

Coolmay Gateway BG200 User Manual

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V23.21

Content

Product Description	
I. Instructions before use	1
1.1 Safety precautions	1
II. Introduction of Functional Parameters	3
2.1 Introduction to panel hardware and guide rail installation	3
2.1.1 Panel introduction	3
2.1.2 Hardware parameters	4
2.1.3 Guide rail installation	5
2.1.4 Guide rail disassembly	6
2.2 Protocols supported by BG200	8
III. Networking	9
IV. Wiring diagram	10
4.1 PLC wiring mode of Coolmay series	10
4.1.1. L02 physical wiring diagram	10
4.1.2 L02 actual wiring diagram	11
4.2 Mitsubishi FX series PLC download port wiring mode	12
4.2.1 Mitsubishi FX series 422 physical wiring diagram	12
4.2.2 Mitsubishi FX series 422 actual wiring method	13
4.3 485 wiring (this interface is available for MODBUS RTU/FX series)	14
4.3.1 485 physical wiring diagram	14
4.3.2 485 actual wiring diagram	15
4.4 S7-200SMART wiring	16
4.4.1 S7-200SMART Physical wiring diagram	16
4.4.2 S7-200SMART actual wiring diagram	17
V. Device binding	18
5.1 Log in Coolmay Cloud	18
5.2 Add device	19
5.3 Create template	20
5.3.1 Coolmay PLC template	20
5.3.2 Siemens S7-200 smart PLC template	21
5.4 Variables configuration	22
5.5 Communication module binding	23
5.6 Tips	27
5.7 Baud rate setting	28
VI. Equipment Dashboard Editing	29
6.1 Configuration design	29
6.2 Background color	30
6.3 Numerical display	31
6.4 Dash board	32
6.5 Water level chart	34
VII. Equipment strategy	36
7.1 Timed task	36
7.2 Independent configuration (multiple project-based equipment configuration functions in different locations)	37
7.3 Device linkage	37
VIII. Operation Center	38
8.1 Device map	38
8.2 Operational Dashboard	38
8.2.1、Add device configuration interface	41
8.2.2、Add project configuration (independent configuration interface)	42
8.2.3. Add device map	43
8.2.4 Add real-time dynamic graph	44
IX. Data center	45
9.1 History (query)	45
9.2 History (export)	47

9.3 Device online and offline (device online and offline record query)	49
9.4 Alarm record (query)	50
9.5 Alarm log (export)	50
9.6 Report management	50
9.7 Data analysis	50
X. Message center	51
10.1 Inbox	51
10.2 Notification strategy (WeChat alarm function)	52
10.2.1 WeChat alarm function introduction	52
10.2.2 WeChat alarm configuration steps	53
10.3 Alarm point configuration	57
XI. WeChat Mini Programs	59
XII. Gateway usage steps (beginners must read)	60
12.1 Operation steps of CX3G and BG200 (all Coolmay PLCs can be operated according to this step) ..	60
XIV. Remote upload and download	71
13.1 Install the transparent transmission software BoxManager	71
13.2 Serial port remote download	74
13.3 Remote download via network port	79

Product Description

Equipment introduction:

Remote Gateway BG200

Coolmay universal cloud gateway is a gateway that is universal for both network and serial ports. It is mainly designed for the application of industrial control equipment at home and abroad. It can cope with various modules in the market, such as instruments, analog modules, communication sensors, intelligent control modules, various PLCs, and various industrial control equipment. It can read and write all its equipment data remotely, so as to simply control remote equipment in many ways. For example, computer control, WeChat official account monitoring alarm data, mobile phone APP WeChat applet control, and configuration use function. In addition, the Coolmay cloud can be used to realize the cloud configuration function, so that the data can be displayed on the remote public screen in real time, and it supports wired transmission, WIFI transmission, 4G transmission and other network transmission methods;

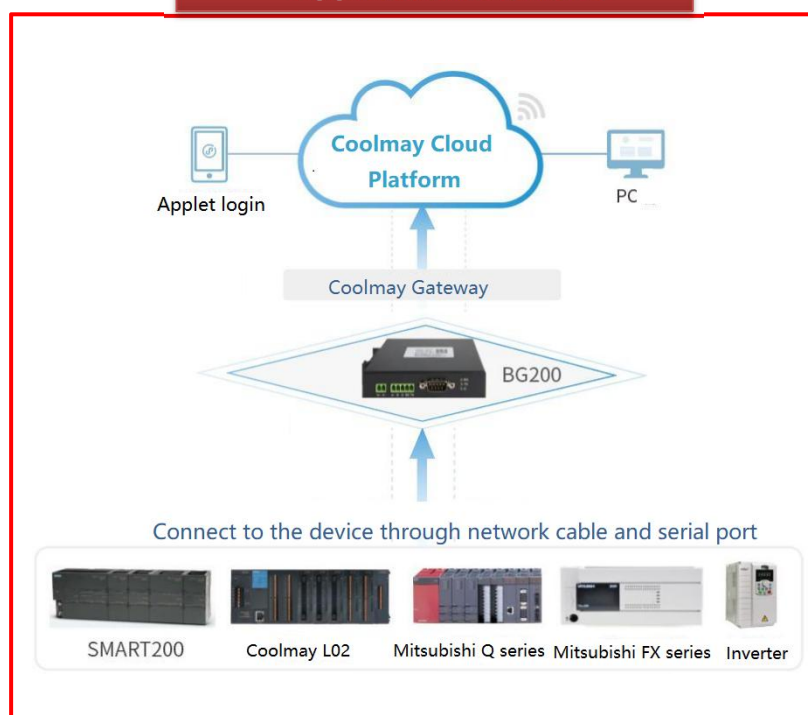
On the cloud platform can also make a series of cloud platform management system, can apply for repair prompt function, Wechat alarm prompt function, data online query function, data export function, map positioning function, data report, alarm data online query export, real-time view of the device online up and down running status, and with a bar chart, curve, you can specify a time to view a variety of data trends at the time.

Main functions and characteristics of the equipment:

Functional characteristics

- Standard 485 interface, supporting standard MODBUS RTU protocol
- Standard RJ45 interface, supporting standard MODBUS TCP protocol
- MODBUS protocol supports up to 32 slave stations
- Standard 232 DB9 interface, supporting data acquisition interface
- Cloud platform configuration function
- Mobile WeChat applet
- remote control send value
- Communication alarm function WeChat official account push alarm function
- Push alarm function for specified size change of data
- Data online and offline query function
- Alarm record query and export function (no upper storage limit temporarily)
- Historical data query and export function (there is no upper storage limit temporarily)
- Device data interaction function

Application scenario

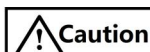


I. Instructions before use

1.1 Safety precautions

Remote gateway BG200

 **Danger** Incorrect operation may cause unnecessary injury to personal safety, or even damage other people's safety;

 **Caution** Incorrect operation may cause personal injury or even death, resulting in loss of life and property;

 **Note** Incorrect operation may cause product damage or property loss;

- Before installation, operation, maintenance and inspection of this product, please read carefully this operation manual and all attached materials of other relevant equipment;
- Use correctly. Please use it after you are familiar with all instructions, safety information and precautions about the equipment;
- Please read the operation instructions and precautions carefully before use to reduce accidents. The person responsible for installation and operation should strictly follow the safety specifications. The safety problems in the instructions do not represent all, but only represent the supplement of the safety precautions;
- When connecting the external equipment, please pay attention not to hurt the personnel on the remote equipment site, and pay attention to the on-site cooperation to use the product safely;
- When using the equipment safely, do not force it to be used when it will endanger the safety of other people's lives and property, and deliberately cause safety accidents;

Safety first

About installation safety:

- ◆ Do not install the equipment in places with high dust to avoid fire;
- ◆ Do not install the equipment in the place with high air humidity to avoid causing the equipment not to work normally and easy to cause short circuit;
- ◆ Do not install the equipment in the place with corrosive gas to avoid direct corrosion and aging of the equipment;
- ◆ The equipment shall not be installed with combustible gas and oil fume to avoid explosion;
- ◆ Do not install the equipment in the place where there are water drops, chemicals and wire splashes. The vaccine will cause equipment short circuit and cause fire;
- ◆ The equipment shall not be installed in places with wet environment and condensation, water droplets, dripping, splashing and other conditions to avoid equipment short circuit damage;

Remote gateway BG200

-  **Note** Avoid connecting high voltage and high current or cables;
-  **Note** Do not over-voltage the power supply, over-voltage will cause equipment damage;
-  **Note** Make sure that the communication line is correct when connecting the communication lines, and do not connect the power line to the communication port;
-  **Note** When stripping and cutting the wire, pay attention that the copper wire shall not splash onto the equipment port to avoid short circuit and burning and causing fire;
-  **Note** Do not connect the power interface in reverse, and immediately adjust the wiring method and re-wire if the connection is reversed;

Safety first

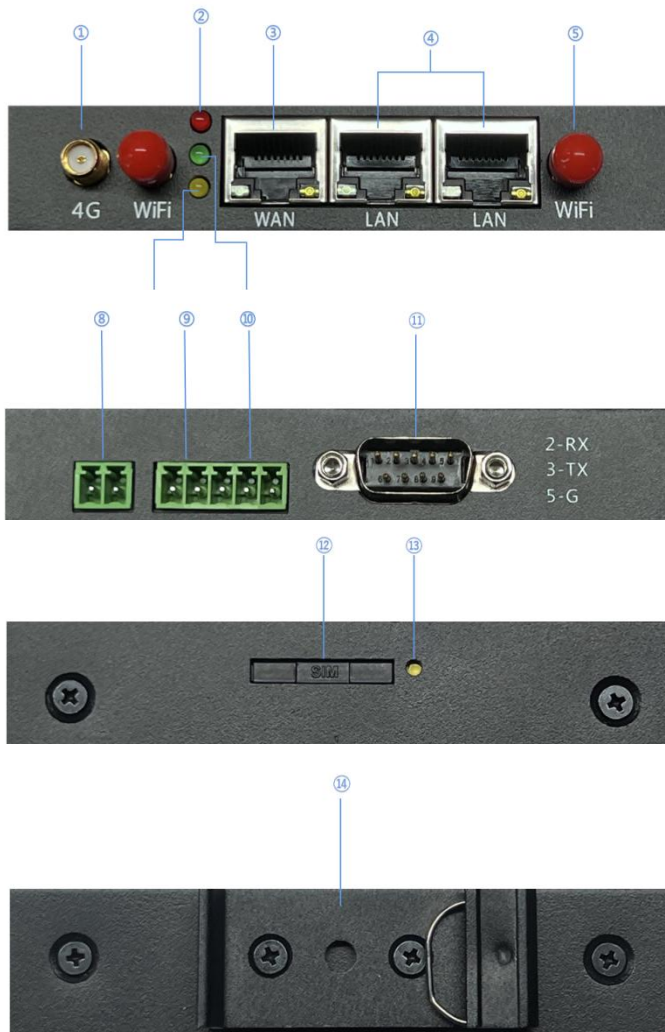
- ◆ Do not wire in the power-on state, please perform wiring operations after power-off;
- ◆ Do not operate the power line interface when it is powered on, which may cause sparks and fire;
- ◆ Do not operate the power interface when the power is on, which is easy to cause short circuit, and it is easy to burn the equipment while causing short circuit;
- ◆ When wiring the communication line, pay attention to whether the signal sending and receiving terminals are correctly wired;
- ◆ The communication interface does not need to be connected to the power supply, but only needs to be inserted into the dedicated line or self-operated signal line;
- ◆ When connecting the network port, ensure that the network port WAN port and LAN port are not connected to the same switch or router;
- ◆ Do not expose the wire head when installing and wiring, which is easy to cause short circuit;
- ◆ When the installation is completed or not in use, it is necessary to keep the integrity of the equipment in accordance with the 6S management rule;
- ◆ The installation must be installed in a safe place, not in a place that is easy to fall out, so as to avoid casualties and equipment damage;

II. Introduction of Functional Parameters

2.1 Introduction to panel hardware and guide rail installation

2.1.1 Panel introduction

Note: Do not connect the WAN port and the LAN port to the same switch or router when use WAN port networking



Remote gateway BG200

- ① 4G antenna interface
- ② WIFI indicator
- ③ WAN port (dedicated for networking)
- ④ LAN port (for connecting devices)
- ⑤ WIFI antenna interface
- ⑥ System indicator
- ⑦ 4G indicator
- ⑧ 24V DC power interface
- ⑨ 485 terminal interface
- ⑩ 232 terminal interface
- ⑪ 232 DB9 pin male (standard 235 male definition)
- ⑫ Card slot
- ⑬ Slot pinhole
- ⑭ Stuck rail

2.1.2 Hardware parameters

Product specification:

Model	→	BG200
Rated power	→	< 5W
Rated voltage	→	DC9-38V working voltage
Maximum power consumption	→	12W
Working temperature	→	-10~60℃
Ambient humidity	→	10~90%RH (no condensation)
Networking method ①	→	4GSIM Telecom/Unicom/Mobile
Networking method ②	→	Ethernet
Networking method ③	→	Wi-Fi
CPU	→	580MHz MIPS
RAM	→	16MB Flash + 128MB DDR2
VPN	→	Support
Ethernet	→	1↑WAN, 2↑LAN
Serial port	→	RS232 / RS485
Dimensions	→	106mm * 97mm * 23mm (not including antenna and mounts)

2.1.3 Guide rail installation

- ① Select the installation location of the equipment to ensure that there is enough space.
- ② Take out the attached screws and metal buckle. Install the buckle on the machine body with screws.
- ③ The buckle can be directly installed on the guide rail after installation.

