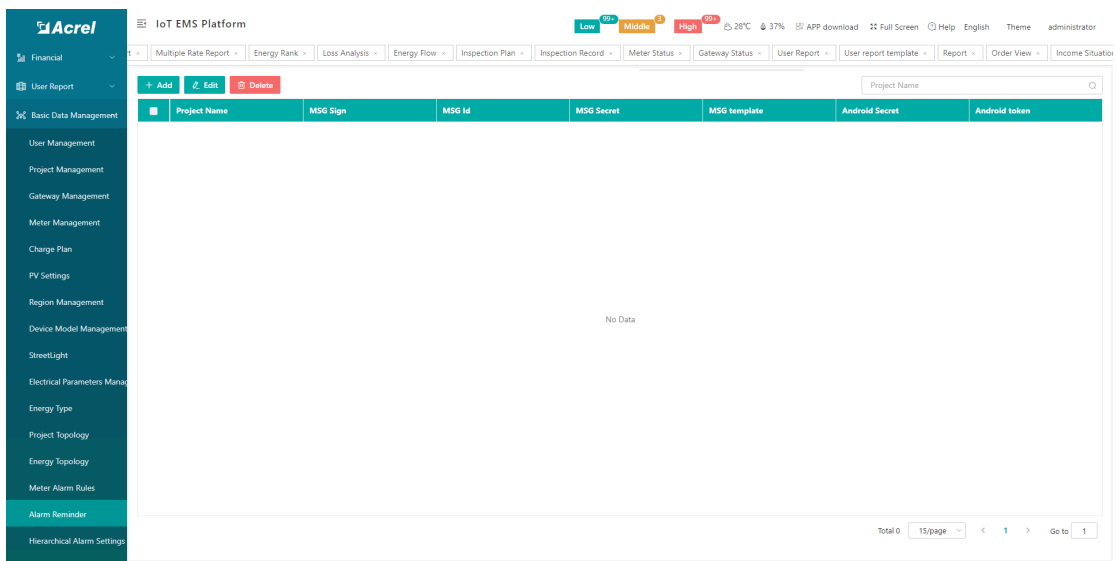


Figure 17-34 Alarm reminder template

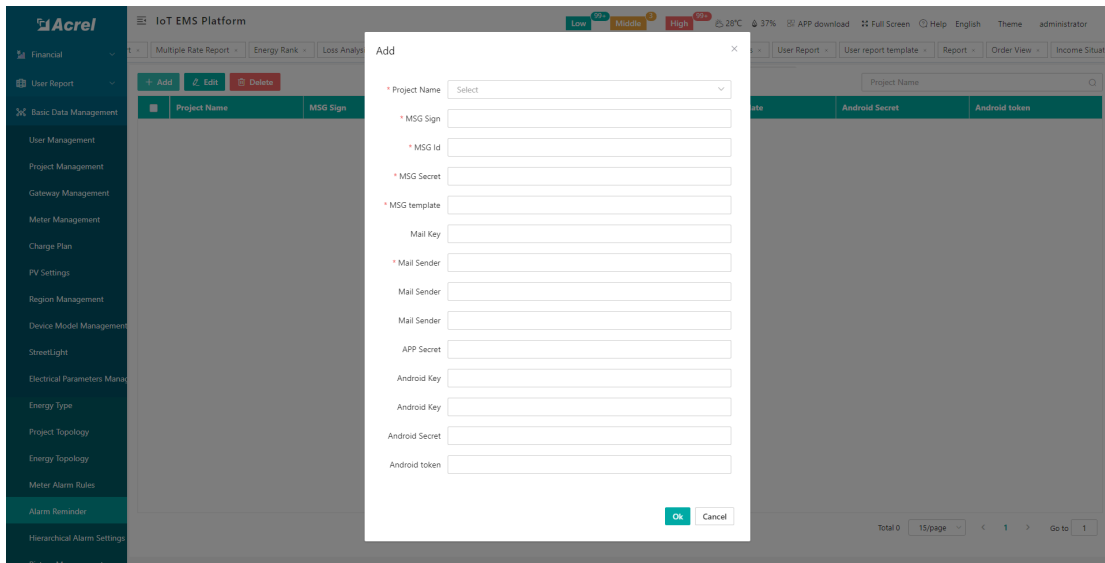


Figure 17-35 Adding an alarm reminder template

17.14. Hierarchical Alarm Settings

Hierarchical alarm settings can perform hierarchical management of abnormal alarm push, as shown in Figure 17-36.

