

**Charge-Web**  
**Charging Management System**  
**User Manual**



# Chapter One: Foreword

## About This Manual

This manual provides a detailed introduction to the system through overviews, diagrams, operation steps and examples, aiming to help you gain an in-depth understanding and use the system flexibly and efficiently. Unless otherwise specified, the system is referred to as “Charge-Web” in the following content.

## Intended Reader

This manual is applicable to the following target users:

- Super Administrator (with full permissions)
- Administrator (with power station management permissions)
- General User (with charging inquiry permissions only)

## Manual Usage

This manual gives a brief introduction with the standard configuration interface as an example. The specific available functions shall be subject to the provisions of the technical agreement or contract. The content of this manual will be continuously updated and revised, but there may be slight discrepancies or errors with the actual interface. Users shall refer to the actual interface displayed.

## Manual Version

This product and its supporting product manual are being continuously improved and upgraded. If you find any discrepancies between the received manual and the product, it may be due to product version updates, and the actual product shall prevail.

The images shown in this manual are for reference only; the actual product shall be subject to the physical object.

# Symbols

To ensure the efficient use of this manual, relevant information is provided and highlighted with appropriate symbols.



"CAUTION" indicates a potential risk that may cause abnormal equipment operation or property damage if not avoided.



"NOTE" is additional information in the manual, which emphasizes and supplements the content, and may also provide tips for optimal product use to help you solve a problem or save your time.

## **Change History**

The Change History compiles the explanations for each document update. The latest version of the document integrates all update contents of previous historical versions.

Document Version 01 (2026-01-10)

Initial Release

## CONTENTS

|  |    |
|--|----|
| Chapter One: Foreword .....                                  | 1  |
| About This Manual .....                                      | 1  |
| Symbols .....  | 2  |
| Change History .....   | 3  |
| Chapter Two: System Overview and Access .....                | 6  |
| 1 System Introduction .....                                  | 6  |
| 1.1 Brief Introduction .....                                 | 6  |
| 1.2 Operating Environment .....                              | 6  |
| 2 Login and Interface .....                                  | 6  |
| 2.1 Login Steps .....  | 6  |
| 2.2 Web Main Interface Overview .....                        | 7  |
| Chapter Three: Core Monitoring and Information Viewing ..... | 9  |
| 3 Home Page Overview .....                                   | 9  |
| 4 Equipment Monitoring .....                                 | 10 |
| 4.1 Power Cabinet Monitoring .....                           | 10 |
| 4.2 Charging Terminal Monitoring .....                       | 20 |
| 5 Equipment Information Management .....                     | 26 |
| 5.1 PCU Equipment Information .....                          | 26 |
| 5.2 CCU Equipment Information .....                          | 27 |
| 5.3 PDU Equipment Information .....                          | 27 |
| 5.4 DC/DC Equipment Information .....                        | 27 |
| 5.5 SECC Equipment Information .....                         | 28 |
| 5.6 PCU Meter Equipment Information .....                    | 28 |
| 5.7 CCU Meter Equipment Information .....                    | 29 |
| 5.8 IMD Equipment Information .....                          | 29 |
| 5.9 RFID Equipment Information .....                         | 30 |
| 5.10 POS Equipment Information .....                         | 30 |
| 5.11 HMI Equipment Information .....                         | 31 |
| 6 Event and Order Query .....                                | 31 |
| 6.1 Event Query .....  | 31 |
| 6.2 Order Query .....  | 33 |
| Chapter Four: Operation Management and Control .....         | 36 |

|   |    |
|---|----|
| 7 Charging Management .....                           | 36 |
| 7.1 Charging Control .....                            | 36 |
| 7.2 Local Card Management .....                       | 41 |
| 8 Equipment Maintenance and Upgrade .....             | 44 |
| 8.1 Equipment Upgrade .....                           | 45 |
| 8.2 Log Export .....                                  | 46 |
| 8.3 Factory Inspection .....                          | 47 |
| Chapter Five: System Configuration and Settings ..... | 49 |
| 9 Power Station Creation Process .....                | 49 |
| 10 System Parameter Settings .....                    | 50 |
| 10.1 General Configuration .....                      | 50 |
| 10.2 Platform Access .....                            | 56 |
| 10.3 Time Settings .....                              | 60 |
| 10.4 Network Setting .....                            | 63 |
| Chapter Six: Appendix .....                           | 65 |
| 11 About the System .....                             | 65 |
| 12 Term Explanation .....                             | 65 |
| 13 Feedback and Support .....                         | 66 |

# Chapter Two: System Overview and Access

## 1 System Introduction

### 1.1 Brief Introduction

The Charge-Web Charging Management System is a web-based local monitoring software, specially designed to provide one-stop management functions for the daily operation of power stations, including pile cluster monitoring, operation diagnosis, charging management, order inquiry, and data statistics.

### 1.2 Operating Environment

**Table 1-1 Recommended Operating Environment**

| Item       | Recommendation      |
|------------|---------------------|
| Browser    | Chrome 58 and above |
| Resolution | 1920x1080           |

## 2 Login and Interface

### 2.1 Login Steps

Step 1: Connect the PC to the Charge-Web system with an Ethernet cable.

Step 2: Configure the IP address of the PC to be in the same network segment as that of the Ethernet ports (ETH0, ETH1) of the power cabinet. The IP addresses of the Ethernet ports are as follows. Taking the ETH0 port of the controller as an example, the default address is 172.30.1.1/24; the PC's IP can be configured as 172.30.1.X (X is recommended to be between 100 and 200), with the subnet mask of 255.255.255.0.

**Table 2-1 Controller IP Addresses**

| Port | Default IP Address   |
|------|--|
| ETH0 | 172.30.1.1/24  |
| ETH1 | 172.30.2.X/24 (for LC communication, assigned based on power cabinet code) |



The IP addresses of the above ports are for reference only; the actual addresses shall prevail!

Step 3: Enter the IP address of the corresponding Ethernet port in the PC's address bar to access the web interface of the charging management system.

Step 4: Select the required language in the upper right corner of the charging management system, enter the account and password, and click the Login button to complete the login successfully.



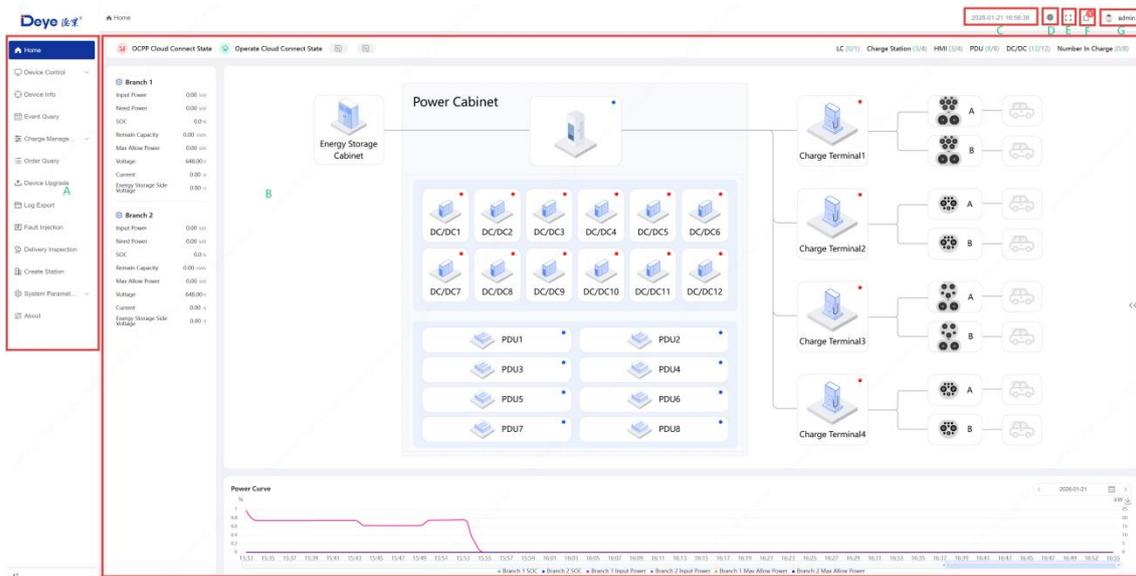
The system has two user types: General User and Operation and Maintenance (O&M) User. General Users can view basic system information, real-time faults, equipment monitoring and other contents. O&M Users have all the permissions of General Users, and are also able to perform system upgrade, power station creation, parameter setting and modification, etc. This manual takes the permissions of O&M Users as an example to briefly introduce the operation methods of the web pages.



Change your password immediately after the first login. The specific steps for password modification are as follows: click the O&M User option, then select Change Password to set a new password. If you forget the login password, you need to provide the S/N number of the current device and contact Deye ESS After-sales Service to obtain a dynamic password.

## 2.2 Web Main Interface Overview

The web main interface is shown in the figure below.



**Figure 2-1 Web Main Interface**



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

**Table 2-2 Function Division of the Web Main Interface**

| NO. | Name                  | Description   |
|-----|-----------------------|---|
| A   | Navigation Menu       | Displays the main functional modules of the web system  |
| B   | Function Display Area | Displays the functional information interface of the currently selected inquiry or parameter setting  |
| C   | System Time           | Displays the current system date and time   |
| D   | Language Switch       | Switches the language type as needed, supporting Chinese, English and French  |
| E   | Screen Display        | Flexibly switches to full-screen display or adjusts the zoom ratio according to actual needs  |
| F   | Activity Event        | Displays the number of activity events running in the system; users can click to view event details. Click a specific event to enter its detailed information page. |
| G   | User                  | Displays the currently logged-in user; click to log out of the system, change the password or perform user management.  |

 **CAUTION**

The user management interface is only accessible to users with the system super administrator permission, supporting the addition, deletion and modification of system users.

# Chapter Three: Core Monitoring and Information Viewing

## 3 Home Page Overview

After successful login, you will enter the Charge-Web home page where the real-time operation information of the charging system can be viewed. The information displayed on the home page is as follows.

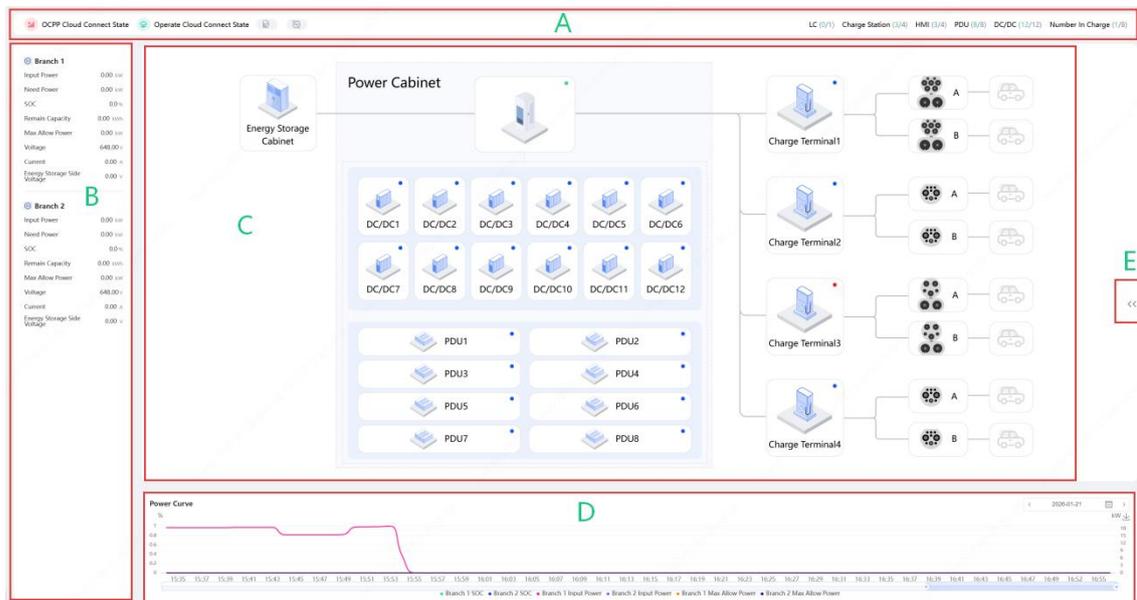


Figure 3-1 Charge-Web Home Page



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

Table 3-1 Function Description of the Web Home Page

| NO. | Name                                   | Description  |
|-----|--|--|
| A   | Status Bar                             | Displays the OCPP communication status of the charging system, operation and maintenance cloud platform communication status, 4G module status/SIM card signal quality, as well as the total number of devices (right) and the number of running devices (left) at the current charging station. |
| B   | Energy Storage Side Branch Information | Displays relevant information of the energy storage side branch, including input power, demand power, SOC (energy storage battery), remaining capacity (energy storage battery), maximum allowable power (energy storage battery), voltage, current and energy storage side voltage.             |

| NO. | Name                             | Description  |
|-----|----------------------------------|--|
| C   | System Dynamic Structure Diagram | Displays the entire process from energy storage discharge to final vehicle charging, dynamically presents energy flow direction, and monitors the operation status of each link in real time. Click any device to enter its detailed information page. (The dot in the upper right corner of the device icon: red = fault; orange = alarm; blue = normal operation.) |
| D   | Branch Power Curve               | Displays the real-time data curve of SOC and input power under the branch operation status; the upper right corner provides functions for querying and downloading data by time.   |
| E   | Power Diagram                    | Click the arrow to display the system power diagram, which intuitively presents the system operation status and quickly locates power quality abnormalities.   |

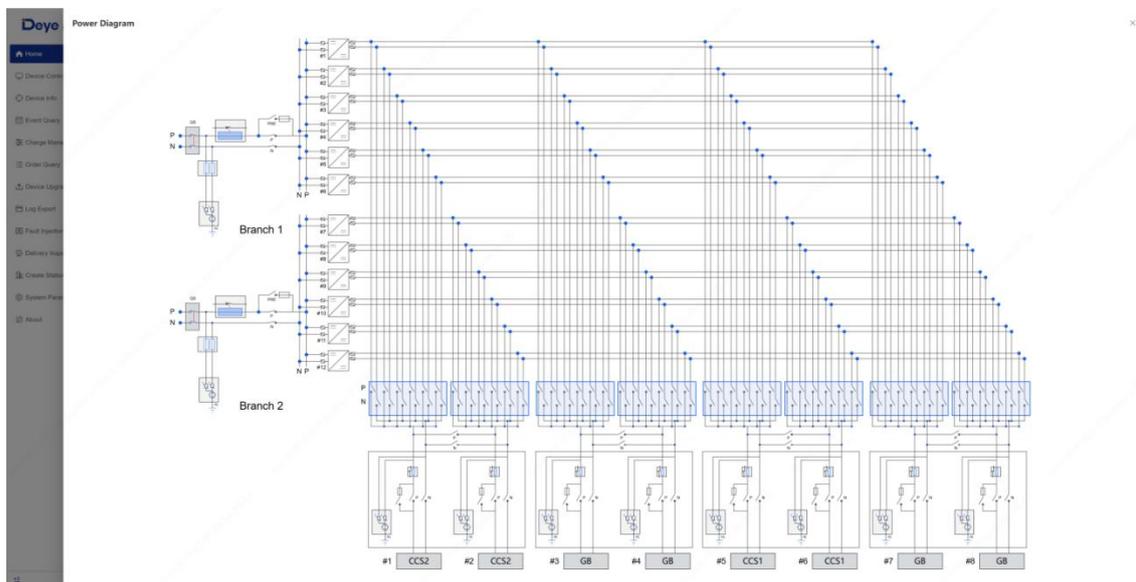


Figure 3-2 System Power Diagram



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

## 4 Equipment Monitoring

Equipment Monitoring is mainly responsible for monitoring the working status of power cabinets and charging terminals in the charging system, and displaying detailed information on the page in real time.

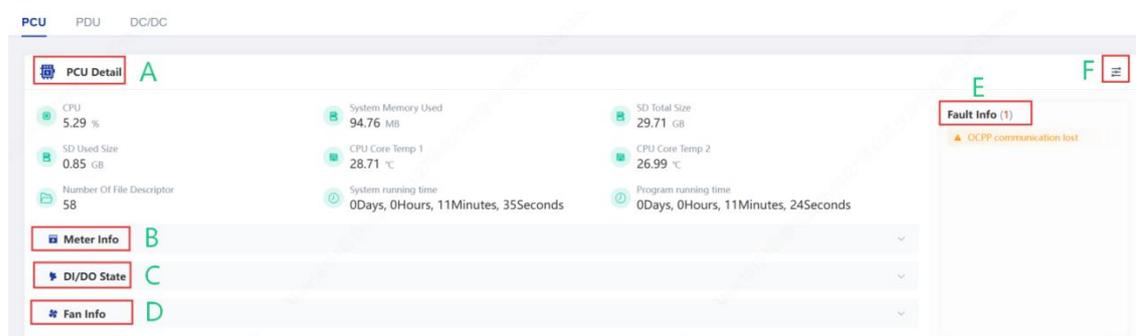
### 4.1 Power Cabinet Monitoring

The core functional modules of a power cabinet include PCU, PDU and DC/DC.

- PCU: Power Control Unit
- PDU: Power Distribution Unit
- DC/DC: DC Power Conversion Module

#### 4.1.1 PCU

Click the “Equipment Monitoring” menu, select the PCU option under “Power Cabinet”, and enter the page to view the working data of the PCU unit. The main information displayed on the page is as follows.



**Figure 4-1 PCU Interface**



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

**Table 4-1 Description of PCU Display Information**

| NO. | Name           | Description  |
|-----|----------------|--|
| A   | PCU Detail     | Displays key operating data of the PCU main control.   |
| B   | Meter Info     | Displays data of the corresponding branch electric meter, including manufacturer, communication status, voltage, current, electric quantity and power.   |
| C   | DI/DO State    | Displays DI/DO status information.   |
| D   | Fan Info       | Displays fan status information.   |
| E   | Fault Info     | Displays real-time faults of the PCU and its external devices.   |
| F   | Manual Control | (Debug Mode) Click the icon  and enter the login password to perform PCU restart, DI enable, indicator light control, branch relay control and fan PWM control. |



Accessing the PCU Manual Control page requires an account with administrator operation permission and operation under the system's Debug Mode; otherwise, operation commands will be blocked by the security policy.