Note: The guide rail is 35mm standard guide rail, which needs to be equipped by itself

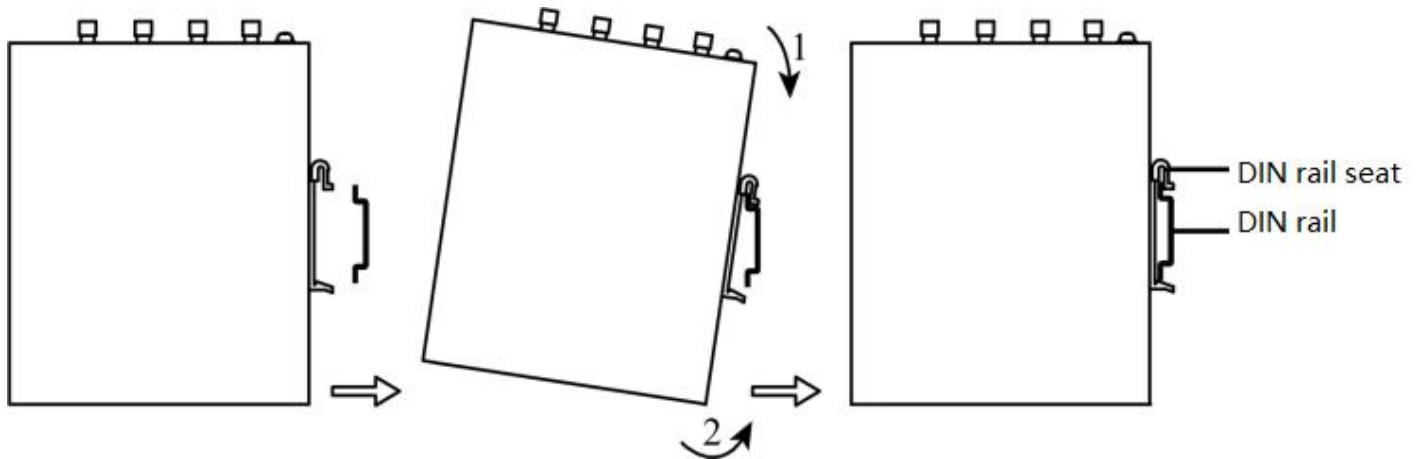


Fig.2.1.3.1

2.1.4 Guide rail disassembly

The specific steps are as follows:

- ① As shown by the arrow 1 in Figure 4-2, press the equipment downward to make the lower end of the equipment free from the DIN rail.
- ② Turn the equipment in the direction of arrow 2, and move the lower end of the equipment outward at the same time. After the lower end is separated from the DIN rail, lift the equipment upward to remove the equipment from the DIN rail.

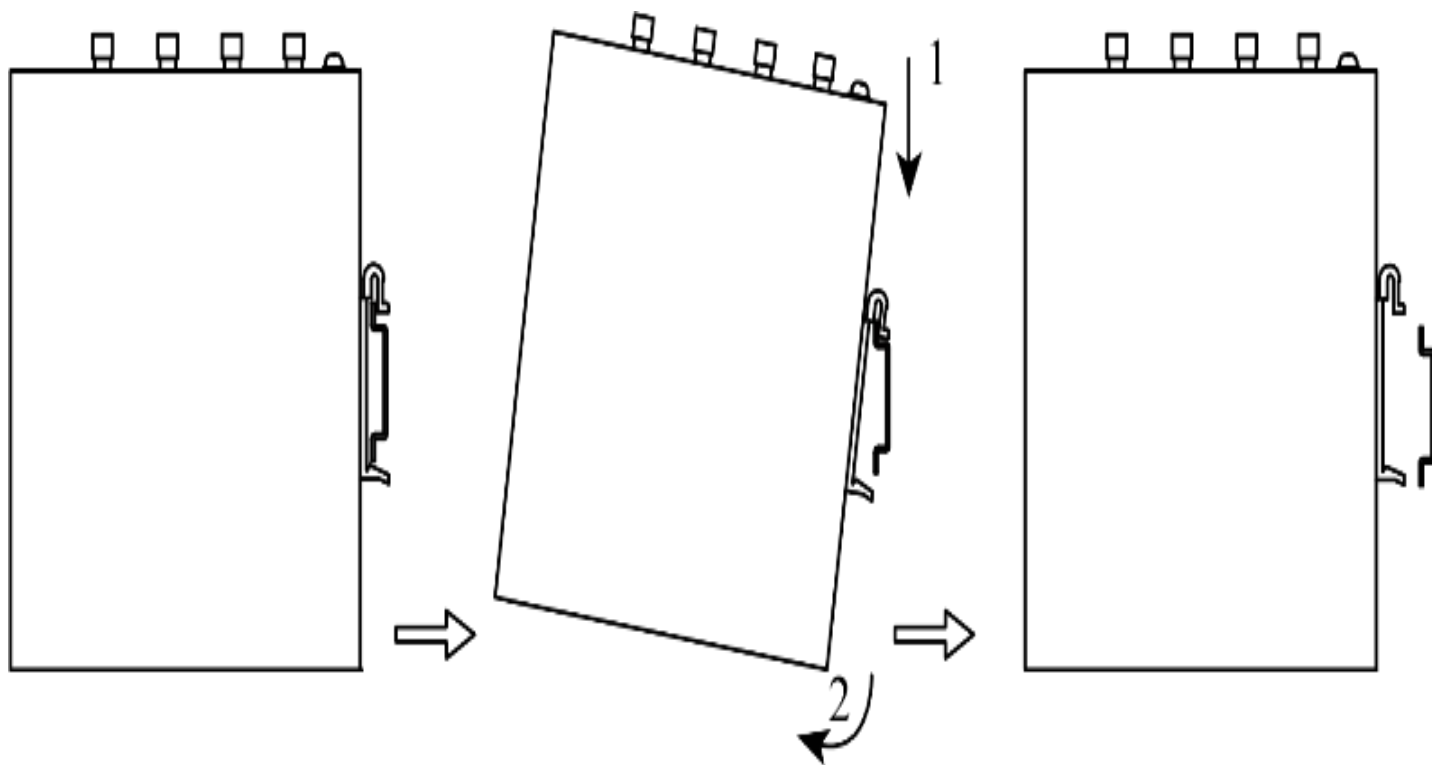


Fig. 2.1.4.1

2.1.5 Structural dimensions

Note: The structure size does not include the wiring part and terminal antenna part

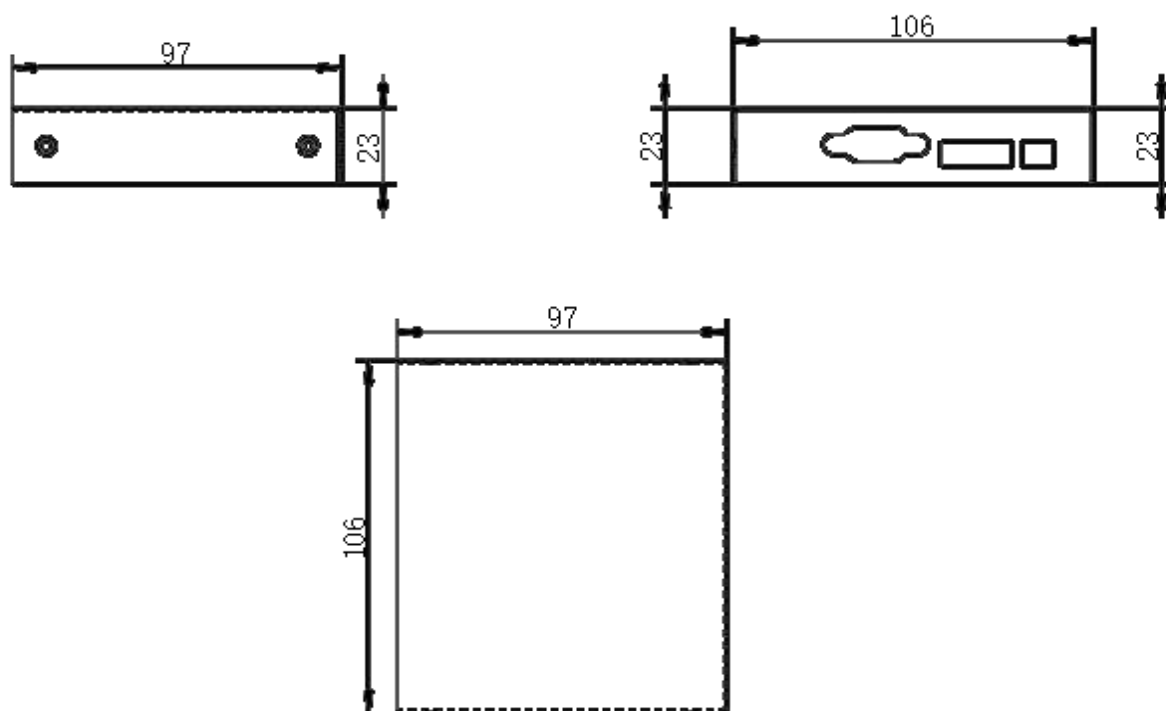


Fig. 2.1.5.1

2.2 Protocols supported by BG200

Interface Protocols	Support or not	485 232	RJ45
Siemens SMART200	yes		√
Mitsubishi FX1/2/3 series	yes	√	
Mitsubishi Q/5U	yes		√
Coolmay series PLC	yes	√	√
MODBUS RTU protocol	yes	√	
MODBUS TCP protocol	yes		√

III. Networking

BG200 supports 3 modes of connecting to the cloud:

- ① Connect the WAN port of BG200 to the network interface to automatically acquire the network without modifying the parameters;
- ② BG200 has a built-in 4G card slot. Inserting the 4G card into the card slot can automatically acquire 4G network signals. It supports mobile, Unicom and telecom cards. Direct access can automatically acquire the network without any parameter settings;
- ③ WIFI needs to link to the local WIFI network, and the configuration method is linked by the specified method;



Note:

WAN port is the connection port to connect the network
LAN port is used to connect industrial control equipment

IV. Wiring diagram

4.1 PLC wiring mode of Coolmay series

4.1.1. L02 physical wiring diagram

Pin-Definition	Gateway	PLC
Sending end	2	5
Receiving end	3	4
GND	5	8

The default PLC download port of each series of Coolmay is 232 interface, which needs to be connected with standard cable. Use DB9 mouse header 232, defined in the table above;

Communication method ① DB232 connect to round head 232 (**standard communication method**)
 Communication method ② AB port of the gateway connect to the AB port/A2B2 port of the PLC
 Communication method ③ The network port of the gateway connect to the network port of the PLC