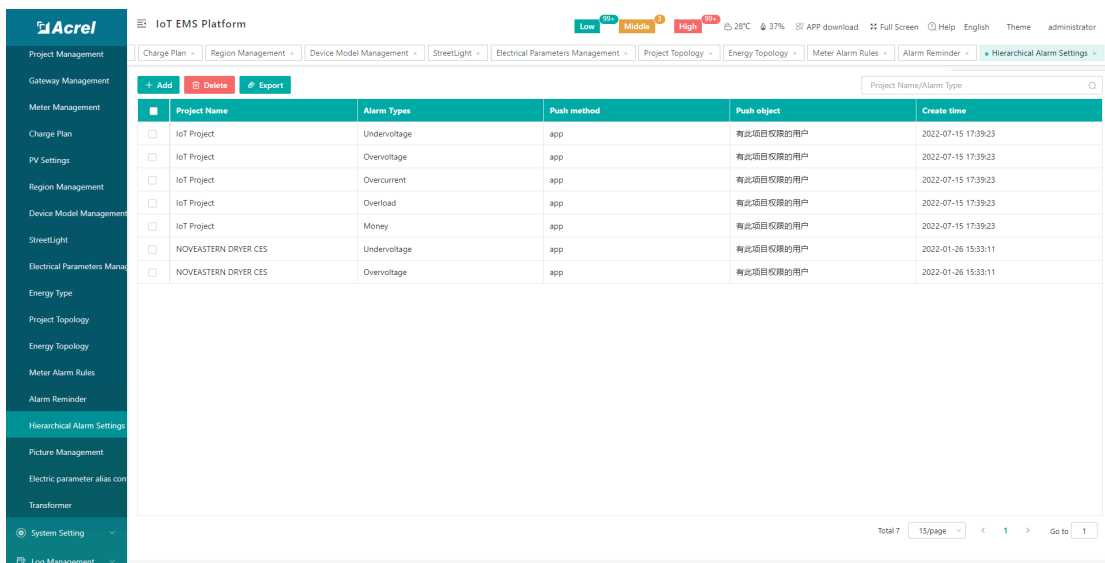


Figure 17-36 Hierarchical alarm settings

17.15. Picture Management

Picture management can perform operations such as adding, editing, deleting, and downloading all relevant picture materials in the project, as shown in Figure 17-37.