The PCU Manual Control is an advanced O&M interface, exclusively for accounts with system administrator or higher permissions. It is used to implement system operations (system restart, application restart, DI enable) and peripheral device control (indicator light control, branch relay control, fan PWM control).

### PCU Setting

#### Restart A

#### Enable B

Lightning Protection  Access Control  Water Immersion

#### Indicator Light C

standby Indicator Light  Light Off  Light On  
Run Indicator Light  Light Off  Light On  
Fault Indicator Light  Light Off  Light On  
Alarm Indicator Light  Light On  Light Off

#### Branch 1 Relay D

|                                     |                                     |                                    |
|-------------------------------------|-------------------------------------|------------------------------------|
| Main POS Relay                      | Main NEG Relay                      | Pre Charge Relay                   |
| <input type="text" value="Closed"/> | <input type="text" value="Closed"/> | <input type="text" value="Break"/> |

#### Branch 2 Relay E

|                                     |                                     |                                    |
|-------------------------------------|-------------------------------------|------------------------------------|
| Main POS Relay                      | Main NEG Relay                      | Pre Charge Relay                   |
| <input type="text" value="Closed"/> | <input type="text" value="Closed"/> | <input type="text" value="Break"/> |

#### Fan F

|                                |                                |                                |                                |
|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Fan 1 Duty Cycle               | Fan 2 Duty Cycle               | Fan 3 Duty Cycle               | Fan 4 Duty Cycle               |
| <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> |

**Figure 4-2 PCU Manual Control Page**



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

**Table 4-2 Description of PCU Manual Control Page**

| NO. | Name            | Description   |
|-----|-----------------|---|
| A   | Restart         | <p>Application Restart: Restarts only the control program or software of the device without cutting off the device power supply; applicable to solving temporary software-level issues with short time consumption.</p> <p>System Restart: Cuts off the device power supply completely and then powers on again, which is a hardware-level restart; used to resolve serious system-level faults, and this process takes significantly longer than an application restart.</p>   |
| B   | Enable          | <p>Lightning Protection: Enables or disables the lightning strike protection function. It should normally remain enabled to protect the device from surge current damage in thunderstorms.</p> <p>Access Control: Enables or disables the cabinet door status monitoring. If enabled, the system will issue an alarm when the cabinet door is opened abnormally to prevent unauthorized operation and electric shock risks.</p> <p>Water Immersion: Enables or disables the water immersion monitoring at the bottom of the cabinet. If enabled, the system will issue an alarm when water leakage or accumulation is detected to prevent device short circuit and damage.</p>                                    |
| C   | Indicator Light | <p>Standby Indicator Light: Illuminates when the device is ready but not in operation.</p> <p>Run Indicator Light: Illuminates when the device is working normally.</p> <p>Fault Indicator Light: Illuminates when a serious error or fault occurs in the device.</p> <p>Alarm Indicator Light: Illuminates when an abnormal condition requiring attention occurs in the device (which does not necessarily cause shutdown).</p>  |
| D   | Branch 1 Relay  | <p>The PCU is connected to two independent DC power supplies, and this is the status control of the Branch 1 relay.</p> <p>Main POS Relay: Controls the on/off of the DC positive bus.</p> <p>Main NEG Relay: Controls the on/off of the DC negative bus.</p> <p>Pre Charge Relay: When the system is powered on, the pre-charge relay and negative relay are closed simultaneously, and the rear-end capacitor is charged with current limiting through the pre-charge resistor to avoid excessive instantaneous current. When the capacitor voltage approaches the bus voltage, the main relay is closed and the pre-charge relay is opened. This process constitutes a key part of the protection circuit.</p> |
| E   | Branch 2 Relay  | <p>Same as above, with the same working principle as Branch 1 Relay.</p>  |

| NO. | Name | Description   |
|-----|------|---|
| F   | Fan  | <p>Fan 1/2/3/4 Duty Cycle: Refers to the duty cycle controlled by PWM (Pulse Width Modulation) in percentage (%). This value determines the fan speed.</p> <p>A larger value (e.g., 100%): The fan runs at full speed with the strongest heat dissipation but the maximum noise.</p> <p>A smaller value (e.g., 10%): The fan runs at low speed with low noise but weak heat dissipation capability.</p> |



Do not arbitrarily modify any settings here (especially relay operations) unless the consequences of the operation are clearly understood; incorrect operations may cause device shutdown or damage.

### 4.1.2 PDU

Click the “Equipment Monitoring” menu, select the PDU option under “Power Cabinet”, and enter the page to view the communication status of all PDUs in the system. Click the icon in the upper right corner to access the manual control page for system-level PDU settings.

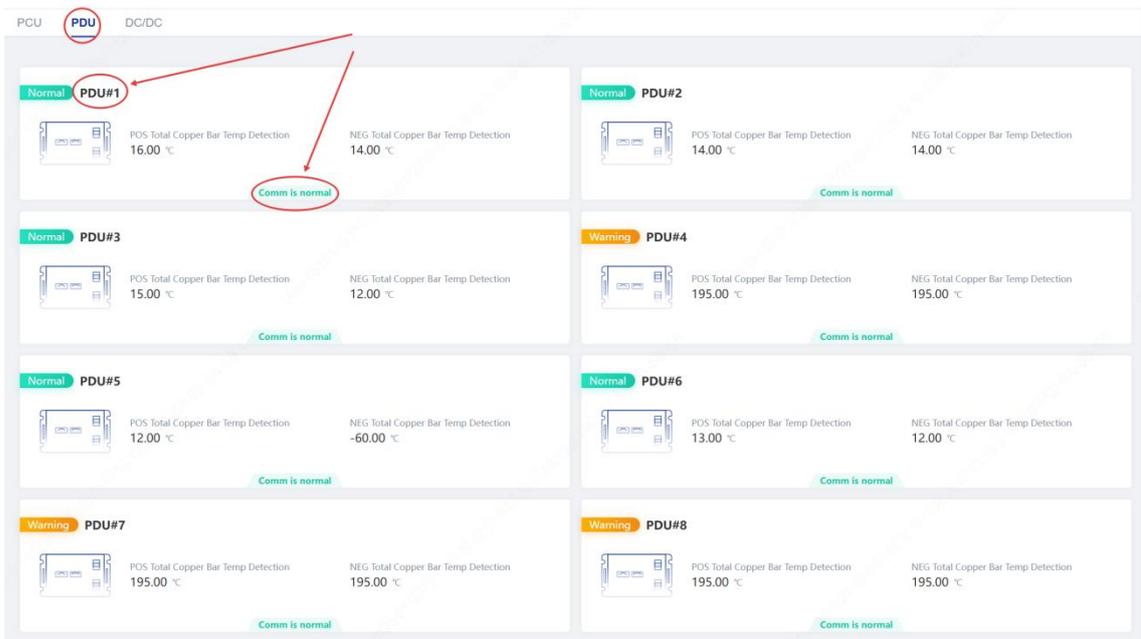
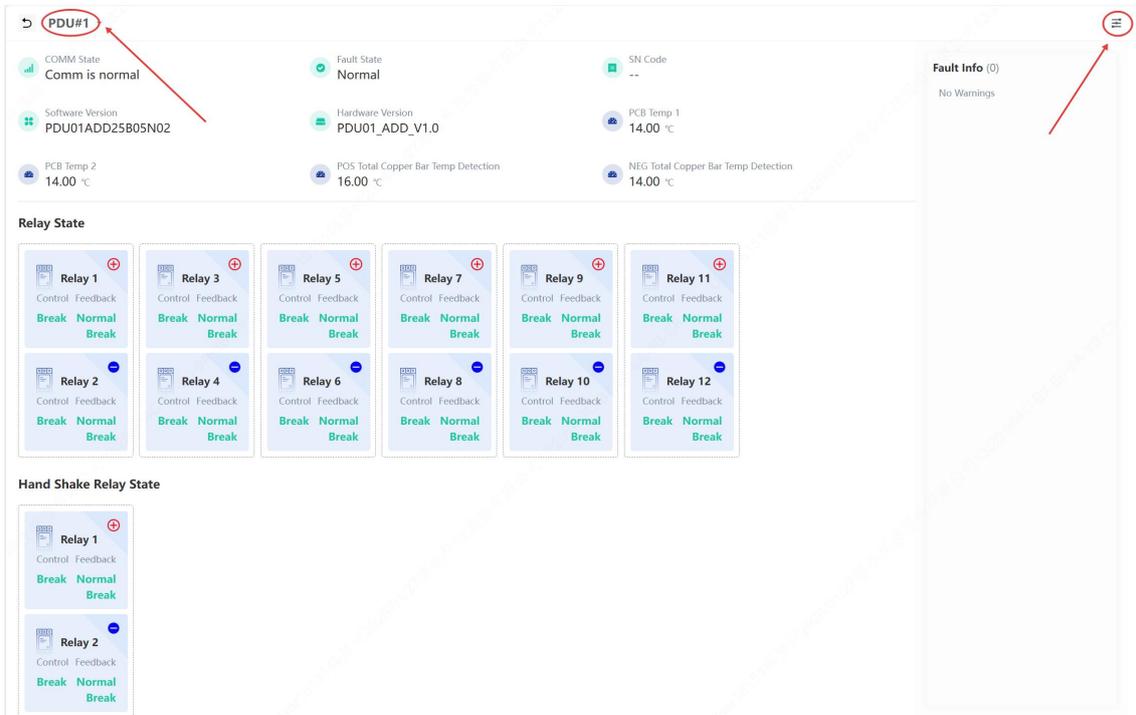


Figure 4-3 PDU Overall Operation Interface



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

- Click any PDU to access its detailed operation information page, where key data such as the PDU's communication status, fault and alarm information, and relay working status can be viewed. Click the icon  in the upper right corner to enter the manual control page of the PDU.



**Figure 4-4 Single PDU Operation Information Page**



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

Manual control is designed to allow O&M personnel to remotely manage and diagnose PDUs, ensuring their normal operation and power supply safety.

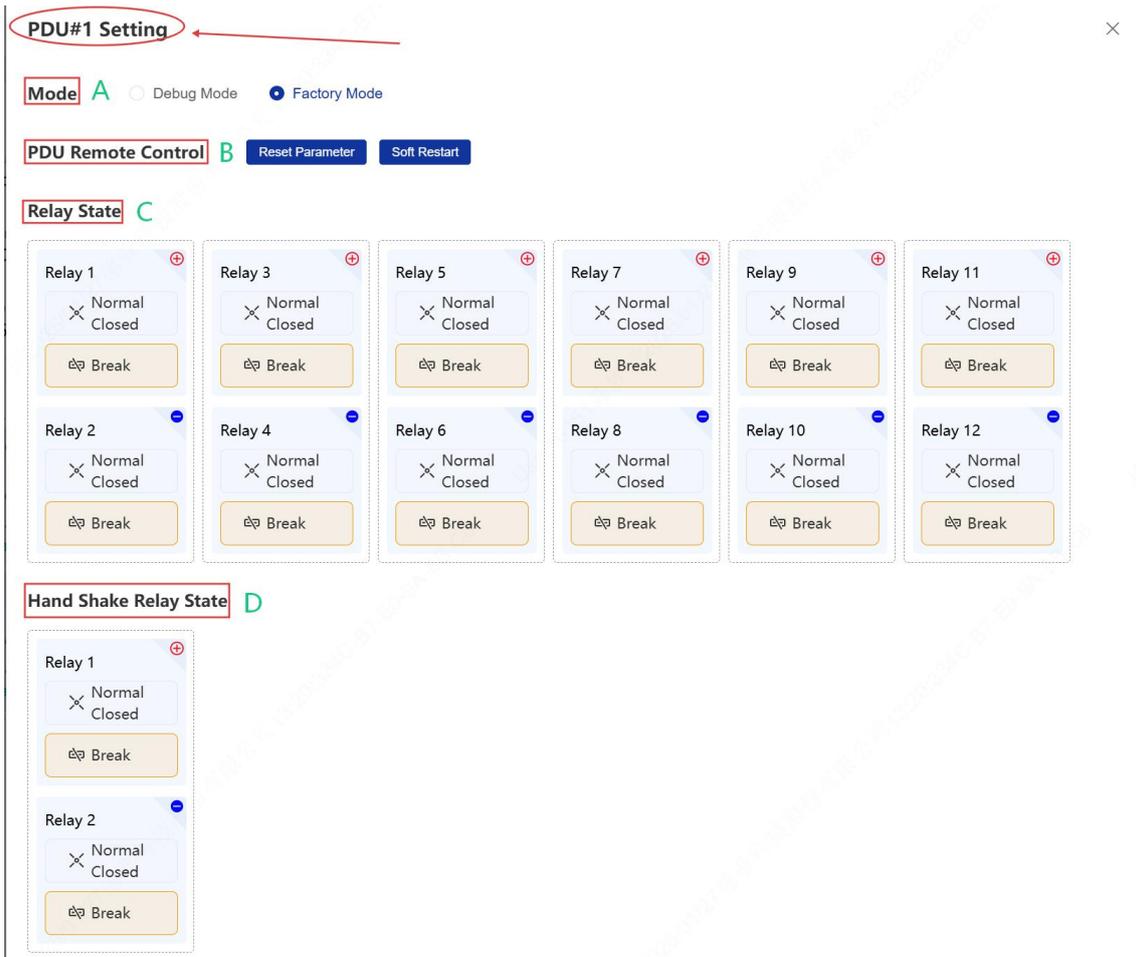


Figure 4-5 Single PDU Manual Control Page



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

Table 4-3 Description of Single PDU Manual Setting Page

| NO. | Name               | Description  |
|-----|--------------------|--|
| A   | Mode               | <p>Debug Mode: Enabled only during equipment installation, debugging or fault troubleshooting.</p> <p>Factory Mode: The daily operation mode of the PDU.</p> <p>The device must be set to Debug Mode before performing manual control operations.</p>  |
| B   | PDU Remote Control | <p>Parameter Reset: Resets stored parameters (e.g., relay action times, PDU startup times) without power off.</p> <p>Soft Restart: Restarts only the PDU control program without power off; all custom configurations are retained and reloaded.</p> <p>Soft Restart is recommended as the preferred method, and Parameter Reset should only be used as a last resort.</p> |
| C   | Relay State        | Controls all relays of a single PDU. Each PDU is configured with 12 relays,  |

| NO. | Name                   | Description   |
|-----|------------------------|---|
|     |                        | whose on/off status can be controlled individually.   |
| D   | Hand Shake Relay State | <p>Only PDUs with odd numbering have the permission to control the hand shake relay.</p> <p>This relay can temporarily borrow modules from the adjacent branch by closing the relay when the DC/DC modules of the current branch are exhausted. When the branch of the borrowed modules is also exhausted, the modules must be returned, and the vehicle using the borrowed modules will face the risk of charging interruption at this time.</p> |



Modifying the independent PDU relay state requires an account with administrator operation permission and operation under the system's Debug Mode; otherwise, operation commands will be blocked by the security policy.

### 4.1.3 DC/DC

Click the DC/DC option under "Power Cabinet" in the "Equipment Monitoring" menu to enter the DC/DC operation details page. The page displays status information such as communication, fault and alarm of all DC/DC modules in the system.

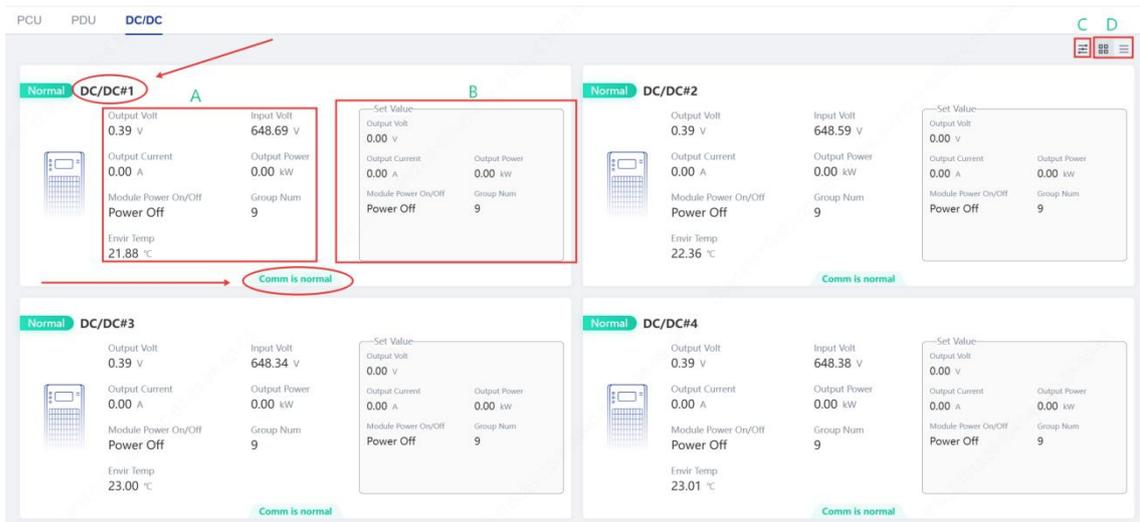


Figure 4-6 System DC/DC Working Status Card Page



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

Table 4-4 Description of DC/DC Page

| NO. | Name           | Description  |
|-----|----------------|--|
| A   | Module Data    | The actual output values of the DC/DC module.  |
| B   | Set Value      | The preset values of the DC/DC module.   |
| C   | Manual Control | Click the icon and enter the login password, then edit the main data of the DC/DC module. Save the settings after the modification is completed. |
| D   | Display Mode   | The page is displayed in Card Mode by default; click the icon to switch freely between Card Mode and List Mode.                                  |

- Click the icon  in the upper right corner of the DC/DC home page to enter the DC/DC Group Control Page. The manual setting page is shown in Figure 4-7, and the description of each parameter setting is detailed in Table 4-5.