Protocol selection: Modbus/Coolmay-3G-L02 series - serial port

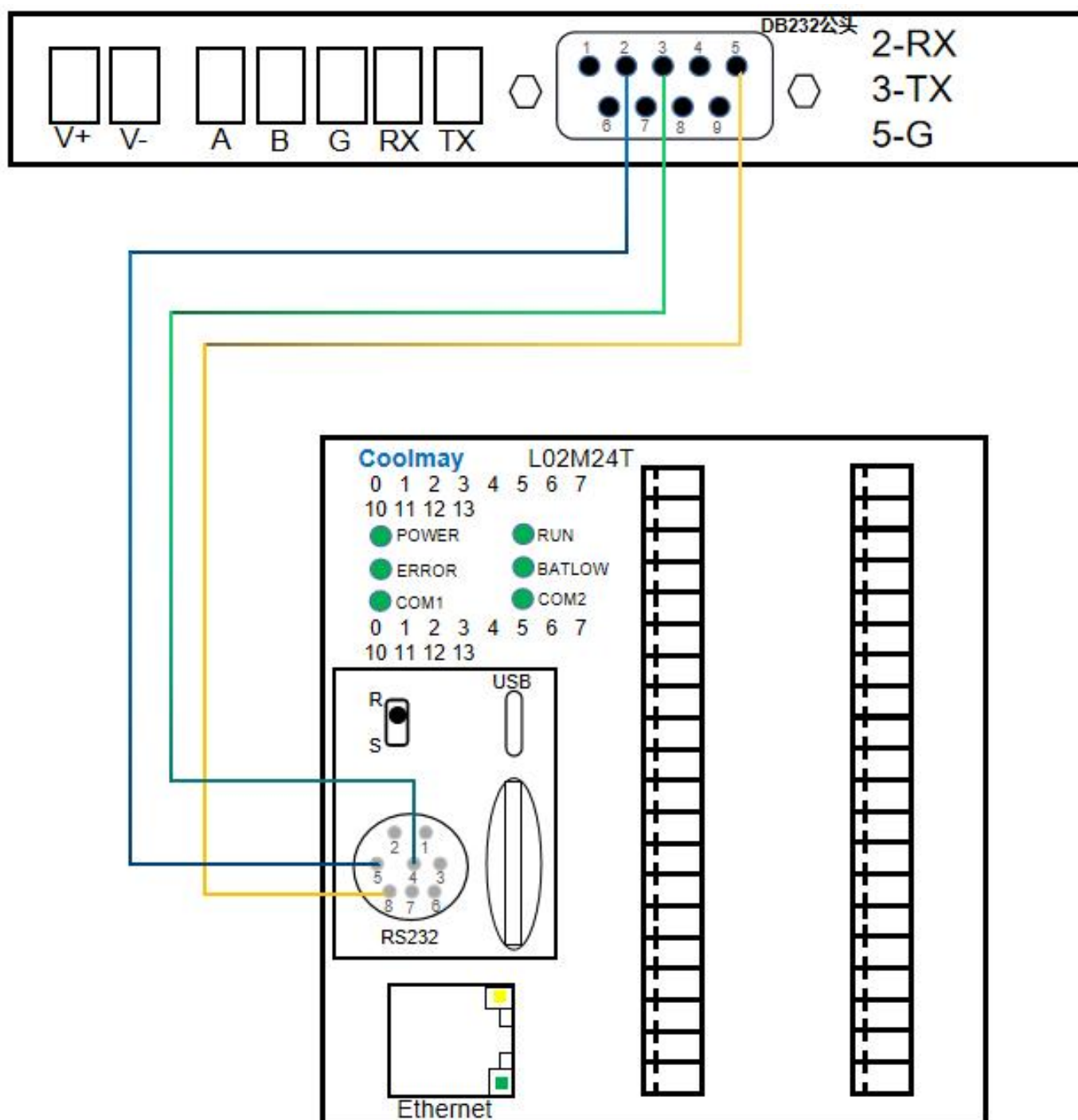


DB9 232 to round eight-pin
232 communication line



4.1.2 L02 actual wiring diagram

Pin-Definition	Gateway	PLC
Sending end	2	5
Receiving end	3	4
GND	5	8



4.2 Mitsubishi FX series PLC download port wiring mode

4.2.1 Mitsubishi FX series 422 physical wiring diagram

Gateway		PLC
2	232 ↔ Convert 422	1
3		2
5		4
		7



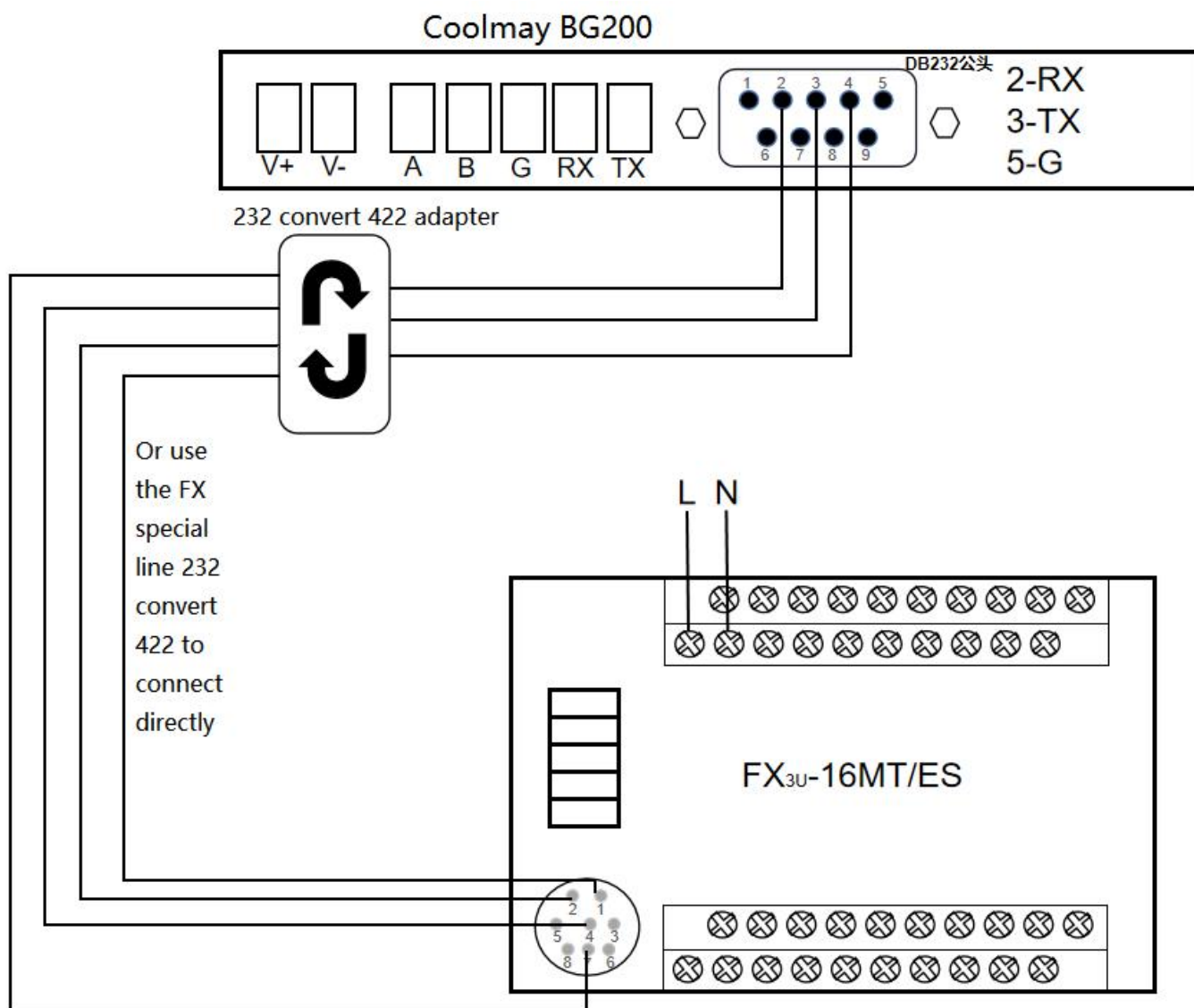
To connect with the Mitsubishi FX series PLC interface, you can directly use the 232 to 422 dedicated line, or use the above table for terminal wiring;

Protocol selection: Modbus/Mitsubishi-FX series-serial port



4.2.2 Mitsubishi FX series 422 actual wiring method

Gateway		PLC
2	↔ 232 Convert 422	1
3		2
5		4
		7



4.3 485 wiring (this interface is available for MODBUS RTU/FX series)

4.3.1 485 physical wiring diagram

BG200	Inverter
A	485-
B	485+

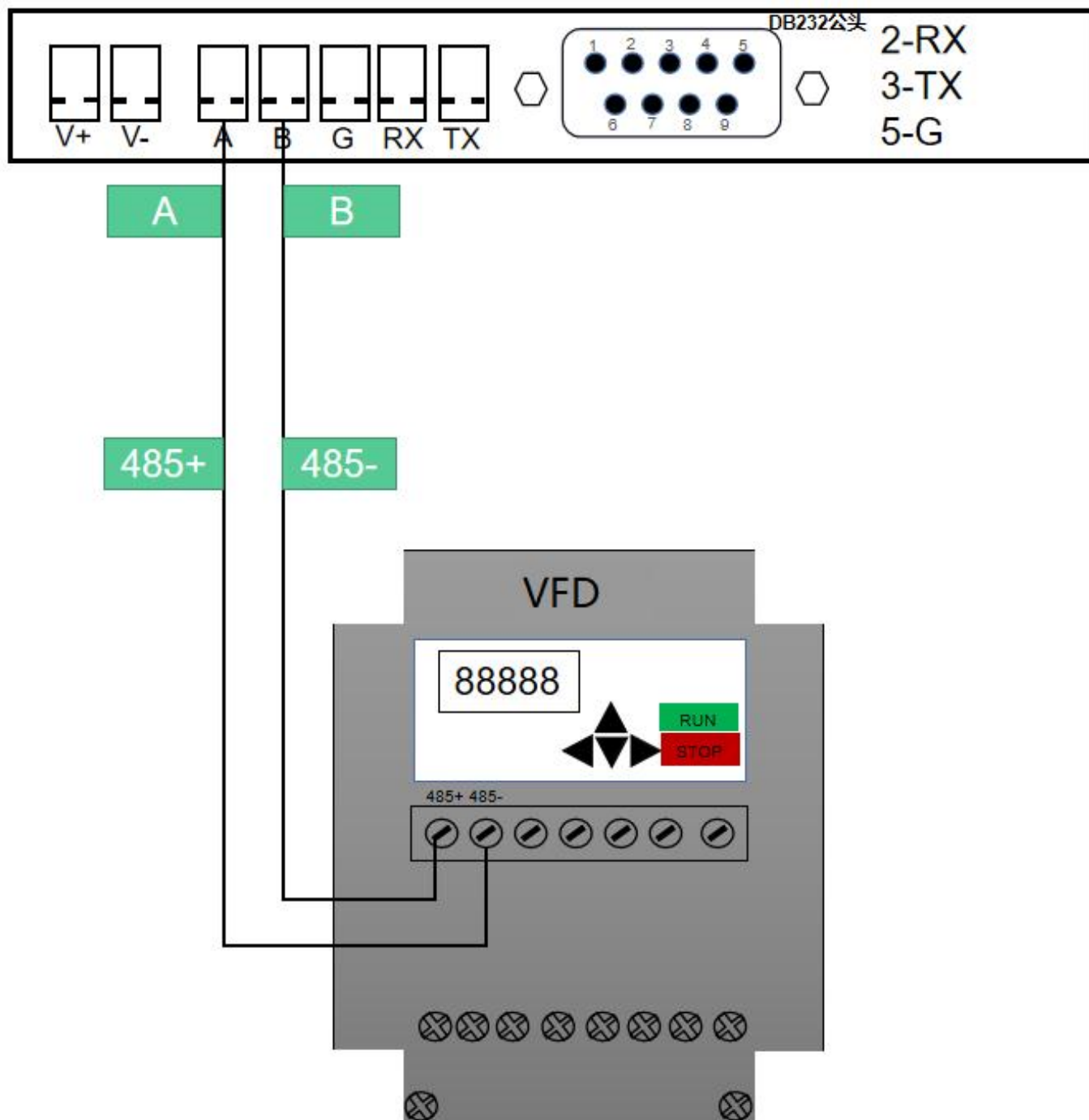


The AB port of BG200 can be connected to various industrial control equipment (equipment supporting MODBUS RTU protocol and Mitsubishi PLC supporting FX series)

Protocol selection: Modbus/Modbus/Modbus RTU



4.3.2 485 actual wiring diagram



4.4 S7-200SMART wiring

4.4.1 S7-200SMART Physical wiring diagram



Docking with S7-200SMART only needs to be connected with each other with a network cable;

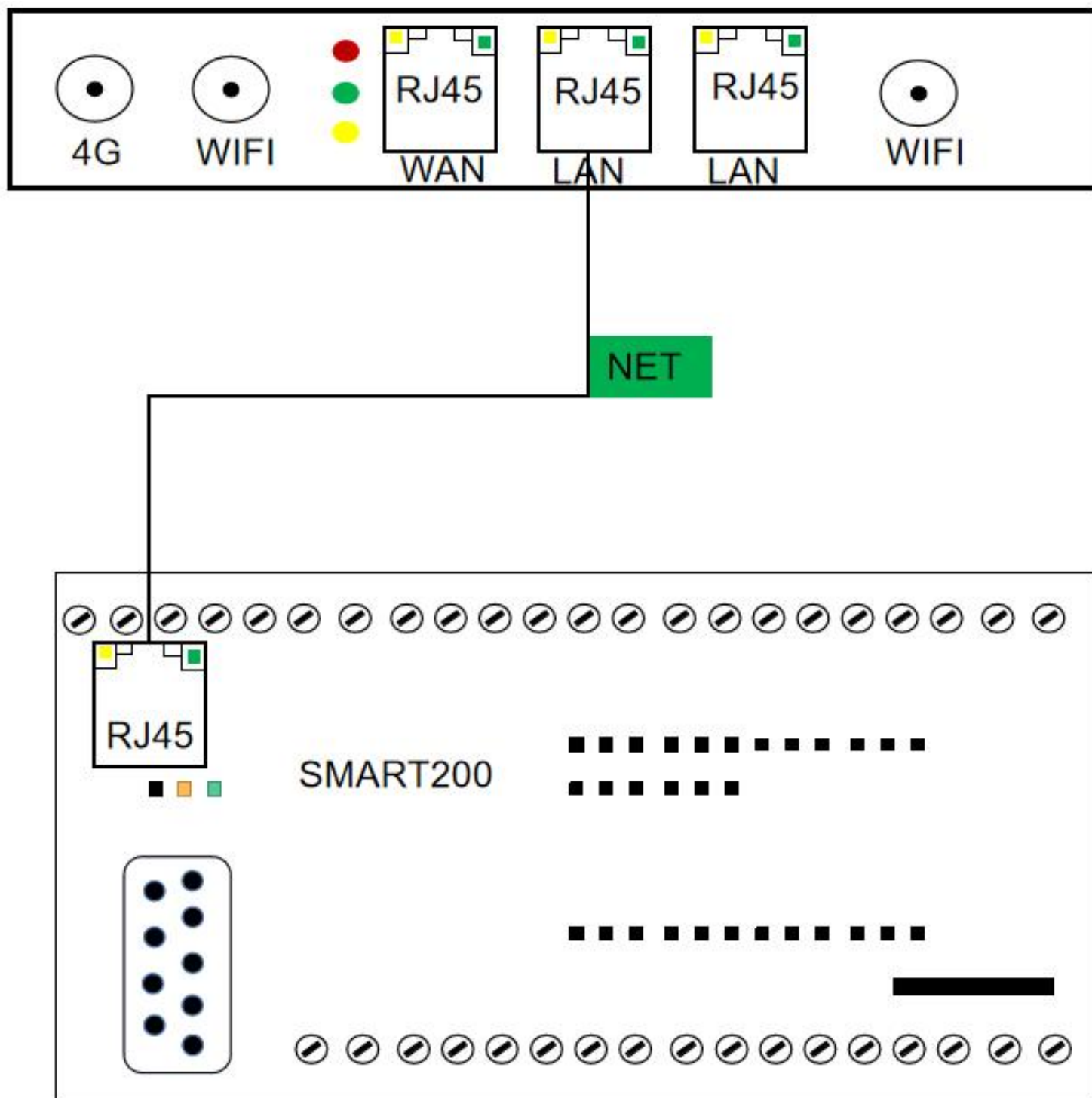
Protocol selection: Modbus/Siemens/S7-200 Smart TCP

Note: It must be connected to the LAN port, not the WAN port;

NET



4.4.2 S7-200SMART actual wiring diagram



V. Device binding

5.1 Log in Coolmay Cloud

Enter “cloud.coolmay.com” to Coolmay cloud.
Enter username and password.