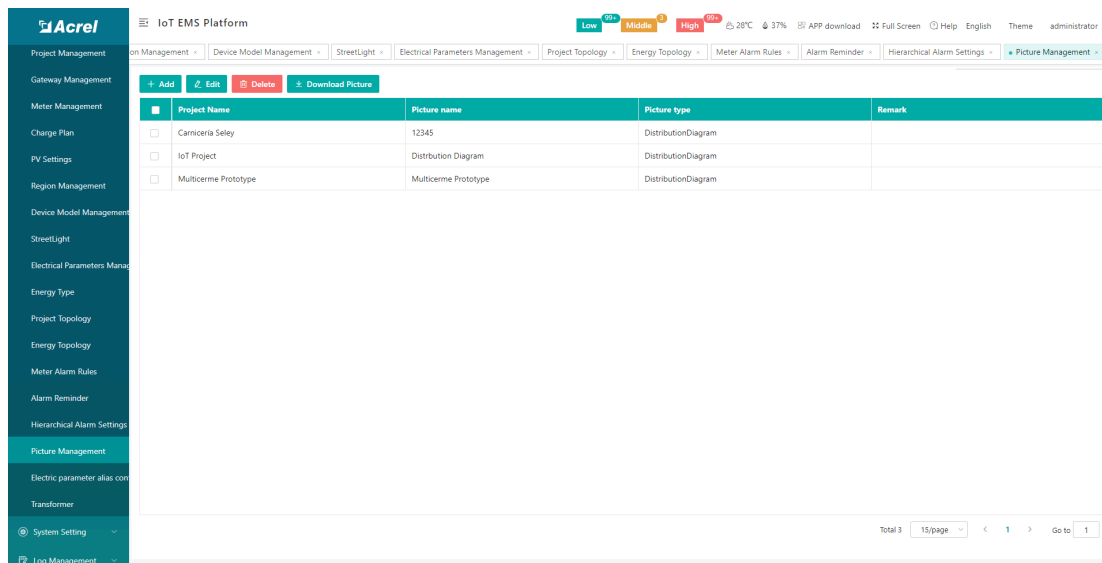


Figure 17-37 Image management

Click Add, enter relevant information, and upload a picture. As shown in Figure 17-38

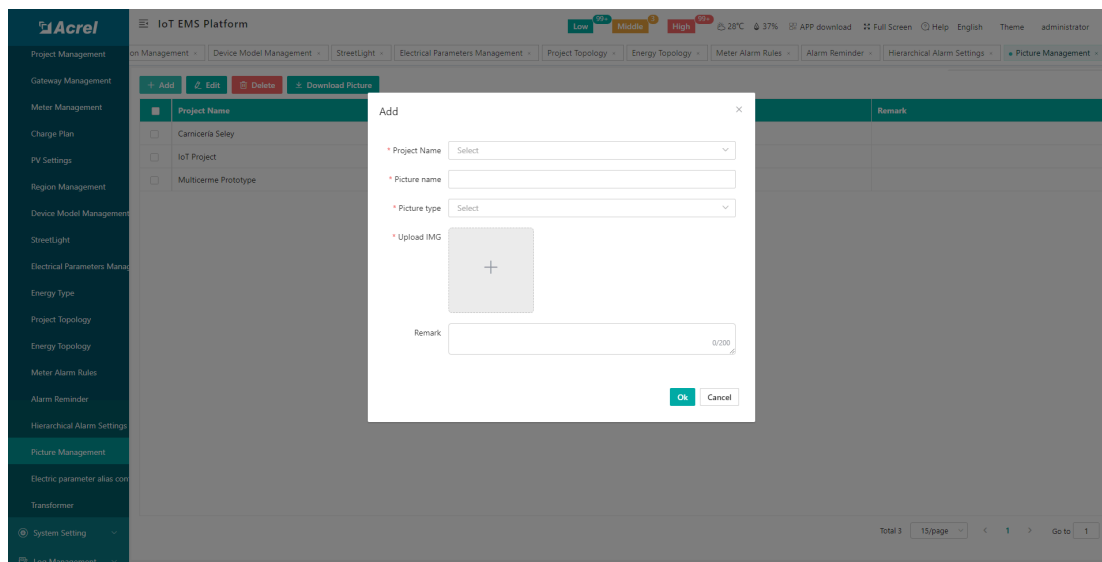


Figure 17-38 Add picture

17.16.Electric Parameter Alias Management

The electrical parameter alias management page displays all the electrical parameter alias information under the associated project. The information includes project name, gateway identification number, meter address, circuit name, meter type, meter unique number, create time, etc., which can be identified according to the project name/gateway Number/meter address/circuit name to find the alias of the electrical parameter. As shown in Figure 17-39.