Figure 4-7 Station-Level DC/DC Setting Page



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

Table 4-5 Description of Station-Level DC/DC Settings

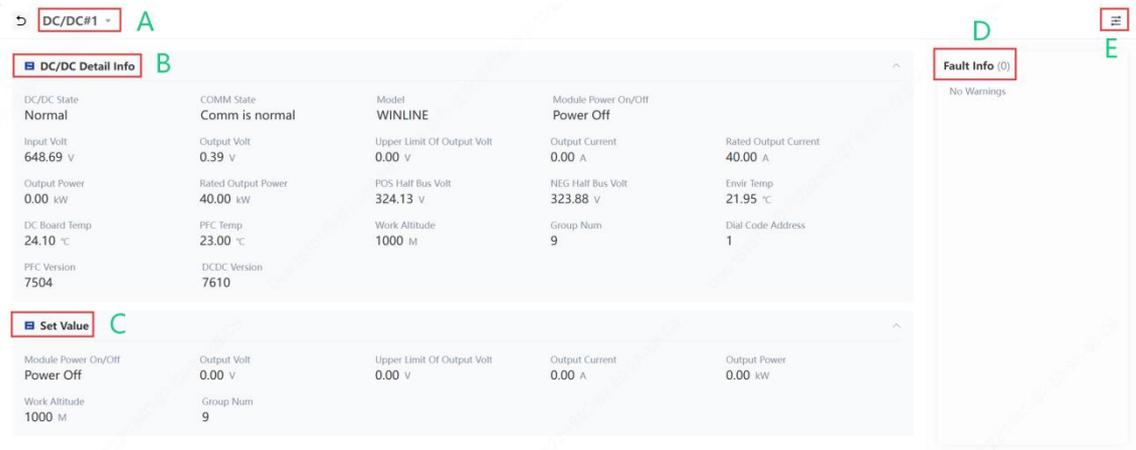
| NO. | Name                | Description   |
|-----|---------------------|---|
| A   | Module Power On/Off | Remotely controls the power on and off of the DC/DC modules.  |
| B   | Overvolt Reset      | Sets the recovery method after the module shuts down for protection due to an output overvoltage fault. Operation is not recommended; the default setting "Allowed" is preferred. |
| C   | Overvolt Protect    | Determines whether to enable linkage when multiple DC/DC modules in the system operate in parallel. Operation is not recommended; the   |

| NO. | Name                | Description  |
|-----|---------------------|--|
|     | Association         | default setting "Allowed" is preferred.  |
| D   | Short Circuit Reset | Sets the recovery method after the module shuts down for protection due to an output short circuit fault. Operation is not recommended; the default setting "Reset" is preferred.  |
| E   | Output Volt         | Sets the target output voltage of the DC/DC module during normal operation. The output voltage of the module can be adjusted continuously through an external monitoring module, with an adjustment range of 150Vdc ~ 1000Vdc. |
| F   | Output Current      | Set the output current limit value of the manual setting module. The current range of the module is 0A - 133A, and the output current value should be set within this range.   |

**CAUTION**

The final preset values of these parameters must strictly comply with the DC/DC Module User Manual, the specifications of the rear-end equipment and the system design requirements. Incorrect settings may lead to serious consequences such as equipment damage and system failure. If you have any questions, be sure to contact the Deye ESS After-sales Department.

- Click any DC/DC module to enter its detailed information page, where relevant data such as its communication status, current preset parameter values, as well as fault and alarm information can be viewed.



**Figure 4-8 Single DC/DC Module Details Page**



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

**Table 4-6 Description of Single DC/DC Module Page**

| NO. | Name              | Description  |
|-----|-------------------|--|
| A   | Module Switch     | Click to switch to the details page of other DC/DC modules.  |
| B   | DC/DC Detail Info | Displays the status, communication status and model of the DC/DC module.   |
| C   | Set Value         | The set value is the system-recommended value for this module.   |
| D   | Fault Info        | Displays the fault and alarm information of the module.  |
| E   | Manual Control    | The manual control page for a single module is consistent with that for the group of modules; for specific setting methods, see Table 4-5 Description of Station-Level DC/DC Settings. |



Group control is designed to dynamically allocate the output of each DC/DC module to optimize global resource allocation; individual control is used to prevent the entire station from shutting down due to a single module fault, thus effectively resolving local safety risks.

## 4.2 Charging Terminal Monitoring

Click the “Charging Terminal” option under the “Equipment Monitoring” menu to enter the charging terminal management page. The page displays the communication status of CCUs, as well as the usage status, power, SOC and other information of Charge Connects.

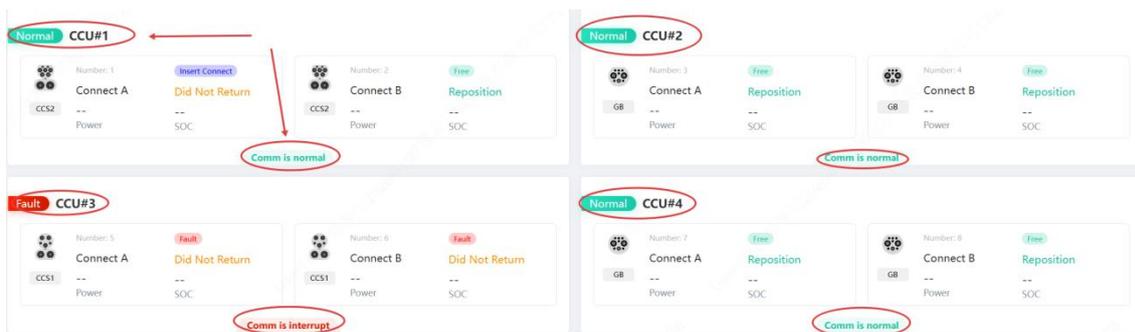


Figure 4-9 CCU Status Display Home Page



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

- Click any position on a CCU card to enter the CCU details page.

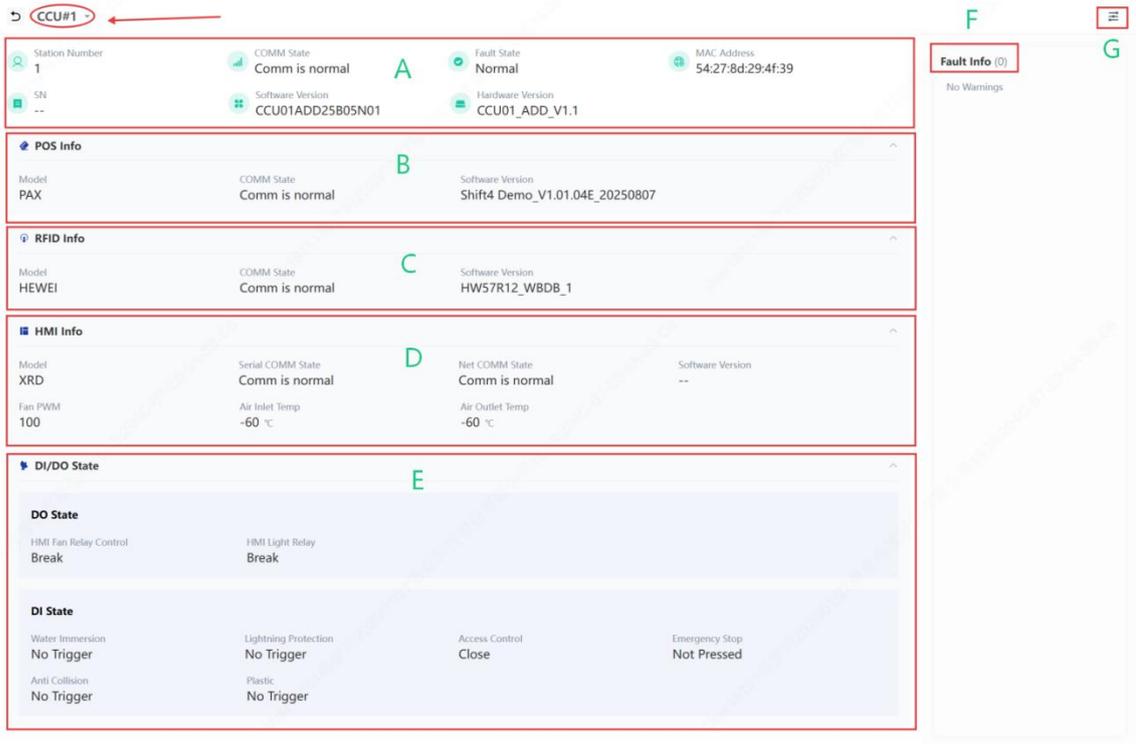


Figure 4-10 CCU Details Page



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

Table 4-7 Description of CCU Display Information

| NO. | Name           | Description   |
|-----|----------------|---|
| A   | Station        | Displays relevant information such as the station number, COMM state and fault state of the charging pile.                                      |
| B   | POS Info       | Displays the model, COMM state and software version of the POS.   |
| C   | RFID Info      | Displays the model, COMM state and software version of the RFID card reader.  |
| D   | HMI Info       | Displays the model, Serial COMM State, Net COMM State of the HMI, as well as the software version and fan PWM information.                      |
| E   | DI/DO State    | Displays the DI feedback information of the CCU module.   |
| F   | Fault Info     | Displays the number and detailed information of faults and alarms of pile-level and Charge Connect-level equipment.                             |
| G   | Manual Control | Click the icon  to enter the manual control page of the CCU. |

- Click the icon  in the upper right corner to enter the CCU manual setting page,

which is mainly used for setting module restart, mode, enable and other functions.

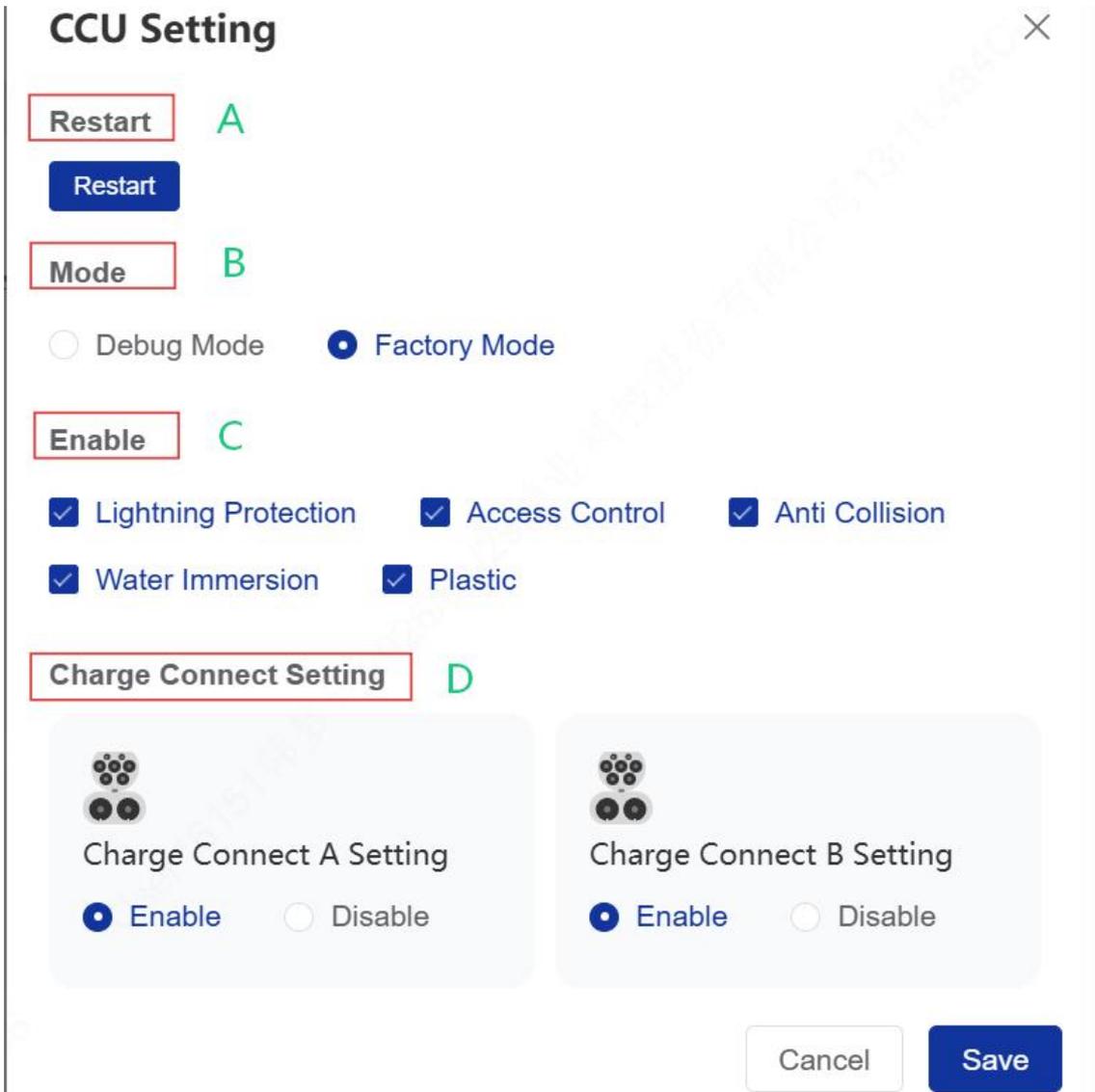


Figure 4-11 CCU Manual Control Page



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

Table 4-8 Description of CCU Manual Control Page

| NO. | Name    | Description   |
|-----|---------|---|
| A   | Restart | After executing the restart operation, the CCU will reload the operating system and application programs. Restarting is applicable when the CCU software malfunctions, communication is abnormal or specific functions fail, to restore normal operation. |
| B   | Mode    | Debug Mode: When enabled, the CCU outputs more detailed underlying operation logs and diagnostic information, facilitating technical personnel to troubleshoot complex system faults.   |

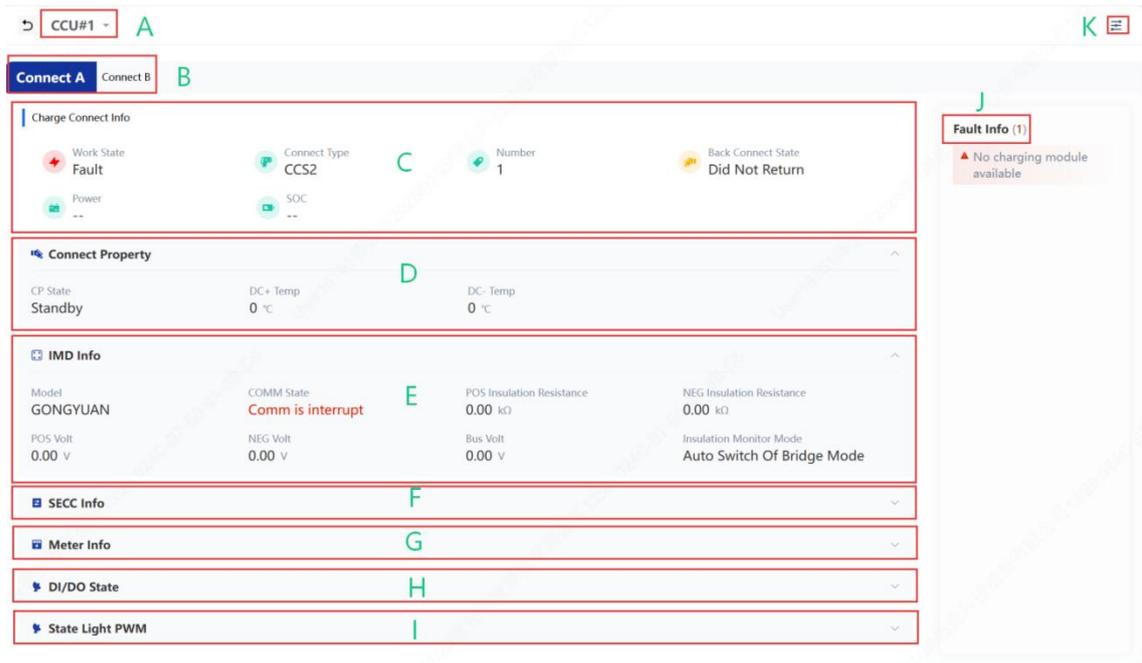
| NO. | Name                   | Description  |
|-----|------------------------|--|
|     |                        | Factory Mode: Restores the CCU to its initial factory state, and this operation will clear all custom configurations.  |
| C   | Enable                 | <p>Used to enable or disable various hardware sensors and protection functions.</p> <p>Lightning Protection: Enables the protection function of the lightning protection module. The CCU real-time monitors the status of the lightning arrester and issues an alarm immediately if it fails or is damaged by lightning strike. Recommendation: Keep enabled at all times to ensure the safety of charging piles and equipment.</p> <p>Access Control: Enables the monitoring of the opening/closing status of the charging pile cabinet door. The CCU triggers an alarm if the door is opened illegally.</p> <p>Anti Collision: Enables the collision sensor. The CCU immediately stops charging and issues an emergency alarm when the charging pile is subjected to external impact (e.g., accidental vehicle collision). Recommendation: Must be kept enabled as an important safety function.</p> <p>Water Immersion: Enables the water leakage sensor installed at the bottom of the charging pile. The CCU issues an alarm when internal water accumulation is detected (e.g., rainwater seepage, pipeline leakage). Determined by the installation environment (e.g., underground garage), but enabling is recommended.</p> <p>Plastic: Does not disable the circuit breaker itself, but enables the status monitoring function of the molded case circuit breaker. The CCU can monitor the on/off status of the main circuit breaker and issue an alarm if it trips accidentally. Recommendation: Enable to keep abreast of the main circuit status in a timely manner.</p> |
| D   | Charge Connect Setting | <p>Manually enable or disable the specified Charge Connect.</p> <p>Enable: Allows the Charge Connect to work normally; users can plug in the Charge Connect and start charging after enabling.</p> <p>Disable: Locks the Charge Connect via software; even if the Charge Connect is physically plugged in, the CCU will refuse charging and display "Unavailable" on the screen.</p>   |

 **CAUTION**

Mode setting and restart operations will interrupt the charging pile service; please perform such operations during off-peak business hours or when no vehicles are charging. Be sure to refer to the manual before modifying settings, and focus on verifying key safety functions in Mode and Enable. Incorrect operations may lead to service interruption or even safety accidents.