Account Login

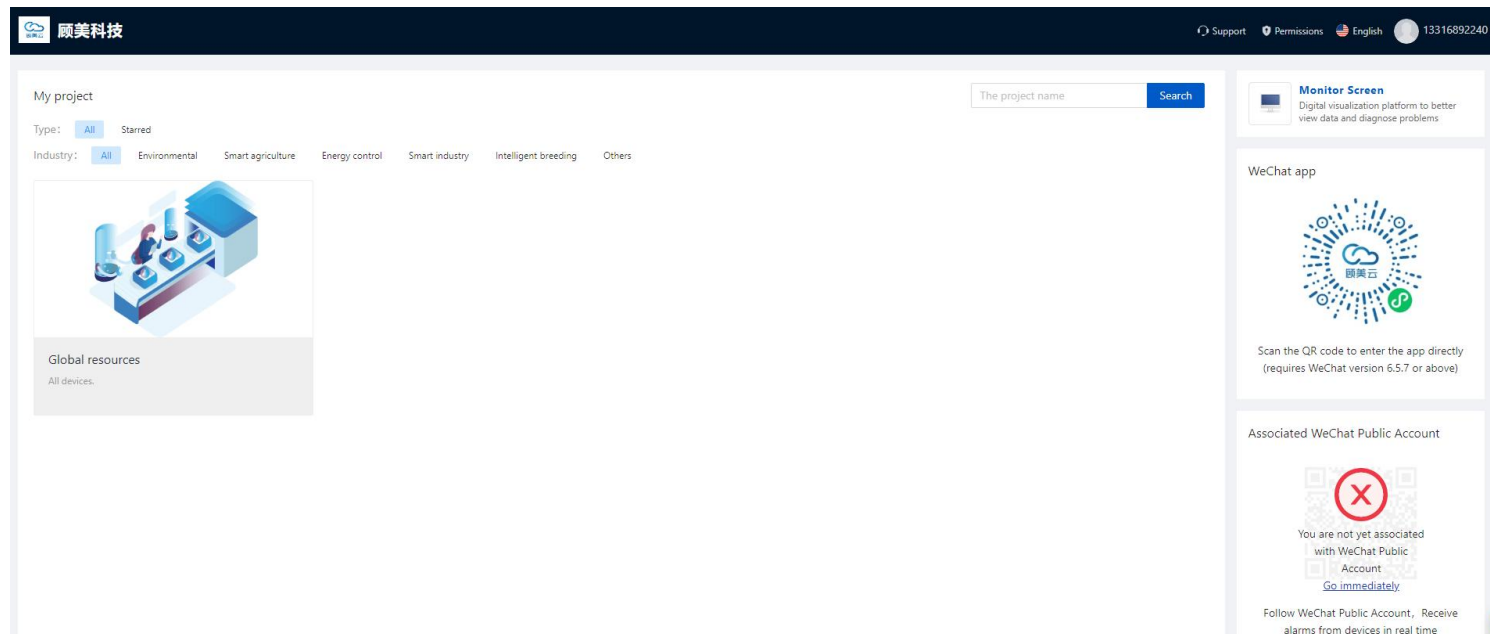
 Username

 Password

[Forgot password](#)

Enter the account password. If you do not have an account password, contact Coolmay sales to apply for it.

When you log in to your account and see the following home page interface, the login is successful

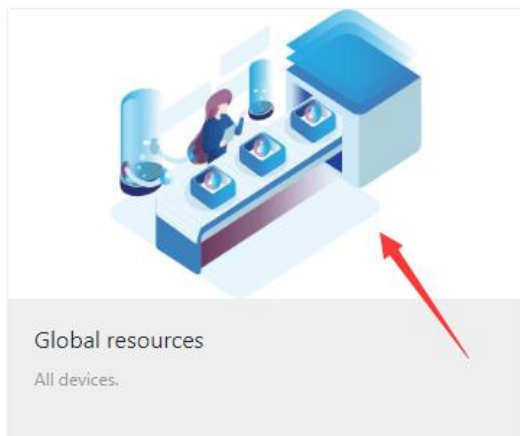


5.2 Add device

My project

Type: **All** Starred

Industry: **All** Environmental Smart agriculture Energy control Smart industry Intelligent breeding Others



Log in to the Cloud homepage and enter the global resources.

Overview Operation **Device** Alarm Work center Data Reports Document Management

全局资源 Support Permissions English

Device center > Add Device

Add Device

1 Basic Info 2 Select Product 3 Complete

所属项目: Global resources

* Affiliated organization: Please select your organization

* Device name:

Device serial number:

Device model:

Device group:

* Device address:

Device Images:

+ Upload pictures

+ Add Field

Next step

After entering the global resources, click on the “device” to see the added device

所属项目: Global resources

* Affiliated organization: Please select your organization

* Device name:

Device serial number:

Device model:

Device group:

* Device address:

Device Images: + Upload pictures

+ Add Field

Next step

Three items are required:

- ① Affiliated organization: fill in the name of the company
- ② Device name
- ③ Device address: click to locate the location information of the device.

After the setting is completed, click Next to enter the template configuration.

5.3 Create template

5.3.1 Coolmay PLC template

* Template Name: Coolmay

Modbus/PLC

Modbus

三菱

西门子

Coolmay

Protocols

3G/L02系列 串口

3G/L02系列 TCP

Protocol selection:
Modbus/PLC/Coolmay/
3G/L02 serial ports

Template name: define your own.

And then you can submit and complete the template binding.

5.3.2 Siemens S7-200 smart PLC template

✓ Basic Info — Select Product — 3 Complete

✓

Device name: 伺服PLC-打开点击4

Binding communication devices

Next, configure the slaves and variables

Operating procedure

- 1: Configuration of communications device;
- 2: Configuring Device Slaves and Variables;
- 3: The device is connected;

Click “Next, configure the slaves and variables”

顾美科技 Overview Operation **Device** Alarm Work center

Device center > Device Template > Template details

Template details

* Template name: Coolmay

Slave list

#	name	Action s
1	3G/L02系列 串口	 

+ Add Slaves

Add slave

* Agreement and product: Modbus/PLC / 西门子 / S7-200 Smart TCP

* Slave name: S7-200 Smart TCP

* IP:

* Port:

Cancel Submit

Fill in the IP and port and submit

Overview Operation **Device** Alarm Work center Data Reports Document Management

Device center > Device Template > Template details

Template details

* Template name: Coolmay

Slave list

#	name	Action s
1	3G/L02系列 串口	 
2	S7-200 Smart TCP	 

+ Add Slaves

Edit slave

Agreement and product: Modbus/PLC/西门子/S7-200 Smart TCP

* Slave name: S7-200 Smart TCP

* IP: 192.168.99.66

* Port: 102

Cancel Submit

Remember that the network segments must be the same, otherwise the value cannot be read normally

5.4 Variables configuration

Add variable



① * Variable name: Voltage

② unit: V

③ register: D (Data) D0(int16)

Identifier: D0

④ * Data format: 16-bit signed

⑤ * Read/write: ☒ read&write ☐ read only

advanced options ▾

Cancel

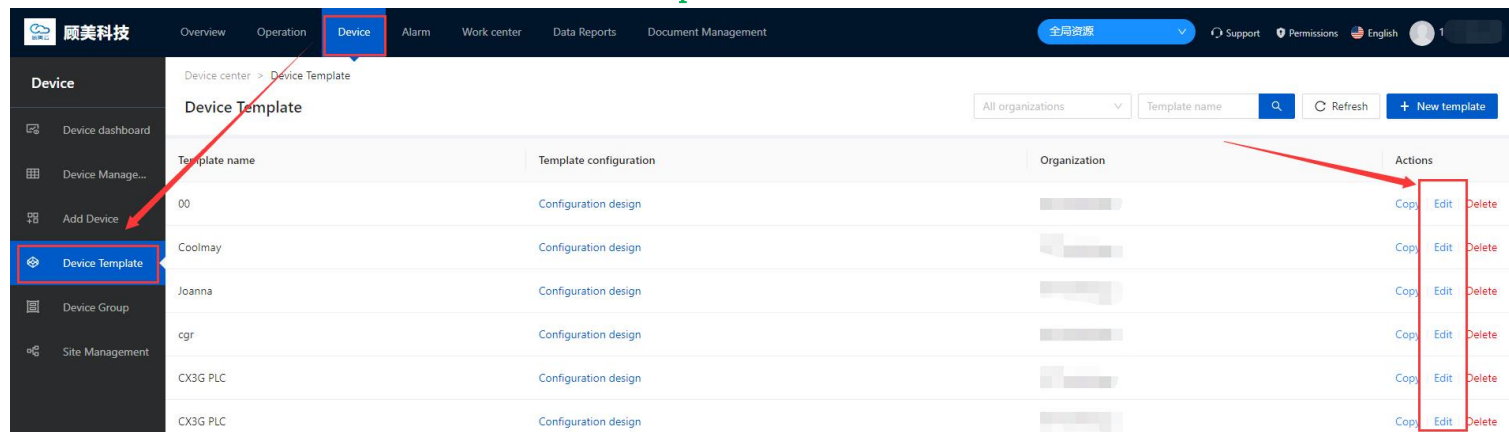
Submit

Add variable example

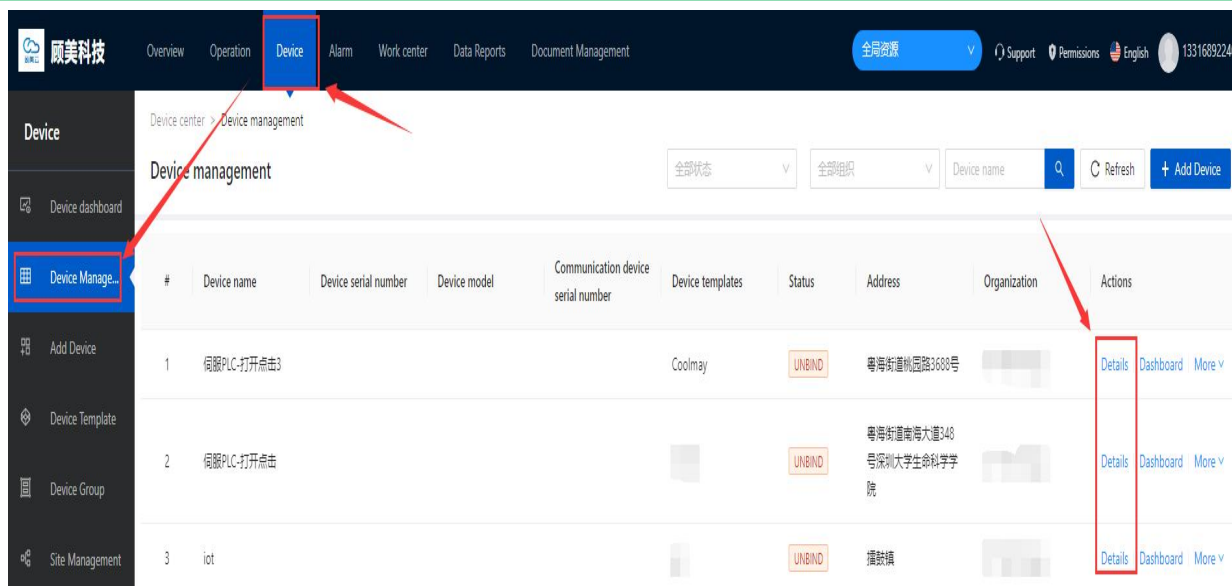
- ① Data name = variable name
- ② unit
- ③ Register = device D, X, Y, R, T, C==
- ④ D registers are all 16-bit signed data format. If you want to use 32-bit, you can directly select 32-bit signed
- ⑤ Read and write mode: can modify the value remotely or read the value remotely

After selecting the above, you can submit directly.

If you re-enter the interface, you can find the template in “Device-Device Template-Edit”



5.5 Communication module binding



Device-Device
Management-
Details

The screenshot displays the 'Coolmay PLC-打开点击3' configuration page. On the right, the 'Gateway' section contains a 'Binding communication module' form with the following fields:

- * SN: serial number
- * Password: Communication module pas...
- * Report time: Please select the report time

A red box highlights these three fields. Below the form is a 'Bind' button. The left sidebar shows various tabs like 'Basic information', 'IoT configuration', etc., and a device status of 'UNBIND'.

Fill in SN and password and upload time. The communication information is on the sticker on the back of the device, see the picture below.

Model: BG200
Version: 3.1.0
IP: 192.168.99.1
Password: 3641
S/N: BG200211012400

深圳市顾美科技有限公司

For example,

Model-
Version-
IP-IP of the module
Password-
S/N-serial number
Note: S/N and password are different for each module

Gateway



Binding communication module

* SN: BG200211012400

* Password:

* Report time: 1seconds

Bind

The report time is the transmission time, the picture on the left shows that the data is sent to the cloud platform once every second. Bind after confirmation.

When the binding is successful, There will

绑定成功

appear a prompt.

As long as the configuration of the cloud platform is changed, you need to click Update Configuration.