Project Name	Gateway ID	Meter Address	Circuit name	Meter Type	Meter unique number	Create time
	12208154560005	12208154560002_1		D/5F1352RN	12208154560005_12208154560002_1	2022-09-10 17:20:05
	12208154560005	12208154560004_1		D/5F1352RN	12208154560005_12208154560004_1	2022-09-10 17:20:01
AC energy meter	12208297120001	12208297120001	WAK Nort	ADW300	12208297120001_12208297120001	2022-09-10 01:30:07
	12209074000059	12209074000060_12		ADF400LS	12209074000059_12209074000060_12	2022-09-09 16:30:42
	12209074000059	12209074000060_11		ADF400LS	12209074000059_12209074000060_11	2022-09-09 16:30:41
	12209074000059	12209074000060_10		ADF400LS	12209074000059_12209074000060_10	2022-09-09 16:30:40
	12209074000059	12209074000060_9		ADF400LS	12209074000059_12209074000060_9	2022-09-09 16:30:39
	12209074000059	12209074000060_8		ADF400LS	12209074000059_12209074000060_8	2022-09-09 16:30:38
	12209074000059	12209074000060_7		ADF400LS	12209074000059_12209074000060_7	2022-09-09 16:30:37
	12209074000059	12209074000060_6		ADF400LS	12209074000059_12209074000060_6	2022-09-09 16:30:36
	12209074000059	12209074000060_5		ADF400LS	12209074000059_12209074000060_5	2022-09-09 16:30:34
	12209074000059	12209074000060_4		ADF400LS	12209074000059_12209074000060_4	2022-09-09 16:30:31
	12209074000059	12209074000060_3		ADF400LS	12209074000059_12209074000060_3	2022-09-09 16:30:22
	12209074000059	12209074000060_2		ADF400LS	12209074000059_12209074000060_2	2022-09-09 16:30:06
	12209074000059	12209074000060_1		ADF400LS	12209074000059_12209074000060_1	2022-09-09 16:30:01

Figure 17-39 Electrical parameter alias management

Set the electrical parameter alias, click "Set", a pop-up box "Set electrical parameter alias", edit the electrical parameter alias, "Temperature 1", "Temperature 2", "Temperature 3", "Temperature 4", different items, power The parameters are different. As shown in Figure 17-40.

Set the electrical parameter alias

DI1

DI2

DO1

DO2

Ok Cancel

Figure 17-40 Setting the electrical parameter alias

17.17. Transformer Management

The transformer management page displays all transformer information under the associated project. The information includes transformer name, meter, rated capacity, project name, remarks, creation time, etc. You can find the corresponding transformer according to the project name/transformer name. As shown in Figure 17-41.

Transformer name	Meter	Rated capacity	Project Name	Remark	Create time
☐ TGBT 1	10100001009_2	500	Multicurve Prototype		2022-08-22 20:18:11
☐ Transformer	12203162030001_12203162030001_1	100	IoT Project		2022-05-09 22:34:21
☐ test		500	Vilics Hydraulics		2022-03-02 13:50:37

Figure 17-41 Transformer management

Create a new transformer, click Add, and the Add Transformer box will pop up. The transformer name, project name, instrument, and rated capacity are required items. The operation method of editing transformer is the same as that of adding. As shown in Figure 17-42.

Transformer name:

Project Name:

Meter:

Rated capacity:

Remark:

Ok Cancel

Figure 17-42 Adding a transformer

System Setting

18.1.Menu Management

Menu management allows configurable settings for the menu to flexibly display the required menus. Generally, the default is sufficient, as shown in Figure 18-1.

Note: Menu management does not recommend customers to modify operations by themselves to prevent mistakes.