- Click the Charge Connect card in any CCU module to immediately enter the Charge Connect details page, and switch to view Charge Connect information of other CCU

modules at will.



**Figure 4-12 Charge Connect Manual Control Page**



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

**Table 4-9 Detailed Description of Charge Connect Manual Control Page**

| NO. | Name                       | Description   |
|-----|----------------------------|---|
| A   | CCU Module Switch          | Click to switch and query Charge Connect information of other CCU modules.  |
| B   | Charge Connect Page Switch | Click to switch between the details pages of Charge Connect A and Charge Connect B.   |
| C   | Charge Connect Info        | Displays the working status, Charge Connect return status, power, SOC and other relevant information of the currently selected Charge Connect.                |
| D   | Connect Property           | Displays the CP status of the Charge Connect and temperature information of DC+ and DC-.  |
| E   | IMD Info                   | Displays the model, communication status, positive and negative insulation resistance, and positive and negative voltage of the insulation monitoring device. |
| F   | SECC Info                  | Displays the SECC model, communication status and software version.   |

| NO. | Name            | Description  |
|-----|-----------------|--|
| G   | Meter Info      | Displays the electric meter model, communication status, voltage, current and electric quantity information.     |
| H   | DI/DO State     | Displays the operation status feedback of the positive and negative relays, pre-charge relay and fuse.           |
| I   | State Light PWM | Displays the PWM of the status indicator light.  |
| J   | Fault Info      | Displays the fault and alarm information of the Charge Connect.  |
| K   | Manual Control  | Click to enter the Charge Connect-side manual control page to adjust parameters of State Light PWM and DO State. |

**Figure 4-13 Charge Connect-Side Manual Control Page**



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

**Table 4-10 Description of Charge Connect-Side Manual Control Page**

| NO. | Name            | Description   |
|-----|-----------------|---|
| A   | State Light PWM | <p>Control the brightness of each color LED in the RGB status indicator on the Charge Connect head by adjusting the duty cycle of the PWM (Pulse Width Modulation) signal. The value represents the duty cycle percentage; a larger value means a brighter light of the corresponding color.</p> <p>Red Light PWM: Controls the brightness of the red LED, which indicates fault or alarm status.</p> <p>Green Light PWM: Controls the brightness of the green LED, which indicates charging, charging complete or reservation successful status.</p> |

| NO. | Name     | Description   |
|-----|----------|---|
|     |          | Blue Light PWM: Controls the brightness of the blue LED, which indicates standby or connected status.   |
| B   | DO State | <p>Pre Charge Relay: When the system is powered on, the pre-charge relay and negative relay are closed simultaneously, and the rear-end capacitor is charged with current limiting through the pre-charge resistor to avoid excessive instantaneous current. When the capacitor voltage approaches the bus voltage, the main relay is closed and the pre-charge relay is opened.</p> <p>Main POS Relay Control: Controls the on/off of the DC output positive bus, which is one of the main power switches. Manual control: Can manually command it to Close or Open for isolating the positive power supply.</p> <p>Main NEG Relay Control: Controls the on/off of the DC output negative bus, which is the other main power switch. Manual control: Can manually command it to Close or Open for isolating the negative power supply.</p> |

## 5 Equipment Information Management

The core function of the Equipment Information module is to manage all types of connected equipment. It is not a simple listing of data, but a key support for full-life cycle equipment management, improving fault diagnosis efficiency and ensuring safety and compliance.

### 5.1 PCU Equipment Information

Click the PCU option under the “Equipment Information” menu to view relevant information of the PCU, including Manufacturer, SN number, software and hardware versions, and system version.

| NO. | Device Name | Manufacturer | SN               | Software Version    | Hardware Version | System Version  |
|-----|-------------|--------------|------------------|---------------------|------------------|-----------------|
| 1   | PCU         | Deye         | 16701000D6040001 | PCU01ADD20260123D01 | PCU01_ADD_V1.2   | V1.0.8.20250828 |

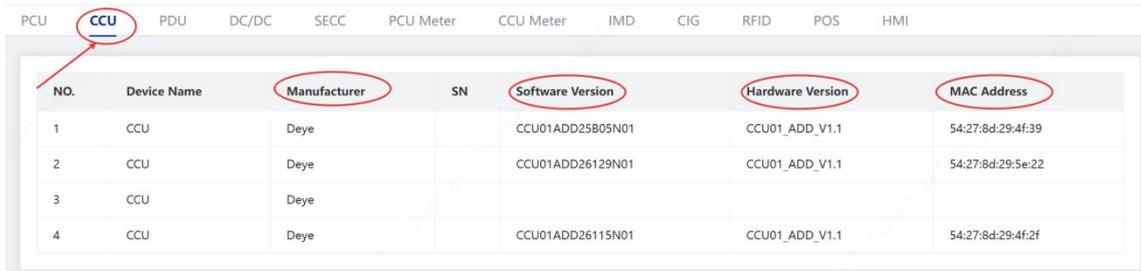
Figure 5-1 PCU Equipment Information



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

## 5.2 CCU Equipment Information

Click the CCU option under the “Equipment Information” menu to view relevant information of the CCU, including Manufacturer, SN number, software and hardware versions, and MAC Address.



| NO. | Device Name | Manufacturer | SN | Software Version | Hardware Version | MAC Address       |
|-----|-------------|--------------|----|------------------|------------------|-------------------|
| 1   | CCU         | Deye         |    | CCU01ADD25B05N01 | CCU01_ADD_V1.1   | 54:27:8d:29:4f:39 |
| 2   | CCU         | Deye         |    | CCU01ADD26129N01 | CCU01_ADD_V1.1   | 54:27:8d:29:5e:22 |
| 3   | CCU         | Deye         |    |                  |                  |                   |
| 4   | CCU         | Deye         |    | CCU01ADD26115N01 | CCU01_ADD_V1.1   | 54:27:8d:29:4f:2f |

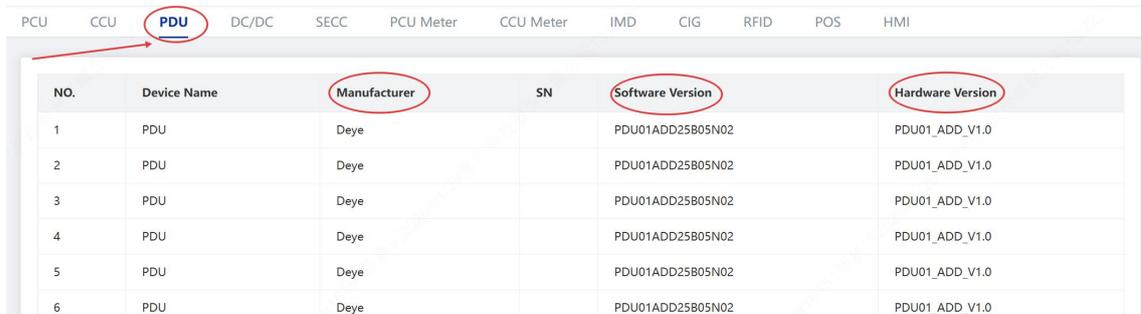
Figure 5-2 CCU Equipment Information



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

## 5.3 PDU Equipment Information

Click the PDU option under the “Equipment Information” menu to view relevant information of the PDU, including manufacturer information, SN number, and software and hardware versions.



| NO. | Device Name | Manufacturer | SN | Software Version | Hardware Version |
|-----|-------------|--------------|----|------------------|------------------|
| 1   | PDU         | Deye         |    | PDU01ADD25B05N02 | PDU01_ADD_V1.0   |
| 2   | PDU         | Deye         |    | PDU01ADD25B05N02 | PDU01_ADD_V1.0   |
| 3   | PDU         | Deye         |    | PDU01ADD25B05N02 | PDU01_ADD_V1.0   |
| 4   | PDU         | Deye         |    | PDU01ADD25B05N02 | PDU01_ADD_V1.0   |
| 5   | PDU         | Deye         |    | PDU01ADD25B05N02 | PDU01_ADD_V1.0   |
| 6   | PDU         | Deye         |    | PDU01ADD25B05N02 | PDU01_ADD_V1.0   |

Figure 5-3 PDU Equipment Information



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

## 5.4 DC/DC Equipment Information

Click the DC/DC option under the “Equipment Information” menu to view the PFC version and DC/DC version of the DC/DC module.

| NO. | Device Name | Manufacturer | PFC Version | DCDC Version |
|-----|-------------|--------------|-------------|--------------|
| 1   | DC/DC       | WINLINE      | 7504        | 7610         |
| 2   | DC/DC       | WINLINE      | 7504        | 7610         |
| 3   | DC/DC       | WINLINE      | 7504        | 7610         |
| 4   | DC/DC       | WINLINE      | 7504        | 7610         |
| 5   | DC/DC       | WINLINE      | 7504        | 7610         |
| 6   | DC/DC       | WINLINE      | 7504        | 7610         |
| 7   | DC/DC       | WINLINE      | 7504        | 7610         |
| 8   | DC/DC       | WINLINE      | 7504        | 7610         |
| 9   | DC/DC       | WINLINE      | 7504        | 7610         |
| 10  | DC/DC       | WINLINE      | 7504        | 7610         |
| 11  | DC/DC       | WINLINE      | 7504        | 7610         |
| 12  | DC/DC       | WINLINE      | 7504        | 7610         |

Figure 5-4 DC/DC Equipment Information



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

## 5.5 SECC Equipment Information

Click the SECC option under the “Equipment Information” menu to view the manufacturer and software version information of the SECC.

| NO. | Device Name | Manufacturer | Software Version |
|-----|-------------|--------------|------------------|
| 1   | SECC        | GW           | 33251111         |
| 2   | SECC        | GW           | 33251111         |
| 5   | SECC        | GW           |                  |
| 6   | SECC        | GW           |                  |

Figure 5-5 SECC Equipment Information



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

## 5.6 PCU Meter Equipment Information

Click the PCU Meter option under the “Equipment Information” menu to view the manufacturer and software version information of the PCU meter.

| NO. | Device Name | Manufacturer | Software Version |
|-----|-------------|--------------|------------------|
| 1   | PCU Meter   | ACREL        | 257              |
| 2   | PCU Meter   | ACREL        | 257              |

Figure 5-6 PCU Meter Equipment Information



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

## 5.7 CCU Meter Equipment Information

Click the CCU Meter option under the “Equipment Information” menu to view the manufacturer and software version information of the CCU meter.

| NO. | Device Name | Manufacturer | Software Version |
|-----|-------------|--------------|------------------|
| 1   | CCU Meter   | ACREL        |                  |
| 2   | CCU Meter   | ACREL        |                  |
| 3   | CCU Meter   | ACREL        | 513              |
| 4   | CCU Meter   | ACREL        | 1025             |
| 5   | CCU Meter   | ACREL        |                  |
| 6   | CCU Meter   | ACREL        |                  |
| 7   | CCU Meter   | ACREL        | 1025             |
| 8   | CCU Meter   | ACREL        | 257              |

Figure 5-7 CCU Meter Equipment Information



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

## 5.8 IMD Equipment Information

Click the IMD option under the “Equipment Information” menu to view the manufacturer and software version information of the IMD.

| NO. | Device Name | Manufacturer | Software Version |
|-----|-------------|--------------|------------------|
| 1   | IMD         | GONGYUAN     | 528              |
| 2   | IMD         | GONGYUAN     | 528              |
| 3   | IMD         | GONGYUAN     | 528              |
| 4   | IMD         | GONGYUAN     | 528              |
| 5   | IMD         | GONGYUAN     |                  |
| 6   | IMD         | GONGYUAN     |                  |
| 7   | IMD         | GONGYUAN     | 528              |
| 8   | IMD         | GONGYUAN     | 528              |

Figure 5-8 IMD Equipment Information



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

## 5.9 RFID Equipment Information

Click the RFID option under the “Equipment Information” menu to view the manufacturer and software version information of the RFID device.

| NO. | Device Name | Manufacturer | Software Version |
|-----|-------------|--------------|------------------|
| 1   | RFID        | HEWEI        | HW57R12_WBDB_1   |
| 2   | RFID        | HEWEI        | HW57R12_XY_100   |
| 3   | RFID        | HEWEI        |                  |
| 4   | RFID        | HEWEI        | HW57R12_XY_100   |

Figure 5-9 RFID Equipment Information



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

## 5.10 POS Equipment Information

Click the POS option under the “Equipment Information” menu to view the manufacturer and software version information of the POS machine.

| NO. | Device Name | Manufacturer | Software Version               |
|-----|-------------|--------------|--------------------------------|
| 1   | POS         | PAX          | Shift4 Demo_V1.01.04E_20250807 |
| 3   | POS         | PAX          |                                |

**Figure 5-10 POS Equipment Information**



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

## 5.11 HMI Equipment Information

Click the HMI option under the “Equipment Information” menu to view the manufacturer and software version information of the HMI device.

| NO. | Device Name | Manufacturer | Software Version |
|-----|-------------|--------------|------------------|
| 1   | HMI         | XRD          |                  |
| 2   | HMI         | XRD          | 1.0.41           |
| 3   | HMI         | XRD          |                  |
| 4   | HMI         | XRD          | 1.0.39           |

**Figure 5-11 HMI Equipment Information**



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

## 6 Event and Order Query

### 6.1 Event Query

Event Query mainly consists of two sections: Activity Event and History Event. Activity Event dynamically refreshes the system's fault and alarm information in real time, while History Event statically stores such information. The two work in coordination to achieve a fully closed-loop management of rapid fault response, root cause analysis and safety audit.

#### 6.1.1 Activity Event

Click the Activity Event option under the “Event Query” menu to access the real-time operation command platform for system O&M. Three key filter criteria are displayed at the top of the page: Alarm Level, Device Type and Device No., which can be used for efficient and accurate retrieval of activity events. In addition, the system provides a one-click reset function to quickly clear search criteria and refresh the page for real-time updated information.

Activity Event History Event

Alarm Level: Please Select Alarm Level | Device Type: Please Select Device Type | Device NO: Please Select Device NO

Search Reset Refresh

| ID | State    | Description  | Alarm Level | Device Type | Device NO | Abnormal Value | Create Time         |
|----|----------|--|-------------|-------------|-----------|----------------|---------------------|
| 1  | Generate | OCPP communication lost                            | Level 1     | PCU         | nil       | 0              | 2026-01-29 13:20:07 |
| 2  | Generate | charging connector does not return for a long time | Level 1     | CONN        | 1         | 0              | 2026-01-29 13:20:18 |
| 3  | Generate | CCU communication lost                             | Level 2     | CCU         | 3         | 0              | 2026-01-29 13:20:20 |
| 4  | Generate | HMI communication lost                             | Level 1     | CCU         | 3         | 0              | 2026-01-29 13:20:45 |

Total 4 10/page < 1 > Go to 1

Figure 6-1 Activity Event Information Query



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

### 6.1.2 History Event

Click the History Event option under the “Event Query” menu to access the system's historical fault and alarm information. Four key filter criteria are displayed at the top of the page: Alarm Level, Device Type, Device No. and Date Range, which users can flexibly use for accurate retrieval of historical events. In addition, it supports one-click reset of search criteria and convenient export of historical event data as required.

Activity Event History Event

Alarm Level: Please Select Alarm Level | Device Type: Please Select Device Type | Device NO: Please Select Device NO

Date Range: 2026-01-29 ~ 2026-01-29 Search Reset Export

| ID | State    | Description  | Alarm Level | Device Type | Device NO | Abnormal Value | Create Time         | End Time            |
|----|----------|--|-------------|-------------|-----------|----------------|---------------------|---------------------|
| 1  | Generate | HMI communication lost                             | Level 1     | CCU         | 3         | 0              | 2026-01-29 13:20:45 |                     |
| 2  | Generate | CCU communication lost                             | Level 2     | CCU         | 3         | 0              | 2026-01-29 13:20:20 |                     |
| 3  | Generate | charging connector does not return for a long time | Level 1     | CONN        | 1         | 0              | 2026-01-29 13:20:18 |                     |
| 4  | Restore  | DCDC communication lost                            | Level 2     | DC/DC       | 8         | 0              | 2026-01-29 13:20:16 | 2026-01-29 13:20:22 |
| 5  | Restore  | DCDC communication lost                            | Level 2     | DC/DC       | 7         | 0              | 2026-01-29 13:20:16 | 2026-01-29 13:20:22 |
| 6  | Restore  | DCDC communication lost                            | Level 2     | DC/DC       | 6         | 0              | 2026-01-29 13:20:16 | 2026-01-29 13:20:22 |
| 7  | Restore  | DCDC communication lost                            | Level 2     | DC/DC       | 5         | 0              | 2026-01-29 13:20:16 | 2026-01-29 13:20:22 |
| 8  | Restore  | DCDC communication lost                            | Level 2     | DC/DC       | 4         | 0              | 2026-01-29 13:20:16 | 2026-01-29 13:20:22 |
| 9  | Restore  | DCDC communication lost                            | Level 2     | DC/DC       | 3         | 0              | 2026-01-29 13:20:16 | 2026-01-29 13:20:22 |
| 10 | Restore  | DCDC communication lost                            | Level 2     | DC/DC       | 2         | 0              | 2026-01-29 13:20:16 | 2026-01-29 13:20:23 |

Total 131 10/page < 1 2 3 4 5 6 ... 14 > Go to 1

Figure 6-2 History Event Information Query



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

## 6.2 Order Query

Order Query is used to retrieve and view detailed information of charging orders (e.g., charging start time, charging activation method, initial SOC, etc.). It supports conditional order filtering and serves as a core tool for charging business statistics, user reconciliation and fault traceability.