设备中心

设备管理

序号	设备名称	设备序列号	设备型号	通讯设备序列号	设备模板	状态	地址	组织	操作
1	工控设备001			BG200211012400	顾美L02-3G模板使用	离线	民治街道致远中路10号	福建永安建兴设备有限公司	详情 仪表盘 更多
2	西门子设备				顾美L02-3G	未绑定	梧田街道福华一路31号	福建永安建兴设备有限公司	详情 仪表盘 更多
3	工控设备-03				顾美三菱3GAPLC-02	未绑定	粤海街道高新南九道89号	福建永安建兴设备有限公司	详情 仪表盘 更多
4	工控设备-02				顾美三菱3GAPLC-03	未绑定	粤海街道高新南九道89号	福建永安建兴设备有限公司	详情 仪表盘 更多
5	工控设备-01			CXPLC00300010	顾美三菱3GAPLC-01	离线	粤海街道高新南九道89号	福建永安建兴设备有限公司	详情 仪表盘 更多

更新配置

If the operation is successful, the configuration is complete

设备中心 > 设备管理

设备管理

序号	设备名称	设备序列号	设备型号	通讯设备序列号	设备模板	状态	地址	组织	操作
1	工控设备001			BG200211012400	顾美L02-3G模板使用	报警	民治街道致远中路10号	福建永安建兴设备有限公司	详情 仪表盘 更多
2	西门子设备				顾美L02-3G	未绑定	福田街道福华一路31号	福建永安建兴设备有限公司	详情 仪表盘 更多
3	工控设备-03				顾美三菱3GAPLC-02	未绑定	粤海街道高新南九道89号	福建永安建兴设备有限公司	详情 仪表盘 更多
4	工控设备-02				顾美三菱3GAPLC-03	未绑定	粤海街道高新南九道89号	福建永安建兴设备有限公司	详情 仪表盘 更多
5	工控设备-01			CXPLC00300010	顾美三菱3GAPLC-01	离线	粤海街道高新南九道89号	福建永安建兴设备有限公司	详情 仪表盘 更多

The following figure shows the successful connection status

设备中心 > 设备管理

设备管理

序号	设备名称	设备序列号	设备型号	通讯设备序列号	设备模板	状态	地址	组织	操作
1	工控设备001			BG200211012400	顾美L02-3G模板使用	在线	民治街道致远中路10号	福建永安建兴设备有限公司	详情 仪表盘 更多
2	西门子设备				顾美L02-3G	未绑定	福田街道福华一路31号	福建永安建兴设备有限公司	详情 仪表盘 更多
3	工控设备-03				顾美三菱3GAPLC-02	未绑定	粤海街道高新南九道89号	福建永安建兴设备有限公司	详情 仪表盘 更多
4	工控设备-02				顾美三菱3GAPLC-03	未绑定	粤海街道高新南九道89号	福建永安建兴设备有限公司	详情 仪表盘 更多
5	工控设备-01			CXPLC00300010	顾美三菱3GAPLC-01	离线	粤海街道高新南九道89号	福建永安建兴设备有限公司	详情 仪表盘 更多

设备中心 > 设备模板 > 模板详情

Template details

* Template name: Coolmay

Slave list

#	name	Action
1	3G/L02系列 串口	编辑 删除
2	S7-200 Smart TCP	编辑 删除

+ Add Slaves

Edit slave

Agreement and product: Modbus/PLC/Coolmay/3G/L02系列 串口

* Slave name: 3G/L02系列 串口

* Connection method: RS232

Cancel Submit

Select connection method. If not selected, or selected without connecting devices, a communication error will be prompted.

5.6 Tips

There is no sequence conflict between cloud platform operation, wiring, and networking. You can first connect to the cloud platform and then connect to the network, or you can connect to the cloud platform first and then connect to the cloud.

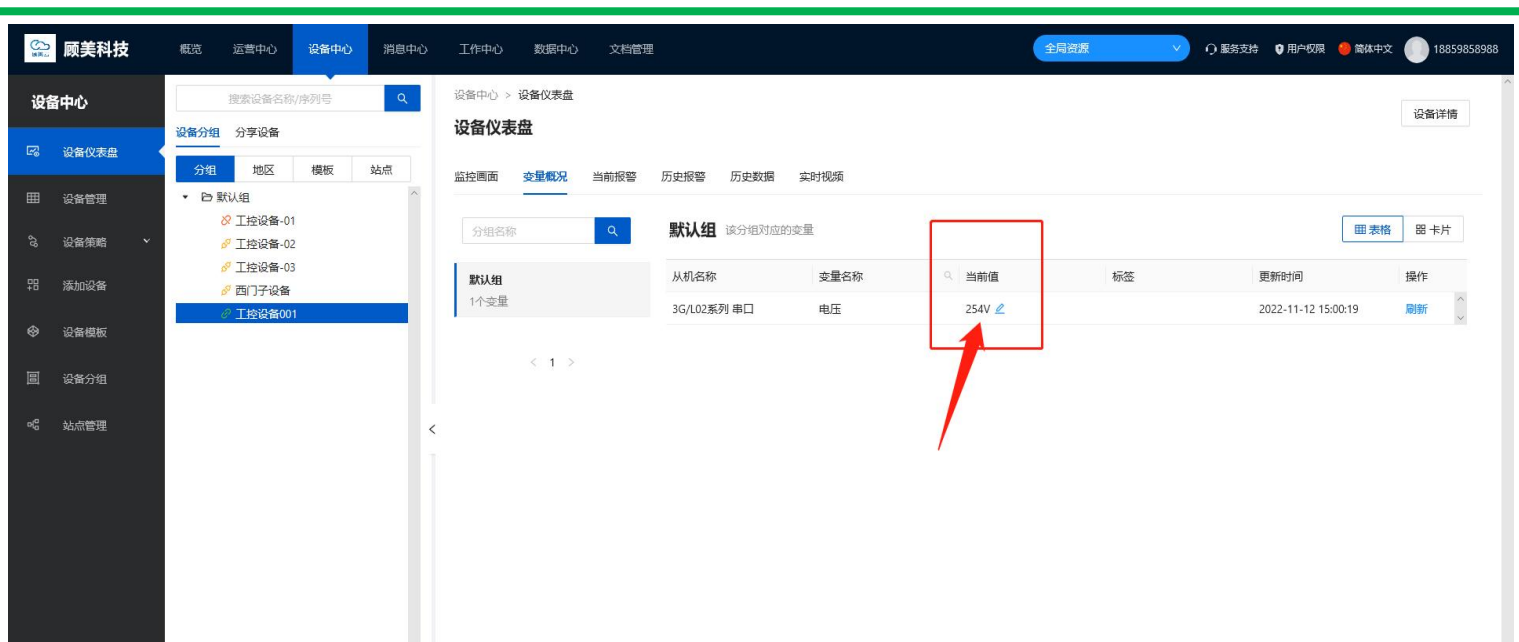
The cloud platform configuration steps are as follows:

Log in to the cloud platform—enter account password—add device in device center—add template—variable configuration—bind communication device—update configuration—interface setting

After the above configuration is completed, you can use the cloud configuration. For the configuration operation of the cloud, please refer to the fifth chapter.

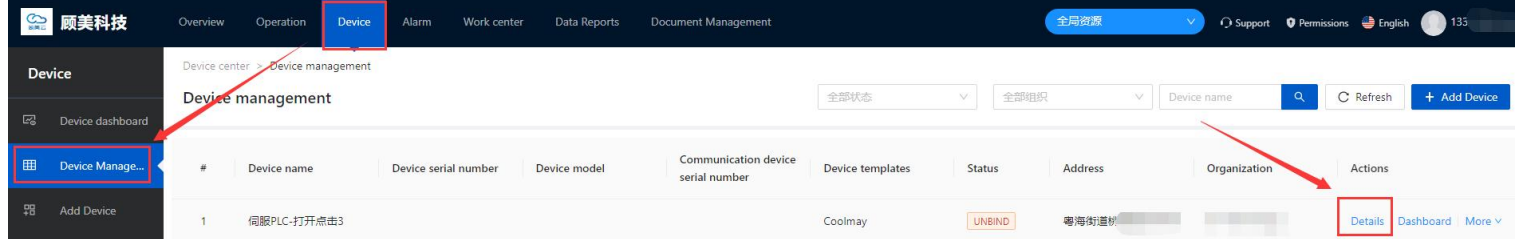
After the configuration of the communication module is completed, do you want to verify whether the data is uploaded normally? You can check whether the data is updated in real time through the figure below.

Click Device—Device Dashboard—Your device name—Variable Summary, you can see the data of the current value uploaded in real time, and you can directly send the data for remote operation.



5.7 Baud rate setting

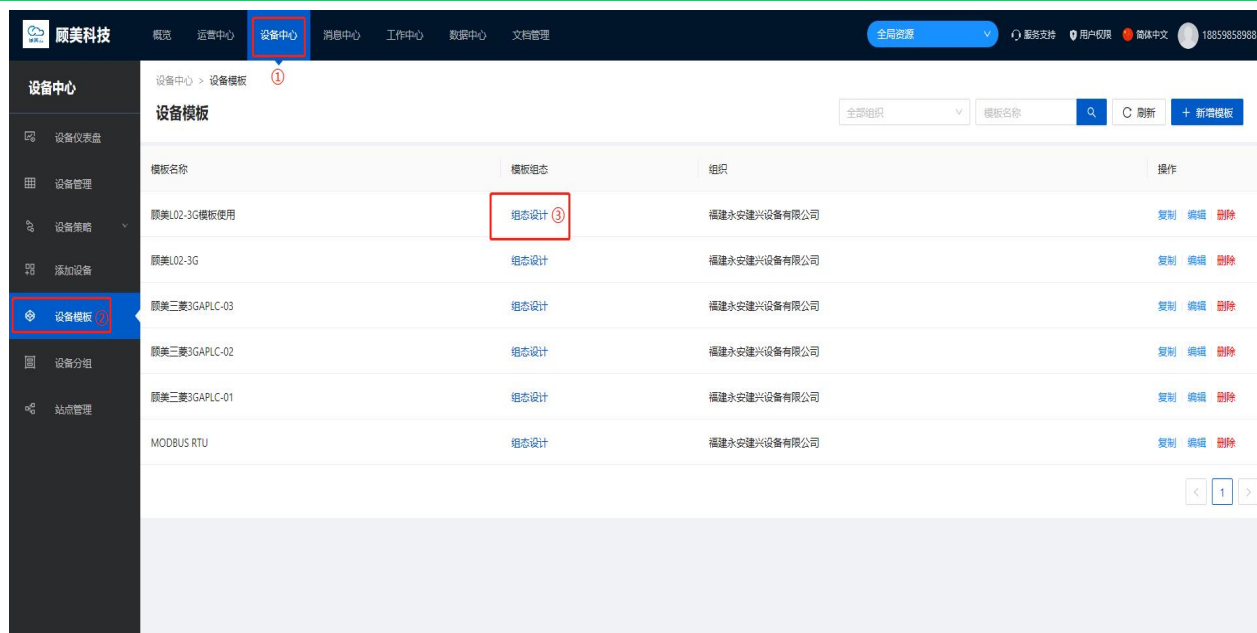
Device-Device Management-Details



Modify the communication device parameter value. After the save is successful, you need to press the [Send] button to update to the communication device, and it will take effect only after the release is successful.

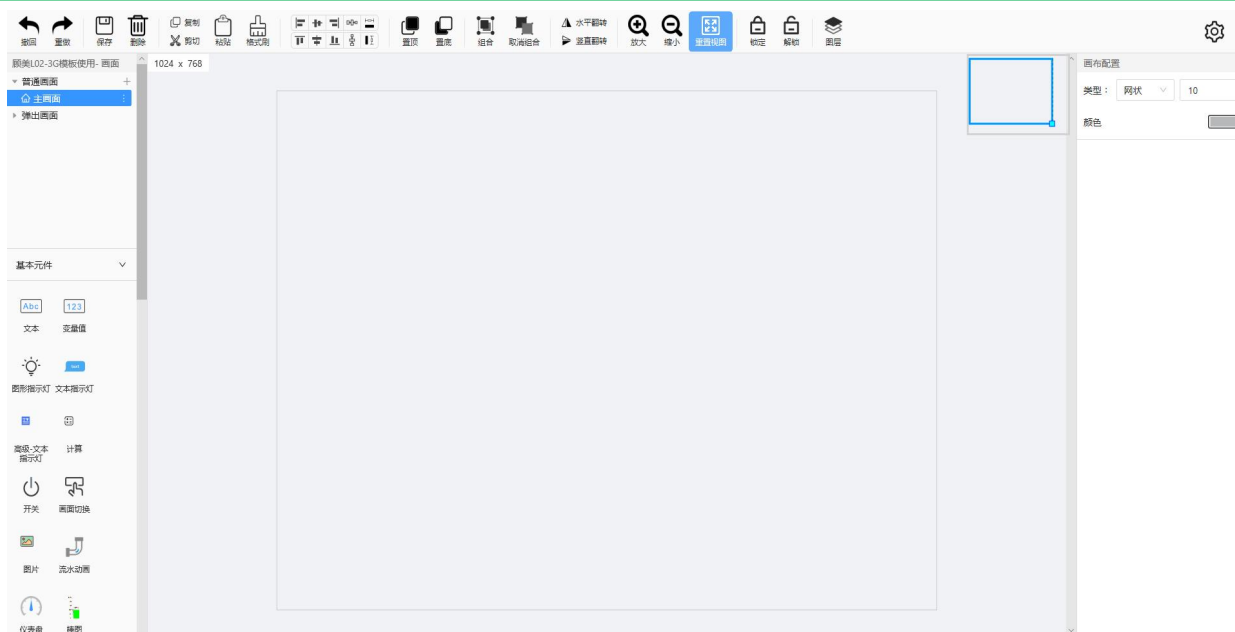
VI. Equipment Dashboard Editing

6.1 Configuration design



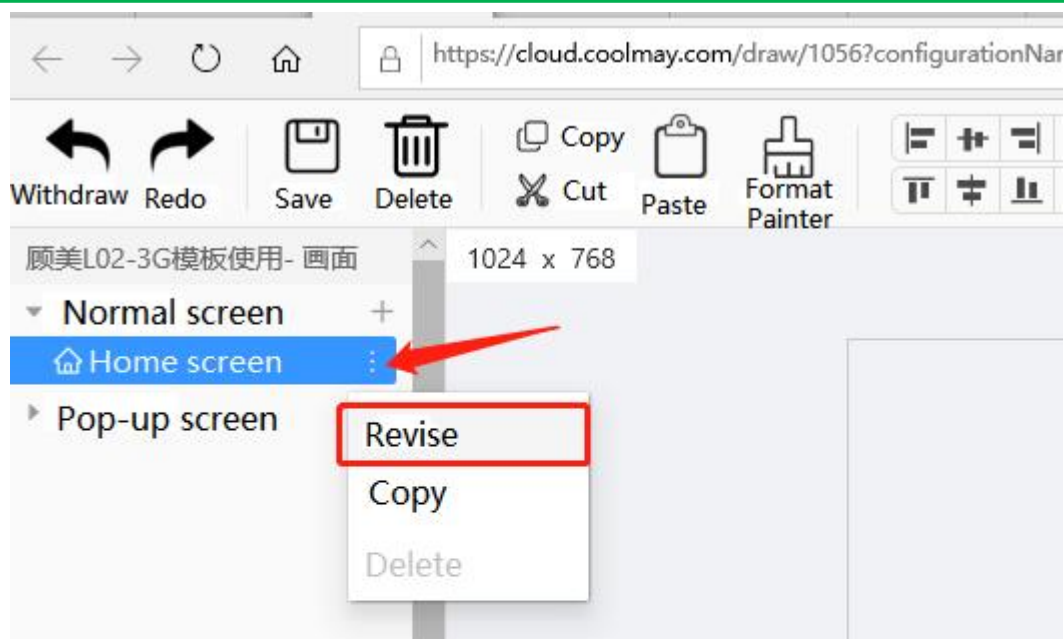
① Equipment Center
② Equipment template
③ Configuration design