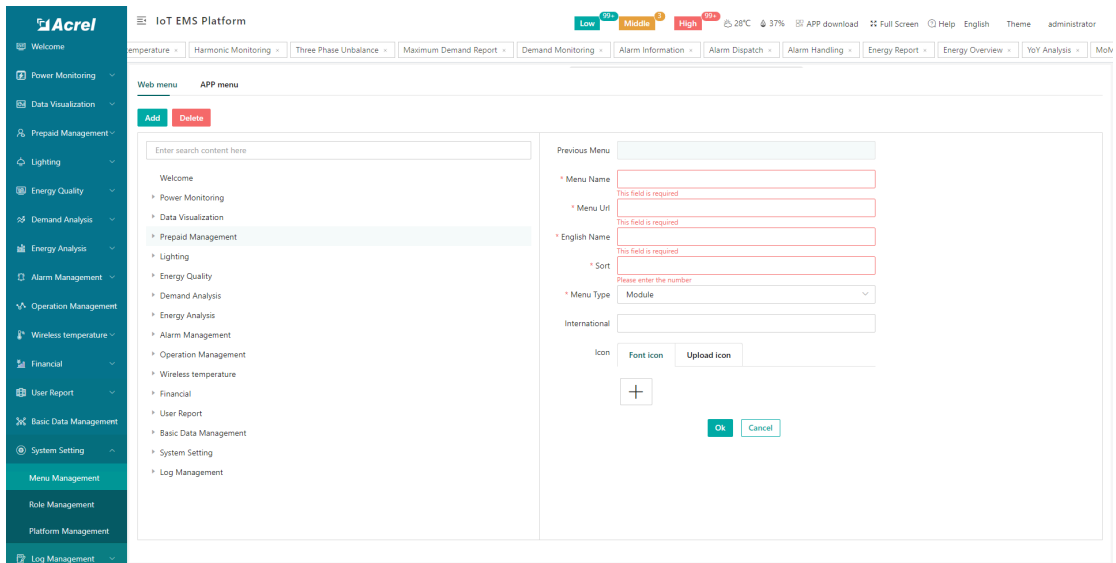


Figure 18-1 Menu Management

18.2.Role Management

Role management can set page menu permissions for users of different levels, and generally use the default, as shown in Figure 18-2.

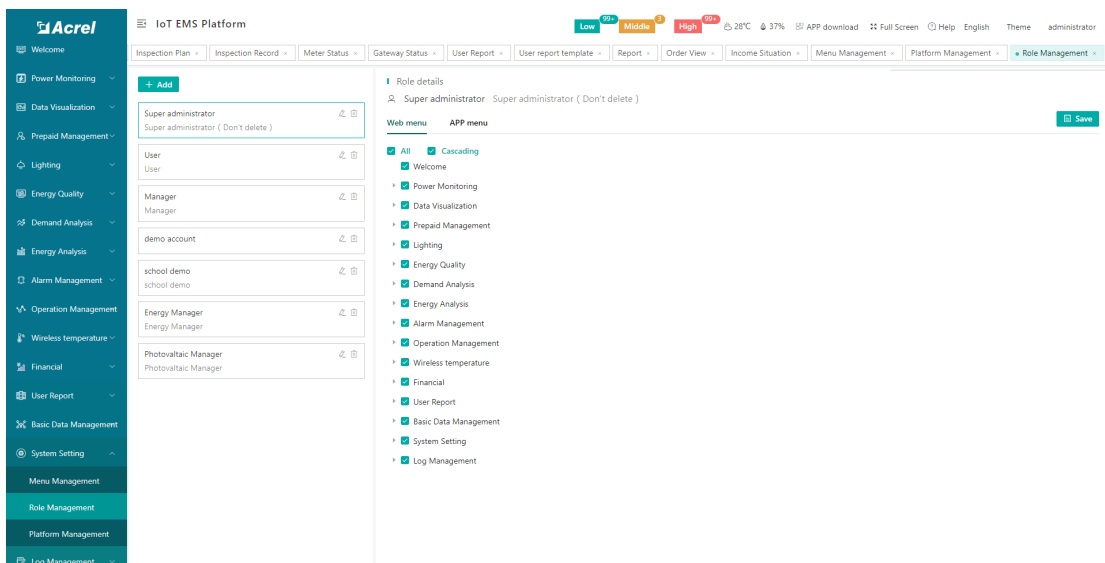


Figure 18-2 Role management

18.3.Platform Management

Platform management can modify the platform name, platform logo, operation password and help information, as shown in Figure 18-3.