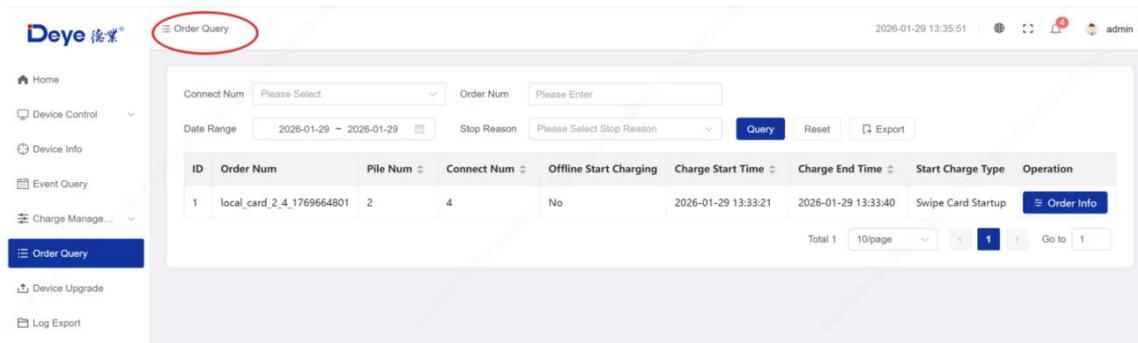


Figure 6-3 Order Query Main Page



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

### ● Order Query Operation Steps

#### Step 1: Access the Order Query module

- After logging in to the system, click Order Query in the left navigation bar to enter the order query page.

#### Step 2: Filter target orders

- Select/enter filter criteria as needed (e.g., Connect Num, Date Range, Order Num, etc.);
- Click the Query button, and the page will display a list of orders that meet the criteria.



Figure 6-4 Order Query Filter Options

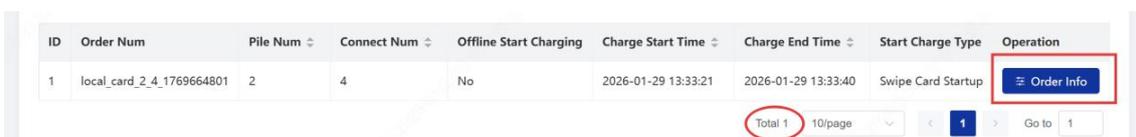


Figure 6-5 Order Details Page



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

### Step 3: View order details

- In the order list, find the Operation column corresponding to the target order and click Order Info to view detailed information such as the charging process and basic charging data of the order.



Figure 6-6 Order Charging Curve Chart



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.



Click the icon  in the upper right corner of the charging curve to download the curve data displayed on the current page to the local folder of the computer.

### Step 4: Export the order list

- After completing the filtering, confirm that the list contains the order data to be exported;

- Click the Export button, and the system will automatically package the order information and download it as a file (Excel format by default).



1. For precise query of a single order, it is recommended to directly enter the Order Num for filtering;
2. Select a reasonable date range to avoid excessive query results and slow loading caused by an overly

long time span;

3. The exported order data includes business data such as charging capacity and SOC, which must be properly stored to prevent information leakage;

4. Data in the order details (e.g., charging curve) is an important basis for fault traceability and is recommended to be retained for a long time.

# Chapter Four: Operation Management and Control

## 7 Charging Management

The core function of Charging Management is to implement full-process intelligent control of the charging process. It ensures precise scheduling based on demand under the premise of safety and reliability, and completes the collection and analysis of full-process data.

### 7.1 Charging Control

The page mainly displays system pile information, Charge Connect-side data and vehicle-side data.

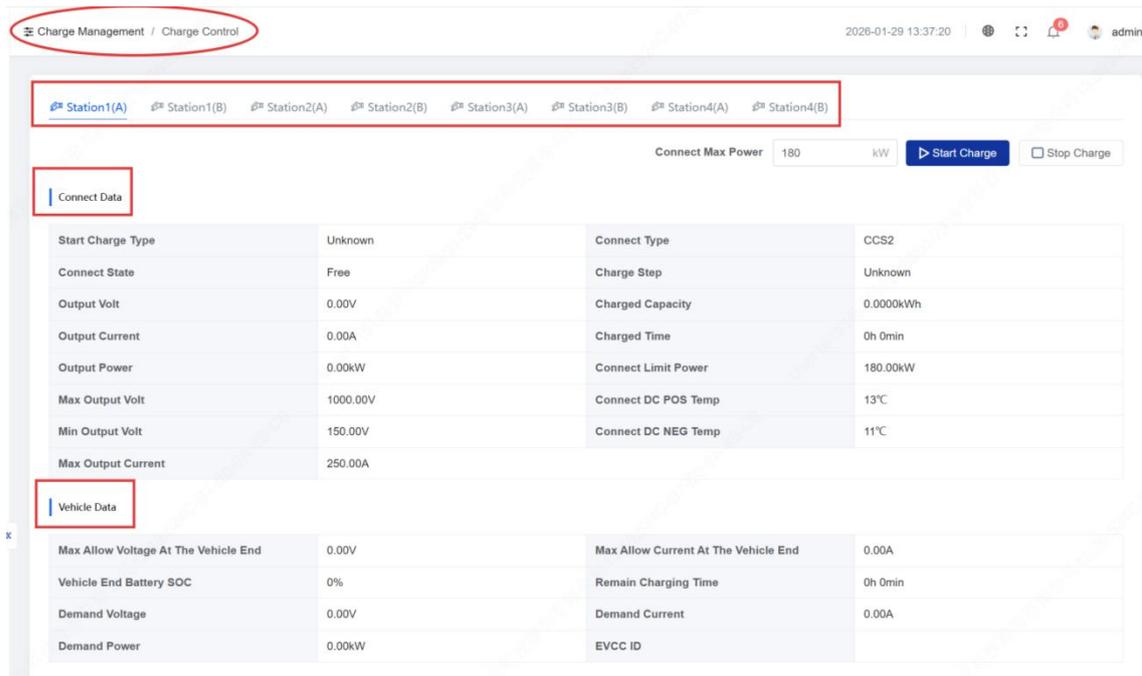


Figure 7-1 Charging Control Main Page



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

- **Basic Page Information**

**Pile Switch:** Supports switching between different charging piles (e.g., Pile 1(A), Pile

1(B), etc.) for managing multiple charging devices.

**Key Operations:** Allows setting the Connect Max Power to limit the upper power limit of the Charge Connect; click the Start Charge and Stop Charge buttons to control the charging process.



**Figure 7-2 Charge Connect Position Switch Page**



Without any restriction commands, the Charge Connect will operate at its maximum capacity by default, i.e., 180kW. When the system has a restriction requirement, the actual output power of the Charge Connect can be set to any value between 0kW and 180kW through software commands.



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

- The Connect Data display provides real-time and key status references from the charging device side, mainly helping administrators or O&M personnel know the working status of the Charge Connect and ensure the safety and controllability of the charging process.

Connect Data

|                    |          |                     |           |
|--------------------|----------|---------------------|-----------|
| Start Charge Type  | Unknown  | Connect Type        | CCS2      |
| Connect State      | Free     | Charge Step         | Unknown   |
| Output Volt        | 0.00V    | Charged Capacity    | 0.0000kWh |
| Output Current     | 0.00A    | Charged Time        | 0h 0min   |
| Output Power       | 0.00kW   | Connect Limit Power | 180.00kW  |
| Max Output Volt    | 1000.00V | Connect DC POS Temp | 13°C      |
| Min Output Volt    | 150.00V  | Connect DC NEG Temp | 11°C      |
| Max Output Current | 250.00A  |                     |           |

**Figure 7-3 Connect Data Page**



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

**Table 7-1 Description of Charge Connect-side Data Display**

| Name              | Description   |
|-------------------|---|
| Start Charge Type | Refers to the trigger mode of charging (e.g., local start, remote start, card swiping start, POS start, etc.) |
| Connect State     | Refers to the physical connection status between the Charge Connect and the vehicle                           |

| Name                | Description   |
|---------------------|---|
| Output Volt         | The voltage output by the Charge Connect to the vehicle   |
| Output Current      | The current output by the Charge Connect to the vehicle   |
| Output Power        | The actual power output by the Charge Connect   |
| Max Output Volt     | The maximum output voltage by the Charge Connect  |
| Min Output Volt     | The minimum output voltage by the Charge Connect  |
| Max Output Current  | The maximum output current supported by the Charge Connect  |
| Connect Type        | The interface standard of the Charge Connect, indicating the vehicle interface type adapted by the device |
| Charge Step         | The process stage of charging (e.g., pre-charging, charging in progress, charging complete, etc.)         |
| Charged Capacity    | The electric quantity delivered to the vehicle in this charging session                                   |
| Charged Time        | The duration of the current charging session  |
| Connect Limit Power | The maximum power allowed to be output by the Charge Connect  |
| Connect DC POS Temp | The temperature of the DC positive terminal of the Charge Connect   |
| Connect DC NEG Temp | The temperature of the DC negative terminal of the Charge Connect   |

- The vehicle-side data display provides demand and status feedback of the charging process from the vehicle side, mainly to achieve precise adaptation between the charging system and the vehicle, while ensuring vehicle safety and optimizing the charging experience. The vehicle-side data displayed varies with different types of connectors.

| Vehicle Data                         |        |                                      |         |
|--------------------------------------|--------|--------------------------------------|---------|
| Max Allow Voltage At The Vehicle End | 0.00V  | Max Allow Current At The Vehicle End | 0.00A   |
| Vehicle End Battery SOC              | 0%     | Remain Charging Time                 | 0h 0min |
| Demand Voltage                       | 0.00V  | Demand Current                       | 0.00A   |
| Demand Power                         | 0.00kW | EVCC ID                              |         |

**Figure 7-4 Vehicle-side Data Display for CCS1/CCS2 Connectors**



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

**Table 7-2 Description of Vehicle-side Data for CCS1/CCS2 Connectors**

| Name                                 | Description  |
|--------------------------------------|--|
| Max Allow Voltage at the Vehicle End | The maximum input voltage that the vehicle battery can withstand           |
| Vehicle End Battery SOC              | The state of charge of the vehicle battery (percentage of remaining power) |
| Demand Voltage                       | The charging voltage currently requested by the vehicle                    |
| Demand Power                         | The charging power currently requested by the vehicle                      |
| Max Allow Current at the Vehicle End | The maximum current that the vehicle battery can withstand                 |
| Remain Charging Time                 | The estimated remaining time to complete the current charging session      |
| Demand Current                       | The charging current currently requested by the vehicle                    |
| EVCC ID                              | The identification ID of the vehicle charging control device               |

| Vehicle Data                                |         |   |         |
|---|---------|---|---------|
| Max Allow Voltage At The Vehicle End        | 0.00V   | Max Allow Current At The Vehicle End        | 0.00A   |
| Vehicle End Battery SOC                     | 0%      | Remain Charging Time                        | 0h 0min |
| Demand Voltage                              | 0.00V   | Demand Current                              | 0.00A   |
| Demand Power                                | 0.00kW  | BMS Protocol Version Num                    |         |
| Battery Type                                | Unknown | VIN   |         |
| Battery Capacity                            | 0.00kWh | Battery Max Allow Temperature               | 0°C     |
| Vehicle Interface Voltage Measurement Value | 0.00V   | Vehicle Interface Current Measurement Value | 0.00A   |
| Battery Max Temperature                     | 0°C     | Battery Min Temperature                     | 0°C     |
| Charge Allow Status                         | Inhibit |   |         |

**Figure 7-5 Vehicle-side Data Display for GB Connectors**



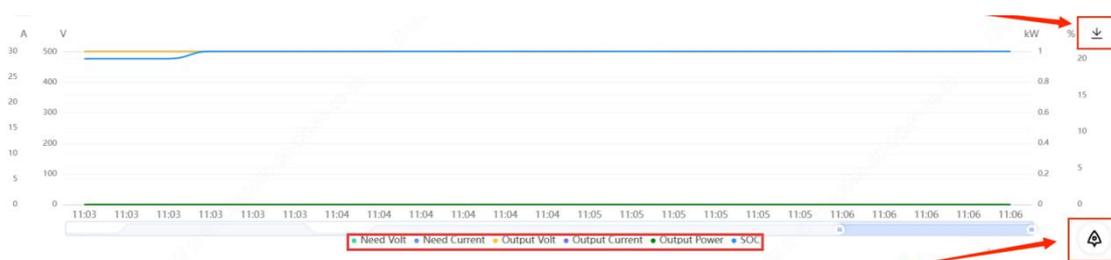
The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

**Table 7-3 Description of Vehicle-side Data for GB Connectors**

| Name                                 | Description  |
|--------------------------------------|--|
| Max Allow Voltage at the Vehicle End | The maximum input voltage that the vehicle battery can withstand           |
| Vehicle End Battery SOC              | The state of charge of the vehicle battery (percentage of remaining power) |
| Demand Voltage                       | The charging voltage currently requested by the vehicle                    |

| Name  | Description   |
|---|---|
| Demand Power                                | The charging power currently requested by the vehicle   |
| Battery Type                                | The chemical model of the battery equipped on the vehicle (e.g., ternary lithium battery, lithium iron phosphate battery, etc.) |
| Battery Capacity                            | The total electrical energy storage capacity of the vehicle battery   |
| Vehicle Interface Voltage Measurement Value | The actual voltage value detected at the vehicle charging interface   |
| Battery Max Temperature                     | The maximum temperature of the current vehicle battery pack   |
| Charge Allow Status                         | The current status of whether the vehicle permits charging to start (e.g., "Forbidden", "Allowed")                              |
| Max Allow Current at the Vehicle End        | The maximum current that the vehicle battery can withstand  |
| Remain Charging Time                        | The estimated remaining time to complete the current charging session   |
| Demand Current                              | The charging current currently requested by the vehicle   |
| BMS Protocol Version Num                    | The version of the communication protocol adopted by the vehicle-side Battery Management System (BMS)                           |
| VIN   | Vehicle Identification Number (the unique identity of the vehicle)  |
| Battery Max Allow Temperature               | The maximum temperature threshold for the vehicle battery to operate safely   |
| Vehicle Interface Current Measurement Value | The actual current value detected at the vehicle charging interface   |
| Battery Min Temperature                     | The minimum temperature of the current vehicle battery pack   |

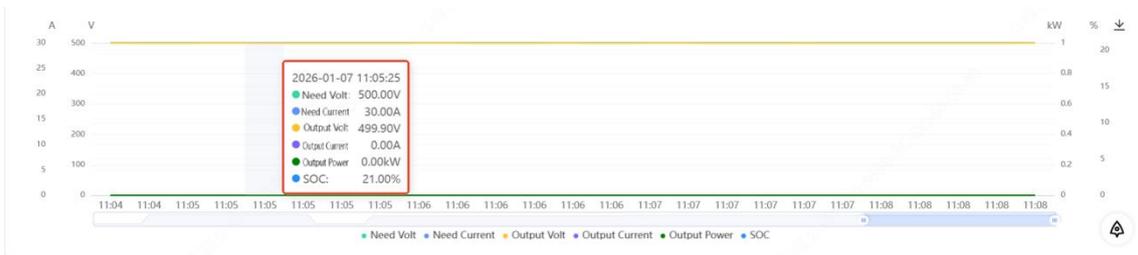
- The charging curve is a trend chart showing the changes of parameters such as demand voltage, current, output power and battery SOC over time during the charging process.



**Figure 7-6 Charging Curve Chart 1**

-  The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.
-  Click the icon  in the upper right corner of the charging curve to download the curve data displayed on the current page to the local folder of the computer; click the icon  in the lower left corner to quickly return to the top of the page.

- Hover the mouse over or click a single curve to view the change curves of demand voltage, demand current, output voltage, output current, output power and SOC of the pile independently, and the detailed values at the clicked time point will be displayed.



**Figure 7-7 Charging Curve Chart 2**

-  The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

## 7.2 Local Card Management

This function is used to manage local charging cards, enabling operations such as card addition, upload and batch export. To use the local card management function, the current account must have administrator or super administrator permissions.

| NO. | Card Number    | Description | Operation              |
|-----|----------------|-------------|------------------------|
| 1   | deyeessyyds005 |             | <a href="#">Delete</a> |
| 2   | deyeessyyds003 | 绿色产业, 美好未来。 | <a href="#">Delete</a> |
| 3   | deyeessyyds002 | 绿色产业, 美好未来。 | <a href="#">Delete</a> |
| 4   | deyeessyyds001 | 绿色产业, 美好未来。 | <a href="#">Delete</a> |
| 5   | deyeessyyds004 | 绿色产业, 美好未来。 | <a href="#">Delete</a> |

**Figure 7-8 Local Card Management Page**



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

- **Local Card Management Operation Process**

- Step 1: Access the Local Card Management page**

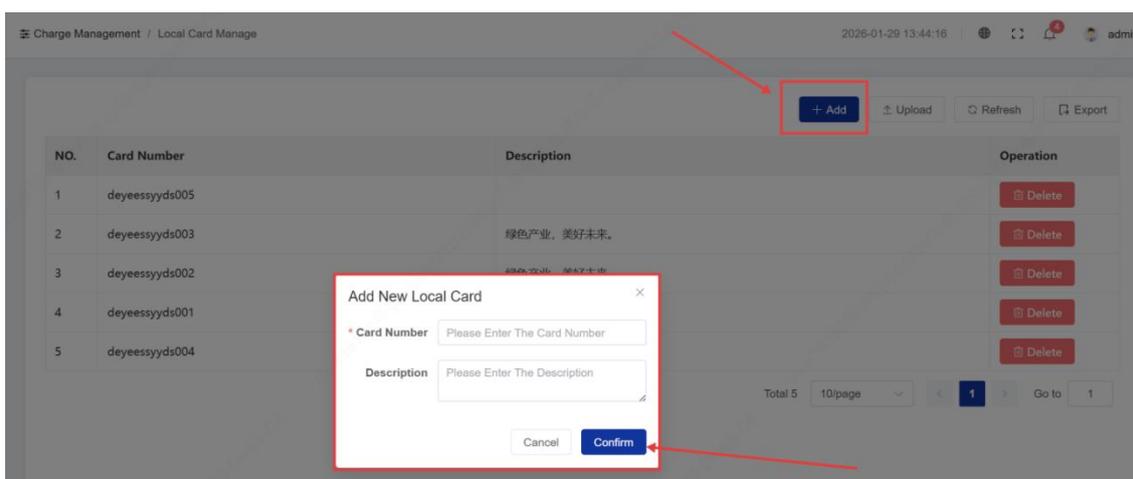
- After logging in to the system, click Charging Management in the left navigation bar → select Local Card Management to enter the local card list page.