After clicking the configuration design, it will enter the configuration interface;



After entering, you can start editing the configuration. Don't forget to save in the upper left corner after each editing, so as not to lose the configuration making progress! !

6.2 Background color



Enter the main screen to modify the configuration interface:

修改 画面

* 名称
主画面

预设尺寸
1024*768(XGA-4:3)

* 宽 1024 * 高 768

☐ 背景颜色

取消 保存

Edit screen

* Name
Home screen

Default size
1024*768(XGA-4:3)

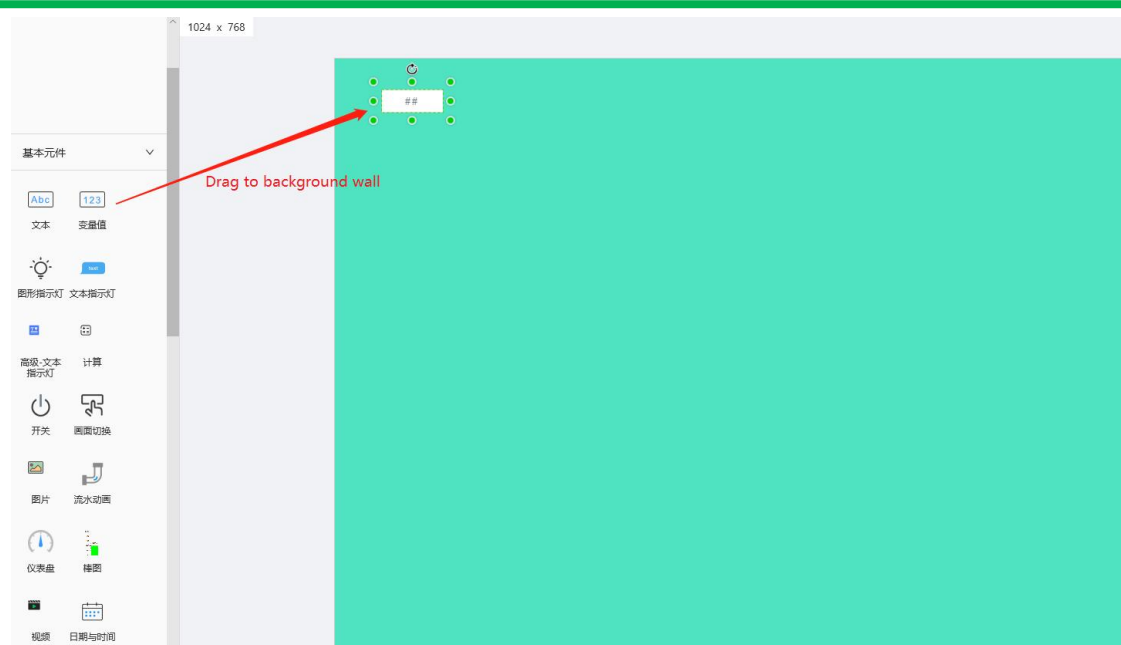
* Width 1024 * High 768

☒ Background color

Color picker interface showing a gradient bar and color selection tools. The selected color is 50E3C2. Below the color picker are buttons for 'Cancel' and 'Save'.

custom color

6.3 Numerical display



Click the variable value icon with the mouse and do not release it, drag it to the background wall and place it where you want; Then left double click! !

Variable

General settings Visibility settings Security Settings

Read and write: ☒ Read only ☐ Read and write

Slave:

Variable name:

Unit:

Negative numbers are not allowed: ☐

Decimal places:

Variable

General settings Visibility settings Security Settings

Read and write: ☒ Read only ☐ Read and write

Slave:

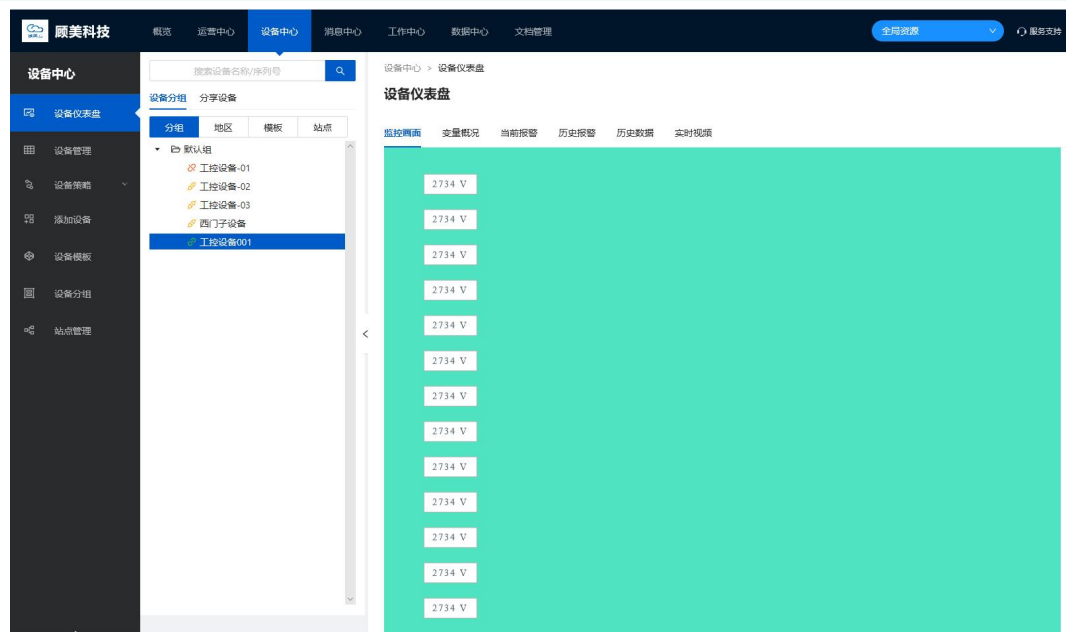
Variable name:

Unit:

Negative numbers are not allowed: ☐

Decimal places:

It will pop up the configured slave and the variable value in the slave, and the unit will be automatically filled, only the decimal point needs to be filled in!
Here to save!
The home page is also saved!
The effect is shown below!



You can also choose position adjustment, centering, level adjustment, etc. on the top of the editing interface by yourself, and you can copy multiple times to get twice the result with half the effort! !

6.4 Dash board



Drag into the background wall and double click

Dash board

General settings

Visibility settings

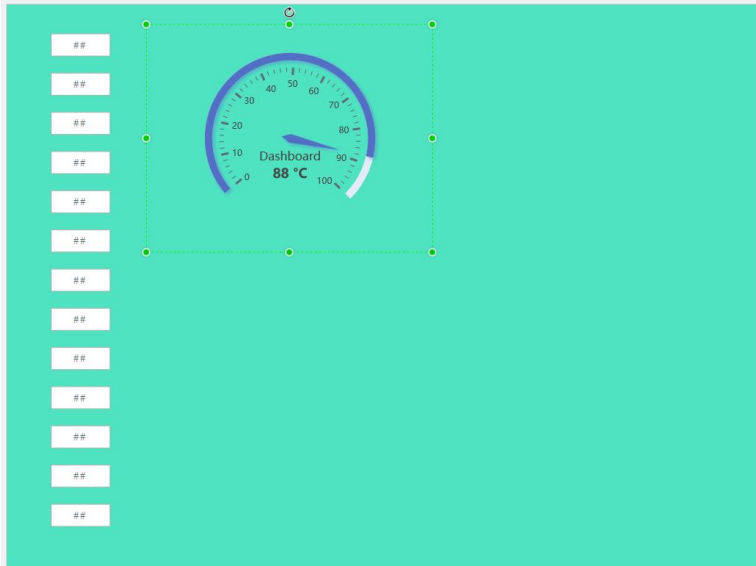
Slave: 3G/L02 series serial port

Variable name: Voltage (DO)

Cancel

Save

Just add points normally, then save!



图表配置

标题 Dashboard ①

单位 °C ②

位置 x: 190 y: 26.5

宽度 390 高度 310

角度 265°

最小刻度 0 ③

最大刻度 100 ④

刻度个数 10 ⑤

文字大小

标题 ⑥ 16

刻度 ⑦ 12

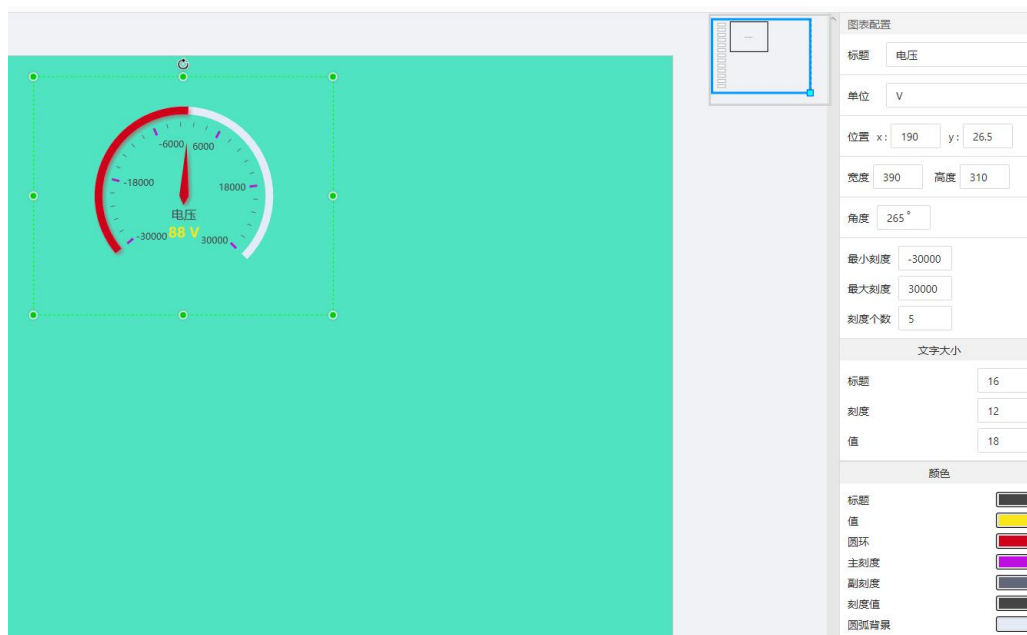
值 ⑧ 18

颜色

标题 值 圆环 主刻度 副刻度 刻度值 圆环背景

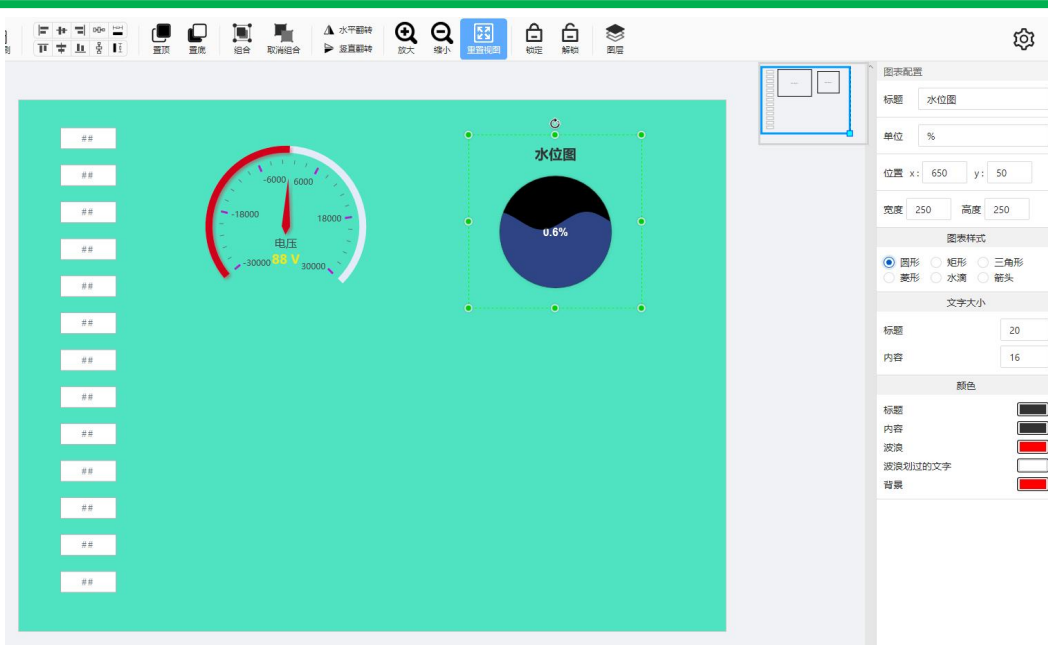
- ① Text title
- ② Unit example: V
- ③ The minimum value of the scale
- ④ Scale maximum value
- ⑤ Number of scales
- ⑥ Title font size
- ⑦ Scale font size
- ⑧ worth the font size