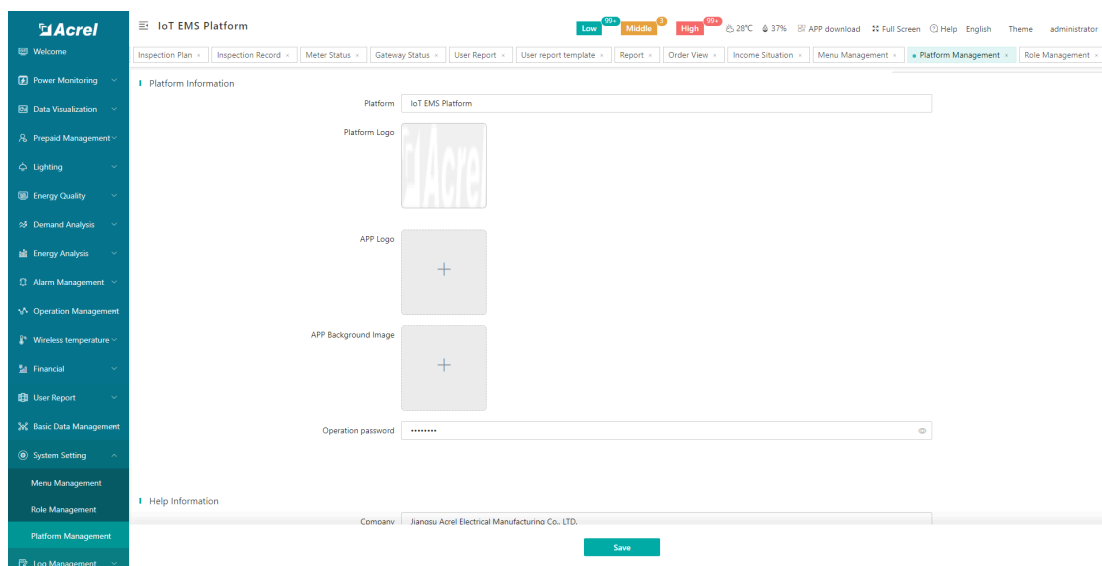


Figure 18-3 Platform Management

Log Management

19.1.Login Log

On the login log page, you can view the login log of platform users, including login account, IP address and occurrence time. You can query the corresponding data through login account, user name, and IP address, as shown in Figure 19-1.

Account	Username	Ip Address	Operating time
Masonc	Masonc	127.0.0.1	2022-09-09 15:47:48
test	test	0:0:0:0:0:1	2022-09-09 15:31:06
acrel	acrel	127.0.0.1	2022-09-09 14:32:18
admin	administrator	127.0.0.1	2022-09-09 14:01:37
acrel	acrel	0:0:0:0:0:1	2022-09-09 13:59:03
admin	administrator	0:0:0:0:0:1	2022-09-09 13:57:13
test	test	0:0:0:0:0:1	2022-09-09 11:52:23
Neuropower	Neuropower	0:0:0:0:0:1	2022-09-09 11:31:19
acrel	acrel	0:0:0:0:0:1	2022-09-09 11:21:55
admin	administrator	127.0.0.1	2022-09-09 11:18:18
Neuropower	Neuropower	0:0:0:0:0:1	2022-09-09 11:01:57
acrel	acrel	127.0.0.1	2022-09-09 10:37:58
admin	administrator	127.0.0.1	2022-09-09 10:13:37
acrel	acrel	127.0.0.1	2022-09-09 10:10:19
admin	administrator	127.0.0.1	2022-09-09 09:52:01

Figure 19-1 Login log

19.2.Operation Log

On the login log page, you can view the platform user operation log, including user name, IP address, operation content and occurrence time, and you can query the corresponding data through login account, user name, IP address, and operation content, as shown in Figure 19-2.