- Step 2: Add a single local card**

- Click the + Add button in the upper right corner of the page to open the card information filling pop-up;

- Fill in the Card Number (unique code) and Description (optional);

- Click Confirm, and the new card will be automatically added to the list.



**Figure 7-9 Single Local Card Addition Page**



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

- Step 3: Batch upload local cards**

- Click the Upload button to download the batch import template provided by the system;

- Fill in the information of the cards to be uploaded (card number, description) in the template format and save as a file;

- Select the filled file and click Confirm Upload; the cards will be added to the list in batches after the system verification is passed.

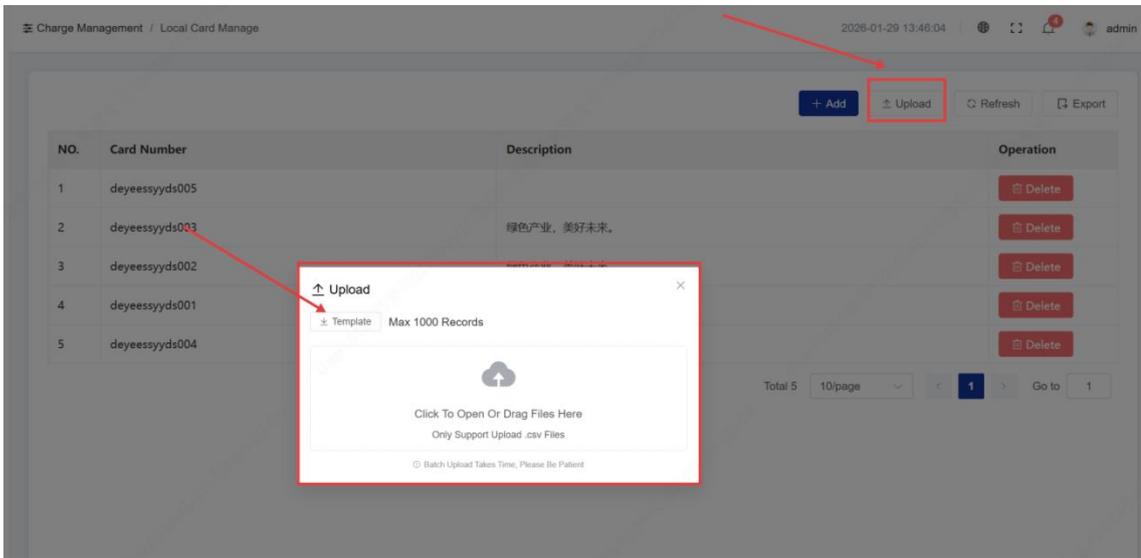


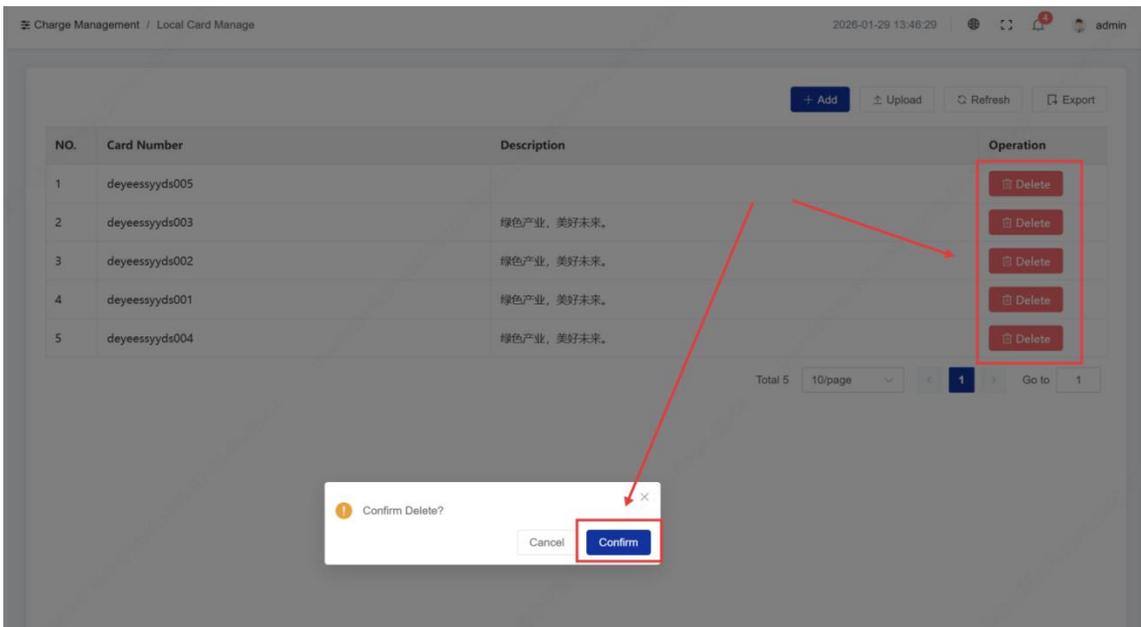
Figure 7-10 Batch Local Card Upload Page



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

#### Step 4: Delete a local card

- In the card list, find the Operation column corresponding to the target card;
- Click the Delete button and click OK in the pop-up confirmation box; the card will be removed from the list (Note: Deletion is irreversible, please operate with caution).



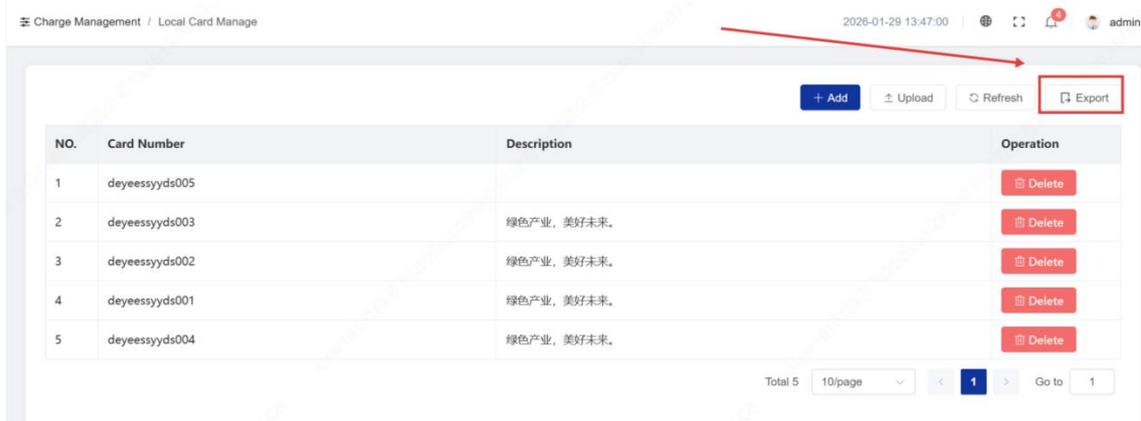
**Figure 7-11 Local Card Deletion Page**



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

### Step 5: Export the local card list

- Click the Export button, and the system will automatically package the card information of the current list and download it as a file (Excel format by default).



**Figure 7-12 Local Card Export Page**



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.



Refresh: Click the Refresh button to update the local card list in real time and obtain the latest card status.

### CAUTION

1. The card number is the unique identifier of a local card; strict uniqueness verification is required when adding or uploading in batches to avoid operation failure caused by duplication;
2. The deletion operation is irreversible; recheck the card information before deletion to avoid accidental deletion of important card data;
3. When uploading in batches, be sure to fill in the data using the system standard template; otherwise, data verification may fail and the import cannot be completed;
4. The exported local card data contains sensitive information, which must be properly stored to prevent information leakage.

## 8 Equipment Maintenance and Upgrade

The Equipment Upgrade module is used to perform firmware upgrade operations on

charging equipment and record upgrade history logs, serving to update device functions, fix vulnerabilities and optimize performance.

## 8.1 Equipment Upgrade

Locate the Equipment Upgrade module in the left navigation menu and click to enter the main equipment upgrade page (the page is divided into two sections: Upgrade Operation Area and Upgrade Log Area).

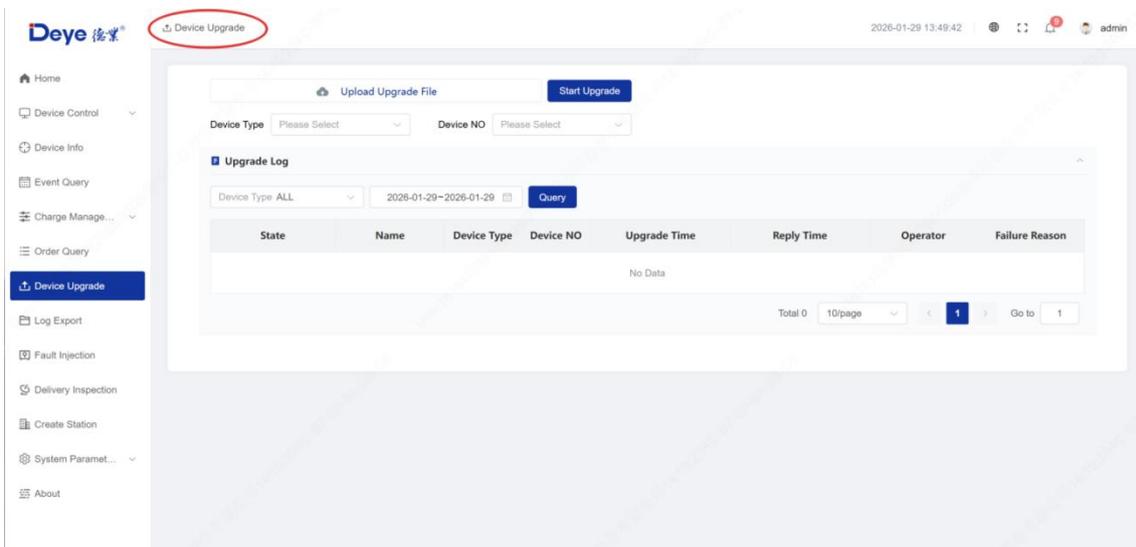


Figure 8-1 Main Equipment Upgrade Page



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

### ● Equipment Upgrade Operation Procedure

#### Step 1: Access the Equipment Upgrade module

- After logging in to the system, click Equipment Upgrade in the left navigation bar to enter the equipment upgrade page.

#### Step 2: Initiate equipment upgrade

- Click Upload Upgrade File, select the firmware upgrade package prepared locally, and complete the upload and verification;
- Select the target device category from the Device Type drop-down box;
- Select the specific device to be upgraded from the Device No. drop-down box;

- After confirming the information is correct, click Start Upgrade, and the system will push the upgrade command to the device.

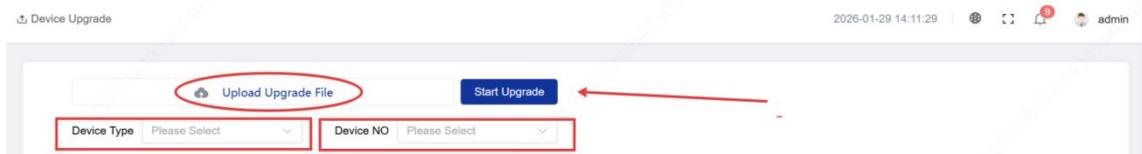


Figure 8-2 Upgrade Operation Page



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.



When performing an HMI or HMI\_AD upgrade, Device Type and Device No. must be selected; for firmware upgrades, these two options are not required.

### Step 3: Query upgrade logs

- Select the device type from the Upgrade Log Area (or keep the default ALL);
- Select the date range;
- Click Query to view the upgrade records for the corresponding period (no data available in the current example).

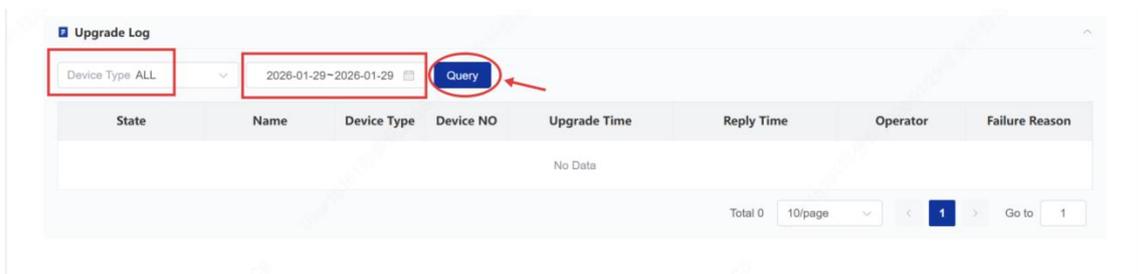


Figure 8-3 Upgrade Log List



There is no requirement for the format of upgrade files, but the file name must match the actual device to be upgraded, e.g., "PCU", "CCU", "PDU", "DCDC", "SECC", "HMI", etc.

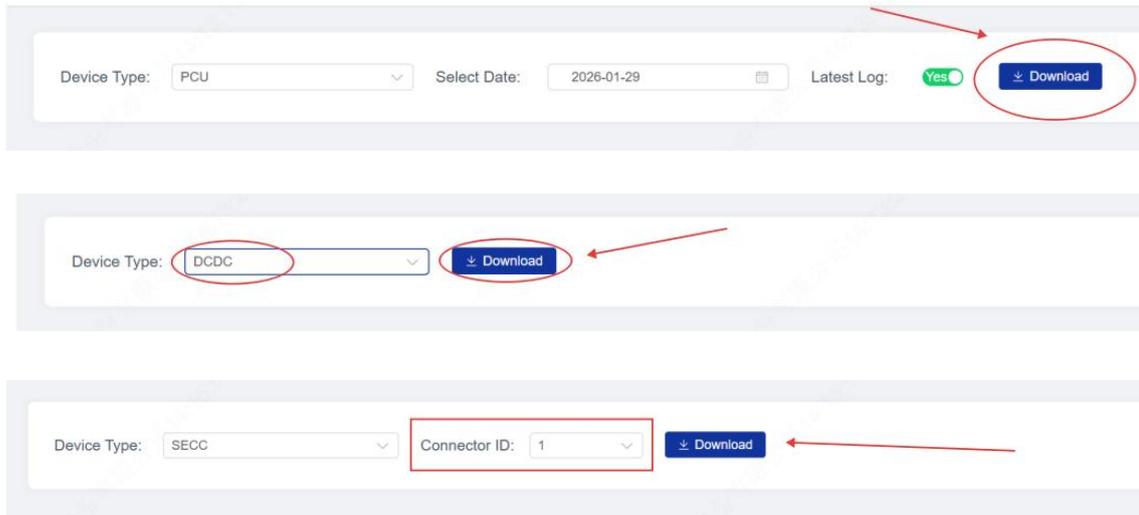


The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

## 8.2 Log Export

Click the Device Type option, select the device logs to be exported, confirm whether

the logs for the selected date are the latest version, and then click the Download button to complete the log export.



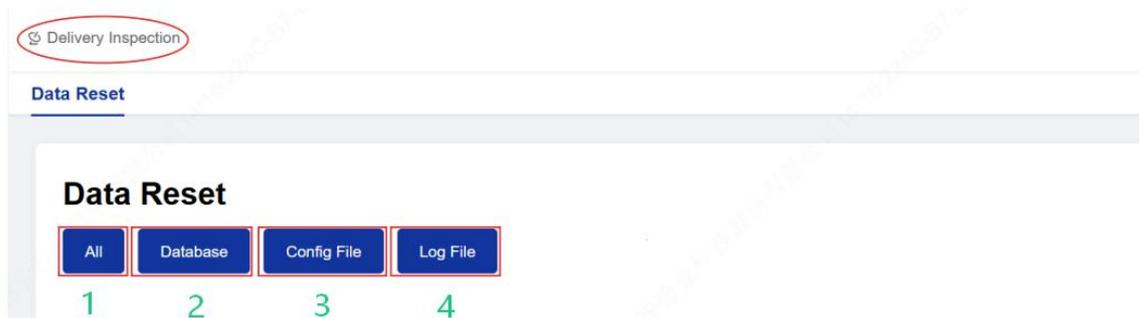
**Figure 8-4 Upgrade Log Export**



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

### 8.3 Factory Inspection

Click the Factory Inspection option to enter the Data Reset page, where the charging pile software data can be restored to different initial states. This function is high risk and high permission, and is usually only performed by administrators or technical personnel during equipment maintenance, fault troubleshooting or equipment decommissioning and recycling; operation with extreme caution is required.



**Figure 8-5 Data Reset Page**



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

**Table 8-1 Description of Data Reset Items**

| No. | Name        | Description   |
|-----|-------------|---|
| 1   | All         | Clears all user data, operation configurations and logs in the charging pile, restoring the device to the factory initial state to the maximum extent at the software level. This operation is irreversible and must be absolutely confirmed before execution.        |
| 2   | Database    | Clears all business operation data while retaining system configurations such as network and certificates. All transaction records, order information, user card information, etc., will be cleared; ensure the data has been uploaded to the cloud before execution. |
| 3   | Config File | Restores all system configuration parameters to the factory default values while retaining business data (order records) and logs. After execution, all previously configured network addresses, OCPP parameters, peripheral models, etc., need to be reset.          |
| 4   | Log File    | Deletes all log files generated during system operation to free up storage space. This is the lowest risk operation, but it is recommended to download or export the logs for fault analysis before execution.  |



Performing the above operations requires administrator operation permission and a secondary confirmation by entering the password.