Color can be customized



The effect is as shown on the left

6.5 Water level chart



Water level chart configuration

Water level chart

General settings

Visibility settings

Slave: 3G/L02 series serial port

Variable name: Voltage (DO)

Display mode: ☒ By percentage ☐ By value

Maximum scale: 30000

Cancel

Save

Maximum scale: the maximum value of the value - the peak value

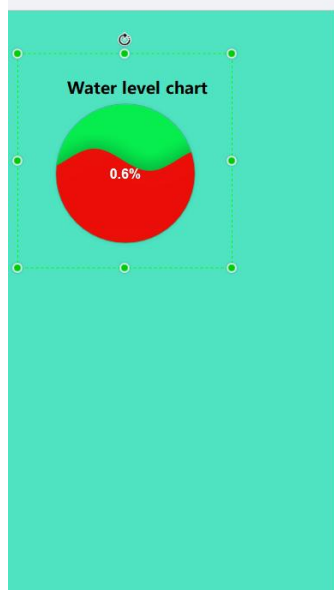


Chart configuration

Title: Water level chart

Unit: %

Location: 650 y: 50

Width: 250 Height: 250

Chart style

☒ Round ☐ Rectangle ☐ Triangle

☐ Diamond ☐ Water drop ☐ Arrow

Font size

Title: 20

Content: 16

Color

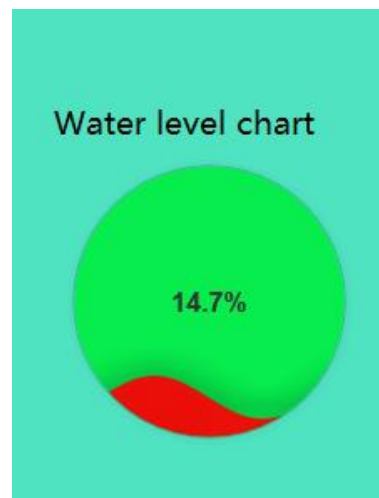
Title:

Content:

Wave:

Words with waves:

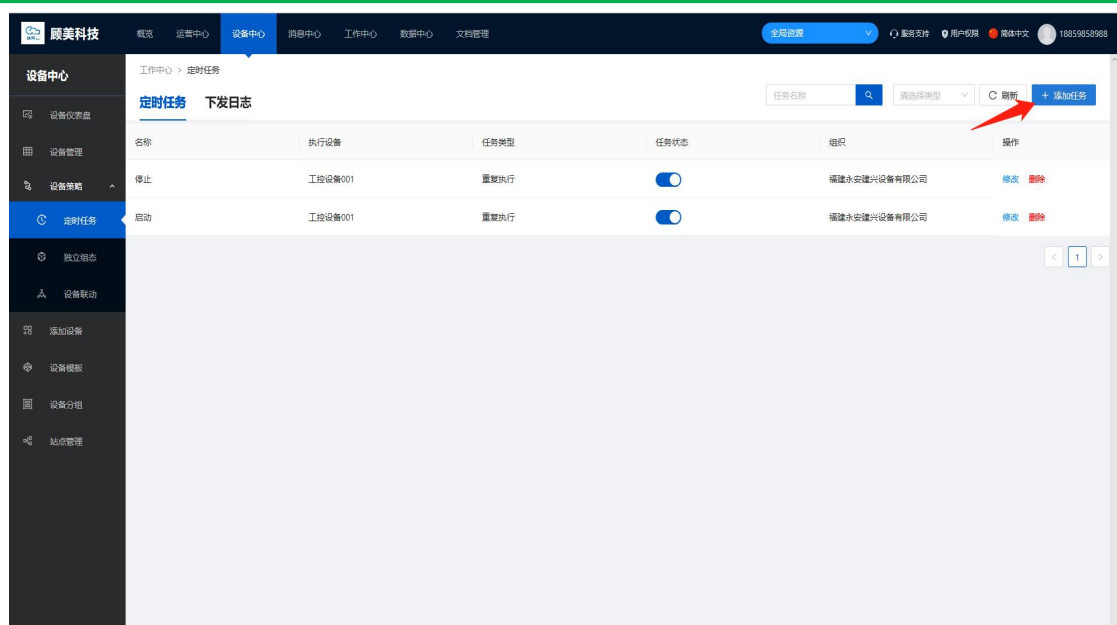
Background:



Renderings

VII. Equipment strategy

7.1 Timed task



Device Center -
Device Policy - Timed
Task - Add Task!

添加定时任务

所属项目: 全局资源

* 任务名称: 停止定时任务 ①

* 执行设备: 工控设备001 ②

* 任务类型: ☒ 重复执行 ③ ☐ 单次执行 ☐ 间隔执行

* 执行时间: 星期二 × ④ 09:00 ⑤

执行内容: 添加 ⑥

变量	发送数据	操作
停止停止停止 ⑦	0 ⑧	删除

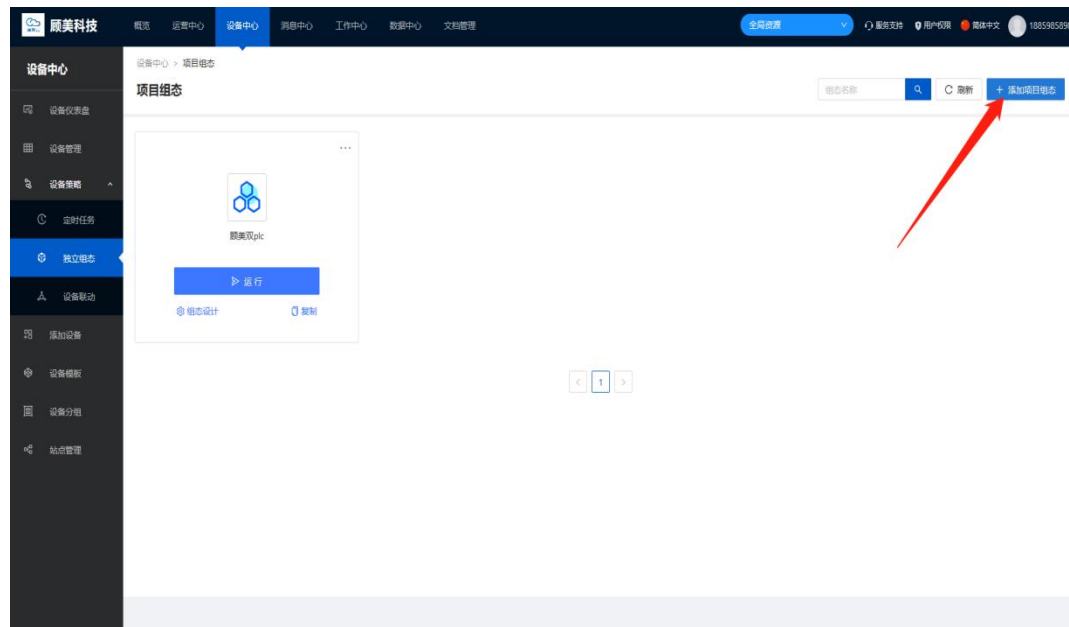
取消

提交

- ① Custom task name
- ② Select the device to be executed
- ③
 - 3.1. Repeated execution = once a week
 - 3.2. Single execution = execution at a specified time
 - 3.3. Interval execution = specified time period, how many seconds to execute once
- ④⑤ Select time
- ⑥ Add execution data
- ⑦ Select variable
- ⑧ Fill in the data to be sent

7.2 Independent configuration (multiple project-based equipment configuration functions in different locations)

This function can be configured by multiple devices in different locations;



Device Center-
Device Policy-
Independent
Configuration-Add
Project Configuration

Add project configuration

Project: Global Resource

*Configuration name: Oil volume collection and analysis in various places

Device set: Industrial Control Equipment 001/Siemens
Equipment/Industrial Control Equipment-03/Industrial
Control Equipment-02/Industrial Control Equipment-01

Cancel

Submit

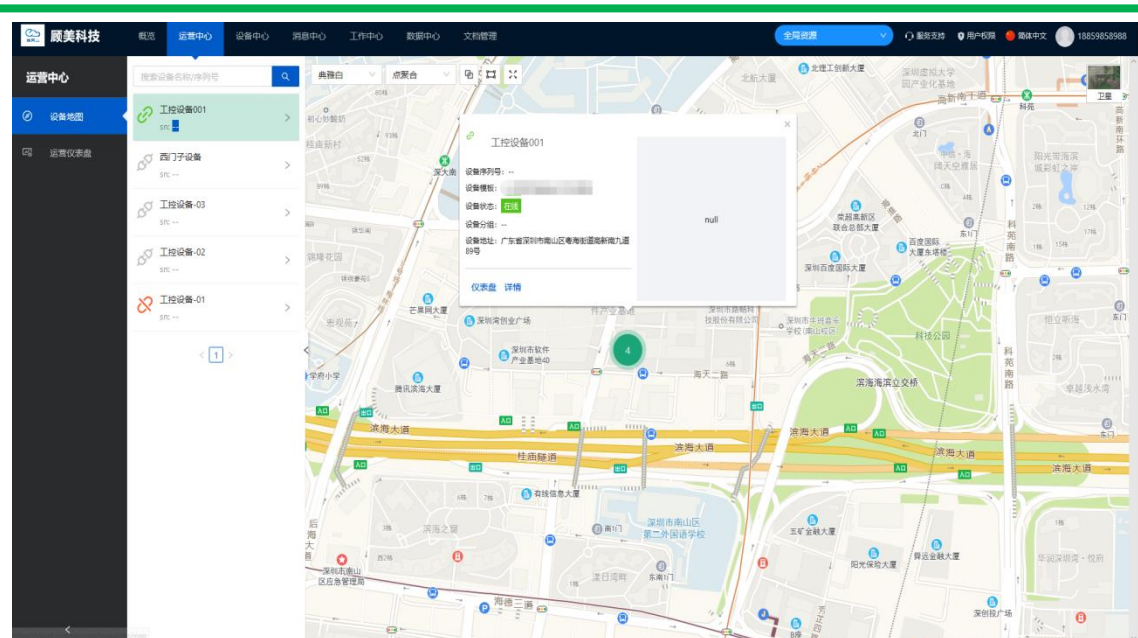
After adding, you can
perform mixed data
collection on devices
in different locations!

7.3 Device linkage

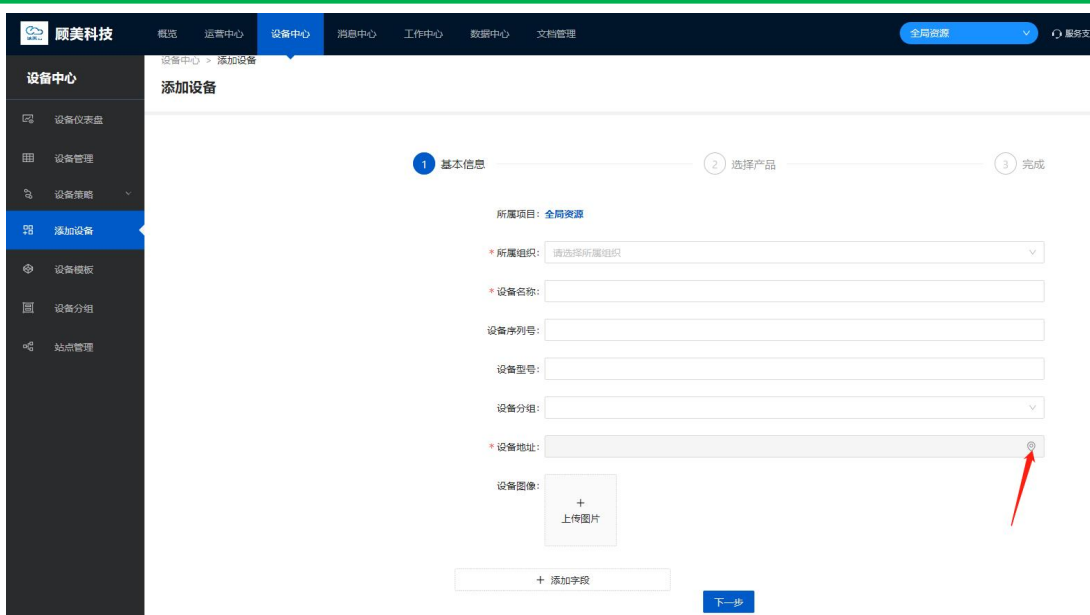
Not yet open, Stay tuned;

VIII. Operation Center

8.1 Device map



Operation Center-Device Map Select the specified device to see the location information;