Project Name	Name	Account	Operating content	Operating time
Alert	test	test	Gateway Time Zone	2022-09-09 07:38:16
Hospital Raja Permaisuri Bainun	administrator	admin	Device Save	2022-09-09 03:22:50
上海川沙南汇主变机电费监控	administrator	admin	Project Batch Delete	2022-09-09 01:24:41
IoT Project	administrator	admin	Gateway Batch Delete	2022-09-09 01:18:40
IoT Project	administrator	admin	Gateway Batch Delete	2022-09-09 01:18:33
IoT Project	administrator	admin	Gateway Batch Delete	2022-09-09 01:18:20
IoT Project	administrator	admin	Gateway Batch Delete	2022-09-09 01:17:55
IoT Project	administrator	admin	Gateway Batch Delete	2022-09-09 01:17:47
IoT Project	administrator	admin	Gateway Batch Delete	2022-09-09 01:17:24
上海川沙南汇主变机电费监控	administrator	admin	Project Save	2022-09-09 01:14:49
MS Project	test	test	Gateway Time Zone	2022-09-08 00:26:14
Vflect	verizon	verizon	Gateway Batch Delete	2022-09-08 11:21:46
Vflect	verizon	verizon	Gateway Batch Delete	2022-09-08 11:21:43
Vflect	verizon	verizon	Gateway Save	2022-09-08 10:48:12
Vflect	verizon	verizon	Gateway Save	2022-09-08 10:44:09

Figure 19-2 Operation log

19.3.Control Log

On the control log page, you can view the platform user operation log, including control type, project name, device model, gateway identification number, instrument address, platform, operator and occurrence time, and you can query the correspondence through the gateway identification number, instrument address, model, and operator Data, as shown in Figure 19-3.

Project Name	Gateway ID	Meter Address	Issued People	Issued Order	Issued Time	Delivery status
IoT Project	32028119921017	1_2	administrator	ForRlyOff	2022-08-17 18:59:05	Failed to deliver
IoT Project	32028119921017	1_2	administrator	RlyOn	2022-08-17 18:58:30	Failed to deliver
IoT Project	32028119921017	1_2	administrator	SelChk	2022-08-17 18:57:50	Delivered successfully
IoT Project	32028119921017	1_3	administrator	SelChk	2022-08-17 18:56:27	Delivered successfully
IoT Project	32028119921017	1_3	administrator	Reset	2022-08-17 18:56:13	Delivered successfully
IoT Project	32028119921017	1_3	administrator	SelChk	2022-08-17 18:55:51	Delivered successfully
IoT Project	32028119921017	1_1	administrator	SelChk	2022-08-17 18:55:22	Delivered successfully
IoT Project	32028119921017	1_3	administrator	RlyOff	2022-08-17 18:55:00	Failed to deliver
IoT Project	32028119921017	1_1	administrator	RlyOff	2022-08-17 18:54:12	Failed to deliver
IoT Project	32028119921017	1_1	administrator	RlyOff	2022-08-17 09:53:20	Failed to deliver
IoT Project	32028119921017	1_3	administrator	RlyOn	2022-08-17 09:44:29	Failed to deliver
IoT Project	32028119921017	1_1	administrator	RlyOff	2022-08-17 09:38:46	Failed to deliver
IoT Project	32028119921017	1_1	administrator	RlyOff	2022-08-17 09:36:03	Failed to deliver
IoT Project	32028119921017	1_1	administrator	SelChk	2022-08-17 09:35:28	Delivered successfully
IoT Project	32028119921017	1_1	administrator	Reset	2022-08-17 09:35:21	Delivered successfully

Figure 19-3 Control log