# Chapter Five: System Configuration and Settings

## 9 Power Station Creation Process

### Step 1: Upload Configuration File

-- Click Load the Configuration File, select and upload the local file, and the main charging station information settings will be automatically populated without manual entry of each item.



Figure 9-1 Load Configuration File



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.



The content of the loaded configuration file is displayed in Figure 9-2.

### Step 2: Manual Configuration

- Manually set the information of the new charging station, enter the information of each field of the charging station in the input box, and click Save to complete the power station creation process.

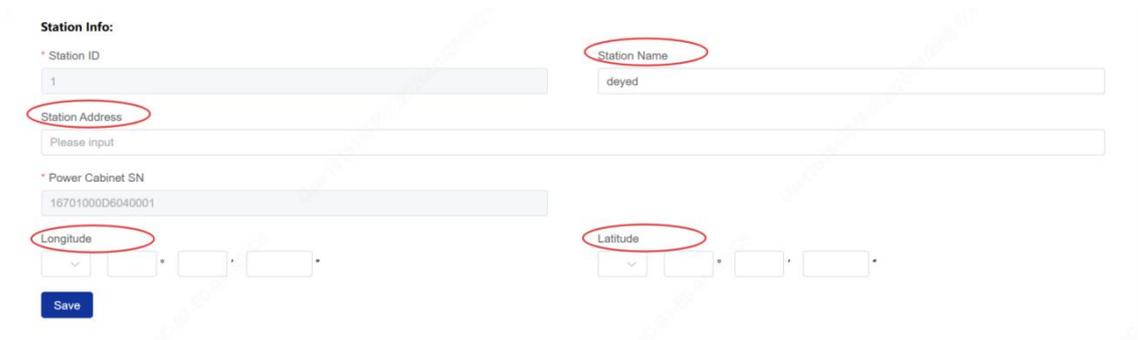


Figure 9-2 Manually Edit Configuration Information



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.



The Power Station ID and Power Cabinet SN Code are pre-set at the factory and cannot be reset or modified for the time being.

### **Step 3: Set Power Station Creation Time**

- Two time setting methods are supported: Custom Time and Synchronize with Current Computer Time. If Custom Time is selected, click Please Select to manually set the time zone and year/month/day/hour/minute/second.



Time synchronization from the network is generally more accurate. Correct time setting is critical to ensuring accurate order timestamp recording, error-free billing and reliable execution of scheduled tasks. Therefore, it is recommended to use the method of synchronizing with computer time.

## **10 System Parameter Settings**

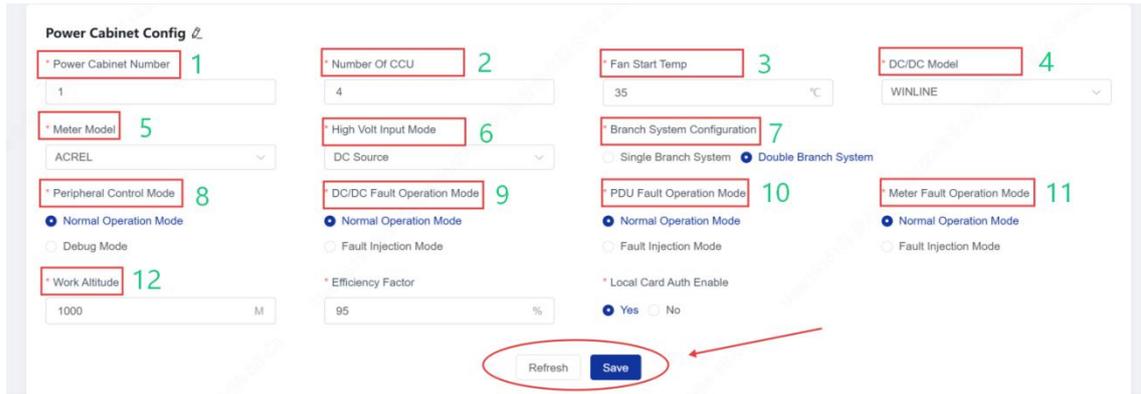
System Parameter Settings mainly include two parts: Device Parameter Configuration and Access Platform Parameter Settings.

### **10.1 General Configuration**

Click the General Configuration option under the System Parameter Settings menu to enter the General Configuration page. On this page, various parameters of the power cabinet, terminal, RFID card swiping and Charge Connect can be set.

#### **10.1.1 Power Cabinet Configuration**

This page is used to configure the hardware parameters, operation mode and protection strategy of the power cabinet, which directly affect the safety, reliability, adaptability and operational efficiency of the charging station. Be sure to save the settings after configuration. Verify whether the configuration takes effect correctly by checking the power cabinet status and reading the meter data through the system monitoring interface.



**Figure 10-1 Power Cabinet Configuration Page**



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

**Table 10-1 Description of Power Cabinet Configuration Items**

| No. | Configuration Item          | Description  |
|-----|-----------------------------|--|
| 1   | Power Cabinet Number        | Corresponds to the number of the actual physical cabinet. Numbering is usually sequential starting from 1, and the maximum system supports 3 power cabinets in operation.  |
| 2   | Terminal Quantity           | Fill in the total number of subordinate charging terminals (i.e., charging piles) connected to the power cabinet.  |
| 3   | Fan Start Temperature       | Set a reasonable threshold according to equipment heat dissipation requirements and ambient temperature, usually ranging from -40°C to 50°C. The fan starts when the DC/DC ambient temperature exceeds the set temperature for 10 consecutive seconds.         |
| 4   | DC/DC Model                 | Select the option that exactly matches the brand and model of the DC/DC module in the cabinet from the drop-down menu.   |
| 5   | Meter Model                 | Select the option that exactly matches the brand and model of the actually connected electric meter from the drop-down menu.   |
| 6   | High-Voltage Input Mode     | Select according to the actual power grid structure of the power station. Select this option if the power station is equipped with an energy storage battery cabinet; other options such as "DC Source" may be selected if there is no energy storage cabinet. |
| 7   | Branch System Configuration | Select based on the internal electrical design of the power cabinet. Refer to Figure 3-2 System Power Diagram, whose default configuration is a dual-branch system.  |
| 8   | Peripheral Control Mode     | Select Normal Operation Mode for daily operation; switch to Debug Mode only when the manufacturer's technical personnel  |

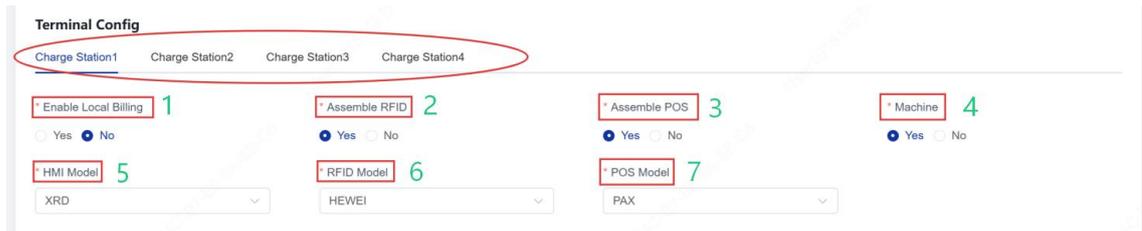
| No. | Configuration Item         | Description  |
|-----|----------------------------|--|
|     |                            | diagnose problems (detailed logs may be output or special operations allowed in this mode).  |
| 9   | DC/DC Fault Operation Mode | Select Normal Operation Mode at all times. Fault Injection Mode is only used for R&D or advanced diagnosis to artificially simulate faults for testing the system fault tolerance capability.  |
| 10  | PDU Fault Operation Mode   | Select Normal Operation Mode at all times. Fault Injection Mode is only used for R&D or advanced diagnosis to artificially simulate faults for testing the system fault tolerance capability.  |
| 11  | Meter Fault Operation Mode | Select Normal Operation Mode at all times. Fault Injection Mode is only used for R&D or advanced diagnosis to artificially simulate faults for testing the system fault tolerance capability.  |
| 12  | Working Altitude           | <p>When the module operates in a high-altitude area, the monitoring system can set the current working altitude value, with an effective setting range of 1000m ~ 5000m. The module will derate operation to different degrees according to the set altitude.</p> <p>Principle: No altitude setting is required when the altitude is below 2000m; however, considering potential poor air duct for long-term system operation, it is recommended to set the actual altitude value when the module's working altitude is above 1000m.</p> |

### CAUTION

1. All models, quantities and numbers must exactly match the on-site physical equipment; otherwise, communication failure or control abnormality may occur.
2. Select Normal Operation Mode for all \*\*\* Fault Operation Modes.
3. Debug Mode and Fault Injection Mode are only for use by technical personnel in specific maintenance scenarios, and must be switched back to Normal Operation Mode after use.
4. Configuration is not allowed when a connector is connected for charging, and the system requires a restart for the saved configuration to take effect.

## 10.1.2 Terminal Configuration

This page is used to manage and configure various peripheral hardware modules connected to the charging pile controller (main control board). Click the actual charging pile to perform configuration settings.



**Figure 10-2 Terminal Configuration Page**



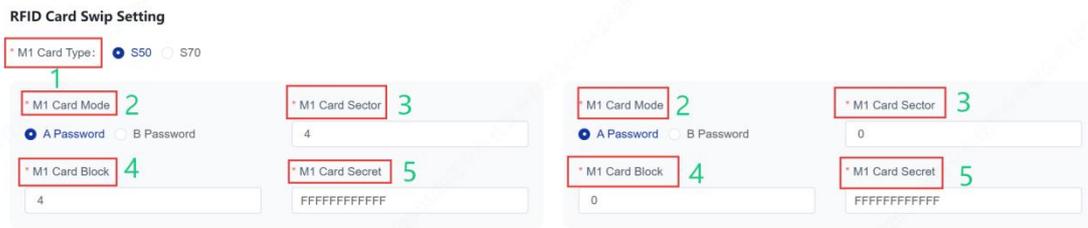
The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

**Table 10-2 Description of Terminal Configuration Items**

| No. | Configuration Item   | Description   |
|-----|----------------------|---|
| 1   | Enable Local Billing | All calculations rely on the cloud; enabling local billing is generally not recommended.  |
| 2   | Assemble RFID        | Select according to whether an RFID card reader module is installed on the charging pile.   |
| 3   | Assemble POS         | Select according to whether a bank card payment module is integrated into the charging pile.  |
| 4   | Machine              | Must be enabled if a 32-inch HMI large screen is selected; this function is not supported if a 10.1-inch HMI is used.   |
| 5   | HMI Model            | Select the option that exactly matches the brand and model of the touch screen (human-machine interface) installed on the charging pile from the drop-down menu.        |
| 6   | RFID Model           | Only required when Assemble RFID is set to "Yes". Select the option that matches the hardware model of the actually installed RFID card reader from the drop-down menu. |
| 7   | POS Model            | Only required when Assemble POS is set to "Yes". Select the option that matches the model of the integrated POS machine from the drop-down menu.                        |

### 10.1.3 RFID Card Swipe Setting

This page is used to configure how the RFID card reader of the charging pile interacts with the user's MIFARE Classic Card (M1 Card for short). An M1 Card contains multiple sectors, each with an independent password and control bits for storing information (e.g., card number, balance, etc.).



**Figure 10-3 RFID Configuration Page**



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

**Table 10-3 Description of RFID Card Swipe Settings**

| No. | Configuration Item | Description  |
|-----|--------------------|--|
| 1   | M1 Card Type       | <p>S50 Card: 1024 bytes, 16 sectors, 4 blocks per sector.</p> <p>S70 Card: 4096 bytes, 40 sectors, 4 blocks per sector for the first 32 sectors and 16 blocks per sector for the last 8 sectors.</p> <p>Must be selected according to the actual card type used by the device. An incorrect selection may cause subsequent sector configuration errors and read/write failures.</p>  |
| 2   | M1 Card Mode       | <p>Select which of the two passwords of each sector to use for identity authentication.</p> <p>Must match the key type written into the card at the factory. Password A is usually used for authentication. Contact the Deye ESS After-sales if the key type is unknown.</p>   |
| 3   | M1 Card Sector     | <p>Specify the sector number for read/write operations. A 1K M1 Card contains 16 sectors (numbered 0 to 15). The specific sector allocation is determined by system design; for example, it is a common convention to store the card ID in Sector 0 and balance data in Sector 4. The sector number must be filled in strictly in accordance with the system design document; otherwise, data positioning will fail.</p>   |
| 4   | M1 Card Block      | <p>Specify the specific block address for operations within a sector. Each sector contains 4 blocks (numbered 0 to 3). The specific structure is determined by system design; generally, Block 3 of each sector is the "Control Block", which stores Password A, Password B and control bits, and user data storage is prohibited here. User data is usually stored in Blocks 0, 1 and 2. However, Sector 0 and Block 0 are used by the manufacturer to store the UID and can only be read, not operated by users.</p> |
| 5   | M1 Card Secret     | <p>This is the password for identity authentication and the only "key" to unlock the specified sector.</p> <p>It is a core configuration item with the highest authority and sensitivity, and must be exactly consistent with the password set by the card issuer when writing the sector. FFFFFFFFFF is the factory default password of M1 Cards with extremely low defense level. It must be replaced with</p>   |

| No. | Configuration Item | Description  |
|-----|--------------------|--|
|     |                    | a high-strength custom password in the production environment; otherwise, the card will face a significant risk of being copied and used fraudulently. |



A single block can store a maximum of 16 bytes of data. Enable the second block data storage area when the data to be stored exceeds 16 bytes.

### 10.1.4 Charge Connect Configuration

This page is used to define the physical interface type, electrical output capability, and connected key safety and metering peripherals of the Charge Connect. Correct configuration is the foundation for ensuring a safe, stable and standard-compliant charging process. The two duplicate sets of configurations on the interface indicate that the charging pile is a dual-Charge Connect pile, and the two Charge Connects can be configured independently.

The screenshot displays the 'Charge Connect Setting' interface, which is divided into two main sections: 'Charge Connect A Setting' and 'Charge Connect B Setting'. Each section contains the following configuration items:

- Charge Connect A Setting:**
  - Connect Type:** Radio buttons for No, CCS1, NACS, CCS2 (selected), and GB.
  - ID:** Input field with value 1.
  - Upper & Lower Limit Output Capability:**
    - Max Volt: 1000 V
    - Max Current: 250 A
    - Min Volt: 150 V
    - Min Current: 0 A
  - Peripheral Model:**
    - Meter: ACREL
    - SECC: GW
    - IMD: GONGYUAN
  - Temp Setting:**
    - Alarm Temp: 70 °C
    - Fault Temp: 93 °C
    - Threshold Of Temp Diff POS-NEG: 15 °C
- Charge Connect B Setting:** (Identical to A, but with ID 2)

At the bottom of the interface, there are 'Refresh' and 'Save' buttons.

Figure 10-4 Charge Connect Configuration Page



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

**Table 10-4 Description of Charge Connect Settings**

| No. | Configuration Item                  | Description  |
|-----|-------------------------------------|--|
| 1   | Connect Type                        | <p>Defines the physical interface and communication protocol standard of the Charge Connect, which directly determines the applicable vehicle range. Must exactly match the actual physical interface of the Charge Connect cable.</p> <ul style="list-style-type: none"> <li>- GB: China National Standard</li> <li>- CCS1: US Combined Charging System.</li> <li>- CCS2: European Combined Charging System.</li> <li>- NACS: Tesla North American Charging Standard.</li> <li>- None: Uninstalled or disabled, no physical Charge Connect equipped.</li> </ul> |
| 2   | ID                                  | <p>Assigns a logical identifier to the Charge Connect. Numbering is usually sequential starting from 1 based on the total number of Charge Connects at the charging station to ensure unique ID for each Charge Connect. This facilitates precise positioning of the operating Charge Connect in system logs, monitoring and scheduling.</p>   |
| 3   | Upper & Lower Limit Output Capacity | <p>When setting the safety boundary of the Charge Connect's output capacity, it is strictly forbidden to exceed the physical bearing upper limit of the Charge Connect cable, connector and internal components.</p> <p>Max Volt: 1000V</p> <p>Min Volt: 150V</p> <p>Max Current: 250A</p> <p>Min Current: 0A</p>  |
| 4   | Peripheral Model                    | <p>The models of the electric meter, IMD and SECC must exactly match the actual hardware models installed on site; otherwise, communication interruption, functional failure or safety monitoring ineffectiveness may occur.</p>   |



The icon  indicates high-speed data transmission between Charge Connect A and Charge Connect B; click it to copy the data parameters of the other Charge Connect with one click.

## 10.2 Platform Access

Click the Platform Access option under the System Parameter Settings menu to enter the Platform Access parameter setting page. On this page, the access configuration for OCPP and the O&M Cloud Platform can be performed.

## 10.2.1 OCPP Configuration

This page is used to establish a safe and stable communication connection between the charging pile and the cloud operation and management platform. Configuration errors will cause the pile to be disconnected, making it impossible to implement core functions such as remote control, fault monitoring, tariff distribution and transaction upload.

**Figure 10-5 OCPP Charging Pile Configuration Page**



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

**Table 10-5 Description of OCPP Charging Pile Configuration**

| No. | Configuration Item                        | Description  |
|-----|---|--|
| 1   | Communication Protocol Version            | Must be strictly consistent with the version supported by the back-end platform. The current platform defaults to Version 1.6, and the value here cannot be modified. If the platform supports Version 2.0.1, it must be adjusted to 2.0.1 accordingly; otherwise, the two parties cannot parse each other's instructions correctly. |
| 2   | Accept Untrusted Certificates             | Must be set to "No" in the production environment. If set to "Yes", the pile will accept any invalid or untrusted certificates, bringing serious security risks. Only enable temporarily during the development and testing phase to troubleshoot certificate issues.  |
| 3   | Allow the Use of Self-Signed Certificates | Must be set to "No" in the production environment. Self-signed certificates are not trusted by public CAs and are for testing only. If the platform uses a self-signed certificate, its CA certificate must be imported into the file specified by the server CA certificate path, but   |



**Figure 10-6 OCPP Protocol Configuration Page**



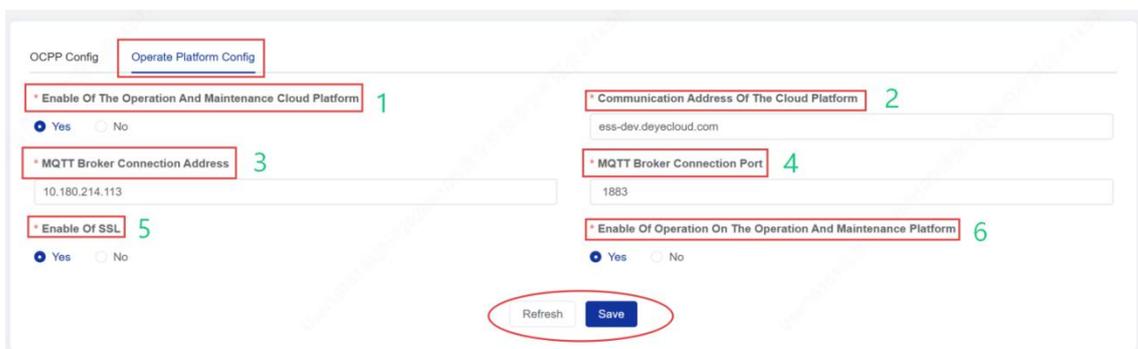
The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

**Table 10-6 Description of OCPP Protocol Configuration**

| No. | Configuration Item                       | Description  |
|-----|--|--|
| 1   | Remote Request Auth for Charge           | It is recommended to set to “Yes” in most scenarios to ensure all transactions are authorized and recorded by the platform.  |
| 2   | Number of Charge Station Connectors      | Must be consistent with the actual quantity. Set to 1 for single-Charge Connect piles and 2 for dual-Charge Connect piles. The platform relies on this to understand the hardware capability of the pile and display the number of available Charge Connects correctly on the interface. |
| 3   | Max Retry Times for Transaction Messages | Set range: 0-3 times; it is recommended to keep the default of 3 times. Too few retries may cause transaction failure due to minor network fluctuations; too many retries may occupy resources meaninglessly when the network is permanently interrupted.                                |
| 4   | Transaction Message Retry Interval       | Recommended set range: 100~3000 milliseconds. An overly short interval will cause unnecessary pressure on the network and server; adjust according to network quality and platform processing capability.  |
| 5   | WebSocket Heartbeat Interval             | It is recommended to use the default value of 300 seconds, with no upper limit set here.   |

### 10.2.3 Operate Platform Config

This page is used to configure the parameters required for the charging pile to establish an MQTT protocol connection with the equipment manufacturer's own O&M cloud platform.



**Figure 10-7 O&M Cloud Platform Configuration Page**



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

**Table 10-7 Description of O&M Cloud Platform Configuration**

| No. | Configuration Item  | Description  |
|-----|---|--|
| 1   | Enable Of The Operation And Maintenance Cloud Platform        | Enabling this function will make the charging pile attempt to connect to the O&M platform according to subsequent parameters. It is usually recommended to enable it for the manufacturer to provide timely technical support.                         |
| 2   | Communication Address Of The Cloud Platform                   | Assigned by the platform provider; must be filled in accurately.   |
| 3   | MQTT Broker Connection Address                                | Assigned by the platform provider; must be filled in accurately without any errors.  |
| 4   | MQTT Broker Connection Port                                   | Must be consistent with the port used by the server. Common MQTT ports: 1883 (unencrypted) and 8883 (SSL-encrypted). The default is the 8883 encrypted port.   |
| 5   | Enable Of SSL   | Must be set to "Yes: for security purposes, to ensure the confidentiality of transmitted data (e.g., passwords, diagnostic logs) and prevent eavesdropping.  |
| 6   | Enable Of Operation On The Operation And Maintenance Platform | It is recommended to enable this function to support operation instructions issued by the platform; if disabled, instructions issued by the platform will not take effect. This function can only be temporarily disabled during debugging in general. |

### 10.3 Time Settings

Time Settings is used to configure the system's time reference, time zone and Network Time Protocol (NTP) rules, ensuring the accuracy of the system time (the time stamps of upgrade logs, order queries and other data rely on this setting).

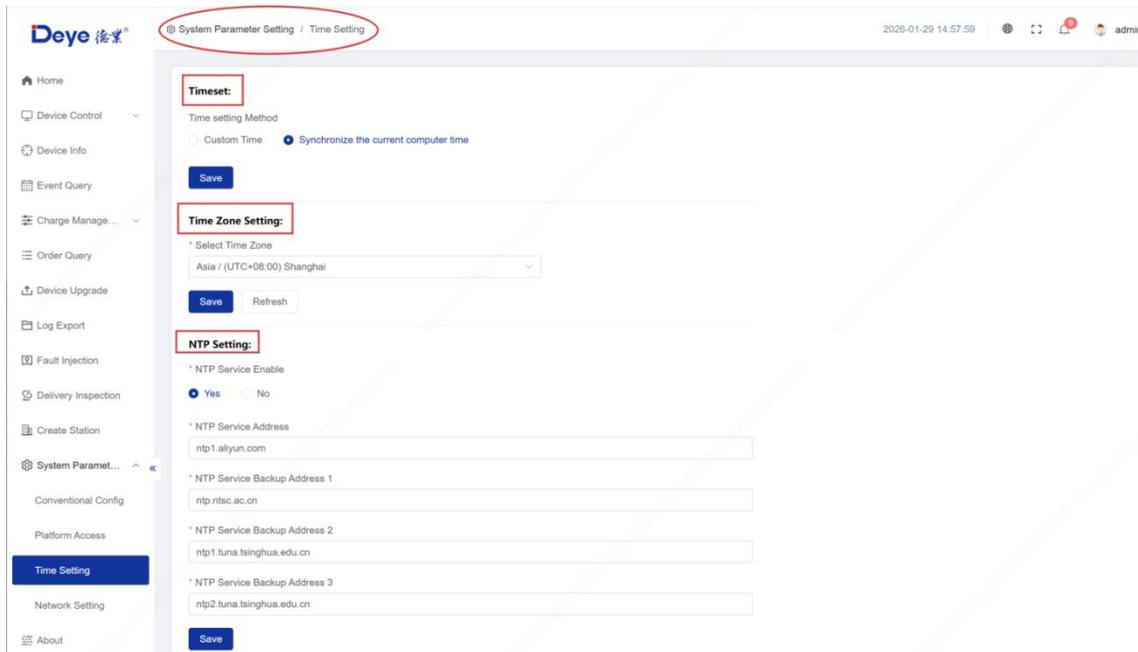


Figure 10-8 Time Settings Main Page



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

### 10.3.1 Time Set

Select the calibration method for the system time:

- Custom Time: Manually enter the specified time (year / month / day / hour / minute / second must be filled in accurately);
- Synchronize the Current Computer Time: Automatically synchronize with the system time of the operating computer (selected by default).
- After confirming the time setting method, click Save to make the configuration take effect.

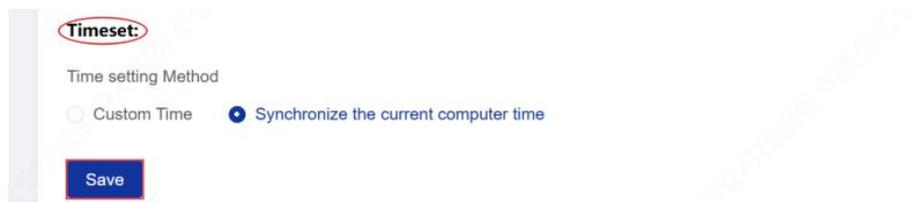


Figure 10-9 Time Calibration Method Page



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

### 10.3.2 Time Zone Setting

Select the time zone (required):

- Select the system's time zone from the drop-down box (the current example is "Asia/Shanghai (UTC+08:00)") to ensure the system time is consistent with the local time zone;
- Save: Click to validate the time zone selection after confirmation;
- Refresh: Reload the time zone list to obtain the latest time zone options.

**Time Zone Setting:**

\* Select Time Zone

Asia / (UTC+08:00) Shanghai

Save Refresh

Figure 10-10 Time Zone Setting Page



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

### 10.3.3 NTP Setting

NTP is used for the system to automatically synchronize with the internet standard time to ensure time accuracy. Fill in the required fields and save for the configuration to take effect:

**NTP Setting:**

\* NTP Service Enable

Yes  No

\* NTP Service Address

ntp1.aliyun.com

\* NTP Service Backup Address 1

ntp.ntsc.ac.cn

\* NTP Service Backup Address 2

ntp1.tuna.tsinghua.edu.cn

\* NTP Service Backup Address 3

ntp2.tuna.tsinghua.edu.cn

Save

**Figure 10-12 NTP Setting Page**



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

**Table 10-8 Description of NTP Settings**

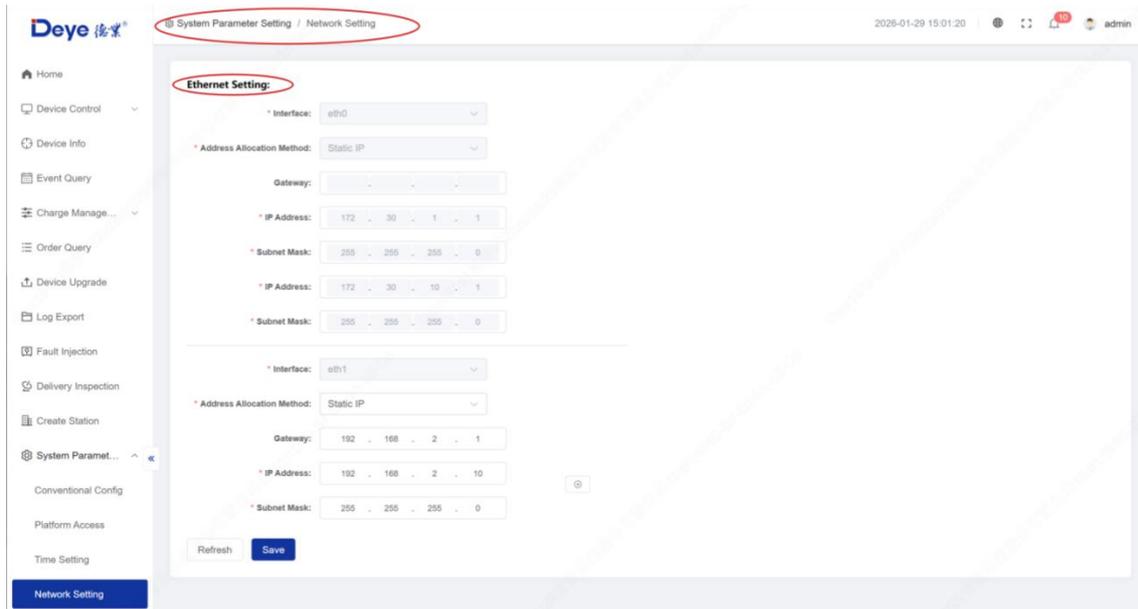
| Name                       | Description   |
|----------------------------|---|
| NTP Service Enable         | Select whether to enable NTP synchronization: <ul style="list-style-type: none"><li>• Yes: Enable automatic time synchronization</li><li>• No: Disable automatic synchronization (manual time calibration required)</li></ul> |
| NTP Service Address        | Primary NTP server address (the current example is "ntp.aliyun.com"), used for priority time synchronization  |
| NTP Service Backup Address | Backup NTP server address (e.g., "ntp.ntsc.ac.cn"), automatically switched to when the primary address is unavailable to ensure synchronization stability   |



1. The time zone must be consistent with the actual system area; otherwise, the time display of logs and orders will be biased.
2. The NTP service address must be a valid public/private network NTP server to ensure network connectivity; otherwise, the automatic synchronization function will fail.
3. All configurations take effect only after clicking Save; please save in a timely manner after modification to avoid configuration loss.

## 10.4 Network Setting

Network Setting is used to configure the Ethernet interface network parameters (IP address, subnet mask, etc.) of the system, ensuring communication connectivity between the system and devices, as well as the external network (which is the foundation for device monitoring, data upload, etc.).



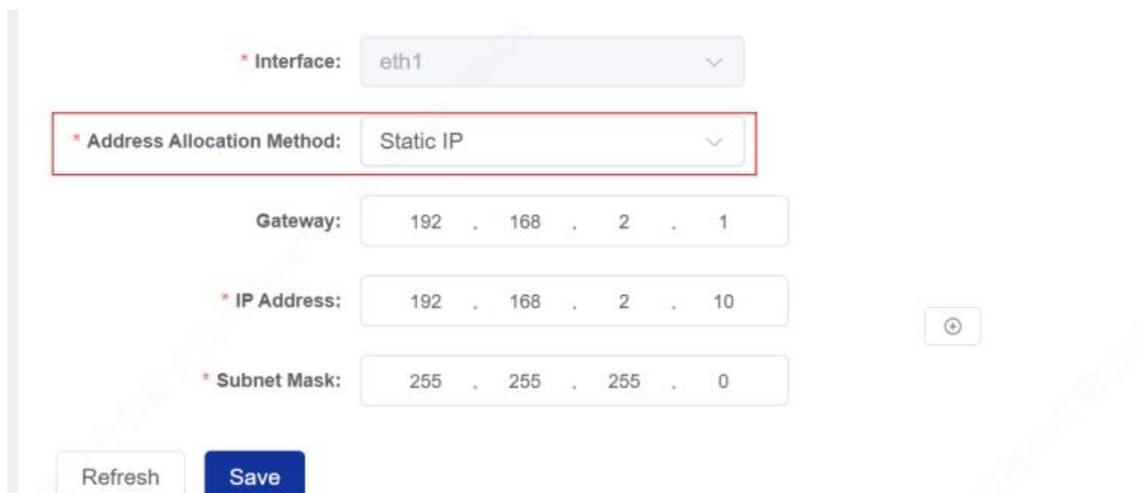
**Figure 10-13 Network Setting Main Page**



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

All fields of Ethernet settings are factory default values, and only the Address Allocation Method is optional:

- Select DHCP (Dynamic Address): The system retains the default settings.
- Select Static IP from the drop-down menu: Fill in the Gateway, IP Address and Subnet Mask; see Section 2.1 Login Steps above for specific filling requirements.



**Figure 10-14 Static IP Setting Page**

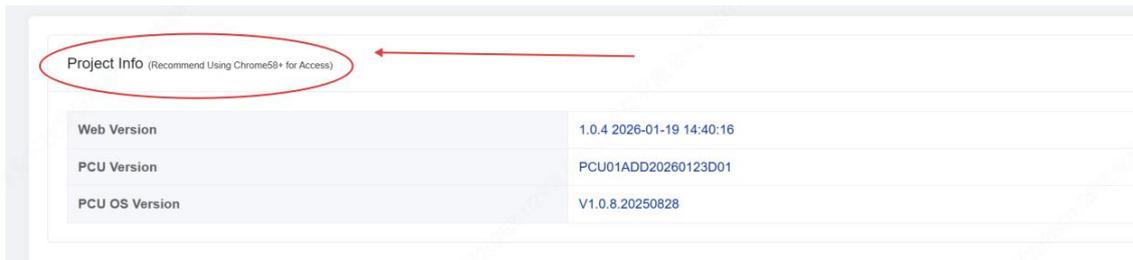


The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.

# Chapter Six: Appendix

## 11 About the System

A brief overview of the Charge-Web project information, including the version details of the Web, PCU and its operating system.



**Figure 11-1 About Charge-Web Project Information**



The figure is for reference only; the actual interface may vary, and the actual interface shall prevail.



The PCU version refers to the version number of the PCU software, while the PCU operating system version refers to the version of the system required to run the PCU software.

## 12 Term Explanation

| No. | Term | Explanation   |
|-----|------|---|
| 1   | PDU  | Power Distribution Unit   |
| 2   | PCU  | Power Control Unit  |
| 3   | CCU  | Charging Control Unit   |
| 4   | PC   | Power cabinet   |
| 5   | CT   | Charging terminal   |
| 6   | OCCP | Open Charge Point Protocol  |
| 7   | SW   | Switch, divided into managed and unmanaged types, with optical and electrical ports |

| No. | Term       | Explanation   |
|-----|------------|---|
| 8   | EMS        | Energy Management System  |
| 9   | ETH        | Ethernet  |
| 10  | CAN        | Controller Area Network   |
| 11  | RS485      | TIA/EIA-485 serial communication standard   |
| 12  | DI         | Digital Input   |
| 13  | DO         | Digital Output  |
| 14  | IP         | Internet Protocol   |
| 15  | MAC        | Media Access Control, (Physical Address)  |
| 16  | TCP        | Transmission Control Protocol (a reliable transmission control protocol)            |
| 17  | Modbus TCP | A Modbus message serial transmission protocol running on TCP/IP                     |
| 18  | Modbus RTU | An open communication protocol mainly based on serial links                         |
| 19  | MQTT       | Message Queuing Telemetry Transport   |
| 20  | HTTP       | Hypertext Transfer Protocol   |
| 21  | NTP        | Network Time Protocol   |
| 22  | TLS        | Transport Layer Security Protocol, supports TLS1.2 with reserved support for TLS1.3 |
| 23  | RFID       | radio frequency identification devices  |

## 13 Feedback and Support

Service hotline: +86-0574-86320560.

Email: [service-ess@deye.com.cn](mailto:service-ess@deye.com.cn)