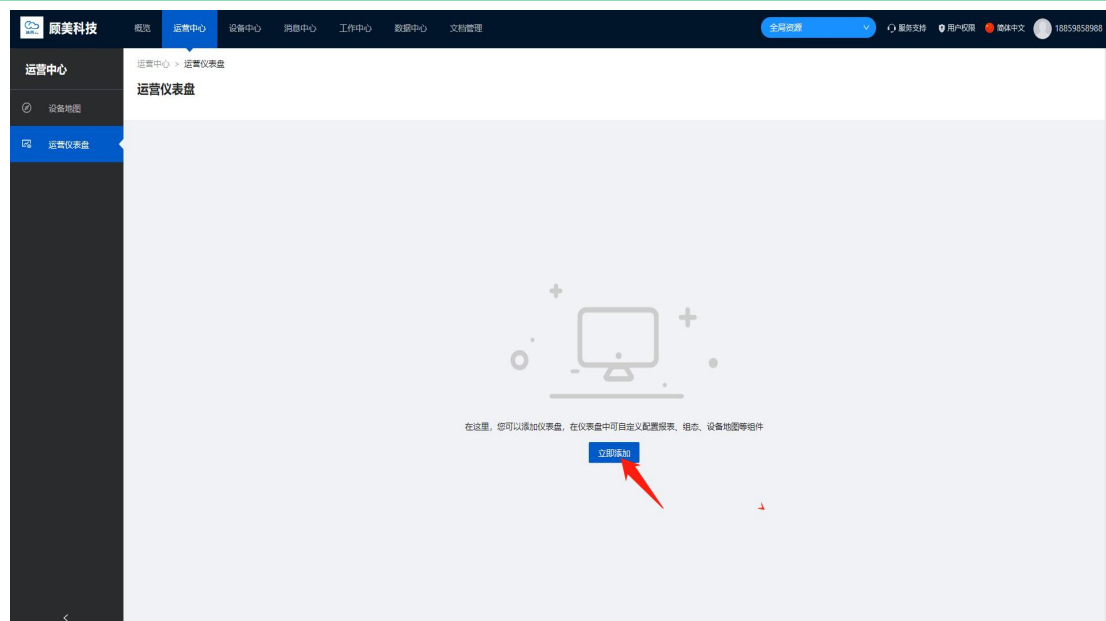
The device map is the positioning information that needs to be filled in when building the device, and the map location can be changed at any time;

8.2 Operational Dashboard

The operation dashboard can combine multiple display functions into one:

- ①. Device reports can be displayed on the same screen
- ②. Device configuration can be displayed on the same screen

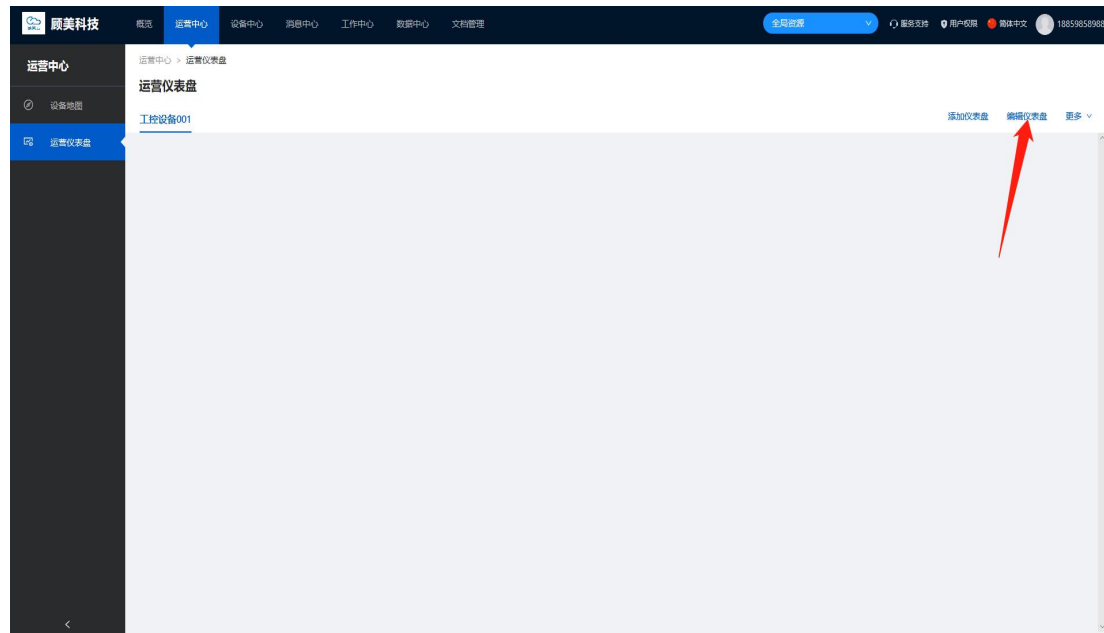
- ③. The project configuration can be displayed on the same screen
- ④. The device map can be displayed on the same screen
- ⑤, real-time curves can be displayed on the same screen



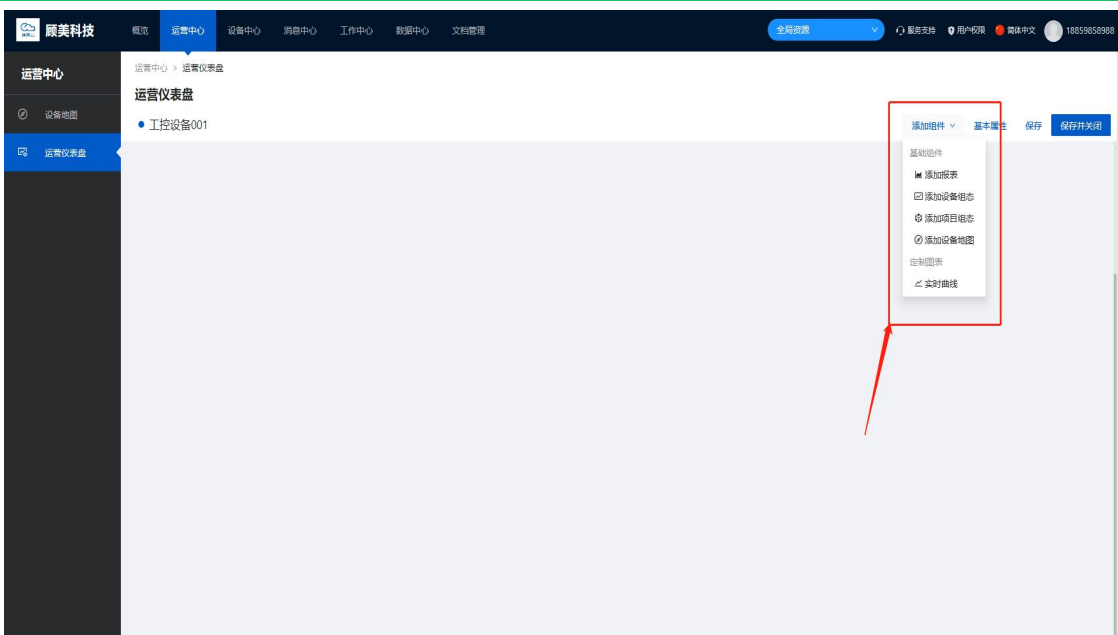
Add an operation dashboard, which can display multiple functions;

The 'Add dashboard' dialog box is shown. It has a title bar with 'Add dashboard' and a close button. The main content area shows 'Project: Global Resource'. Below this, there is a label '*Dashboard name:' followed by a text input field containing 'Industrial control equipment 001'. Below the input field, there is a suggestion box with the same text 'Industrial control equipment 001'. At the bottom right, there are two buttons: 'Cancel' and 'Submit'.

Fill in the display dashboard name and click Submit!



Click to edit
dashboard



Add components
such as prepared
reports! As shown
below:

8.2.1、Add device configuration interface

This function can select multiple configuration interfaces that have been prepared for display on the same screen;

After adding, you can freely drag the position and modify the screen size, and you can drag N device configuration interfaces for display

选择设备

设备名称



☐ 设备名称	sn	地址
☒ 工控设备001		粤海街道高新南九道89号
☐ 西门子设备		福田街道福华一路31号
☐ 工控设备-03		粤海街道高新南九道89号
☐ 工控设备-02		粤海街道高新南九道89号
☐ 工控设备-01		粤海街道高新南九道89号

< 1 >

已选择：1

工控设备001 ×

取消

提交

Add configuration device configuration interface

运营中心 > 运营仪表盘

运营仪表盘

● 工控设备001



运营中心 > 运营仪表盘

运营仪表盘

● 工控设备001



In the lower right corner of the configuration interface, you can zoom in and out; place it in a suitable position;

8.2.2、Add project configuration (independent configuration interface)

The independent configuration interface needs to create an independent project configuration interface. After completing the configuration interface in the independent configuration interface, you can return to the configuration interface function;

The independent configuration interface can be made into a display function of a group of devices, and the display function can also be superimposed in the operation center;

Select project configuration

Project configuration name	Number of equipment sets
Coolmay Dual PLC	3

Selected: 1

Coolmay Dual PLC ×

Cancel Submit

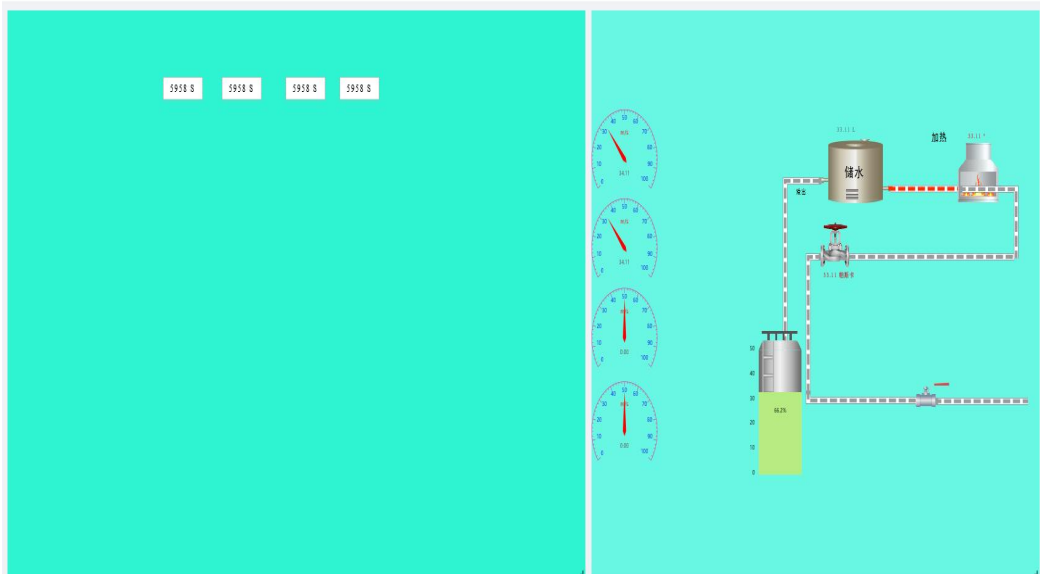
Add components in the upper right corner, select Add project configuration (independent configuration), and submit after selection;

运营中心 > 运营仪表盘

运营仪表盘

工控设备001

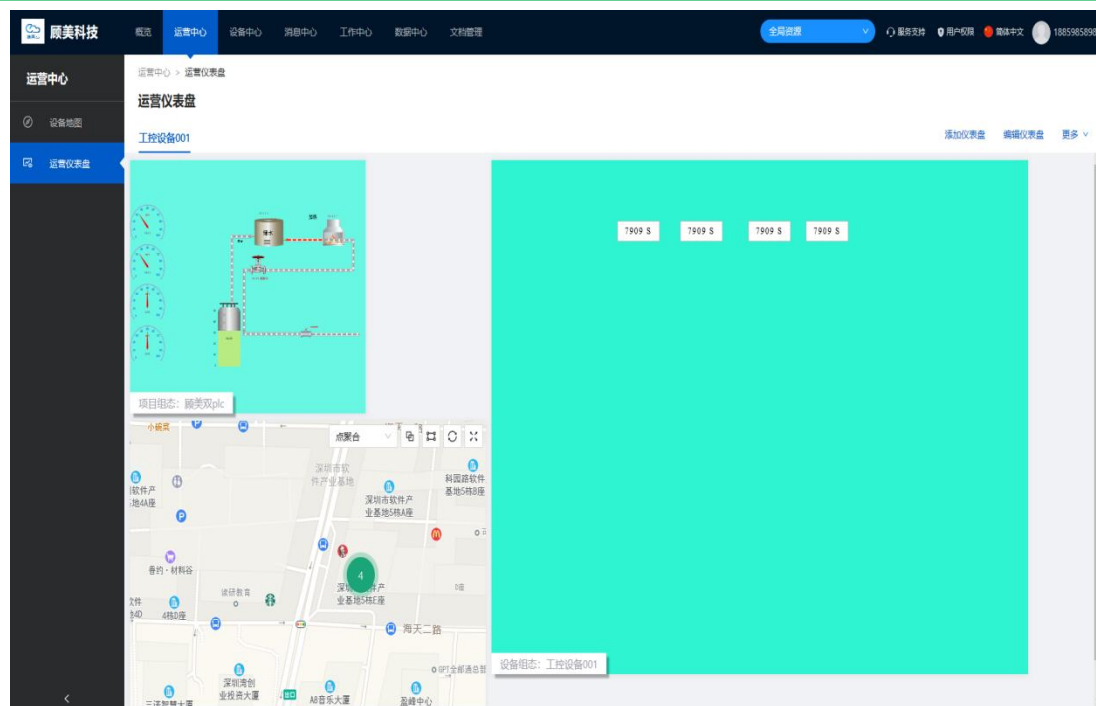
添加组件 基本属性 保存 保存并关闭



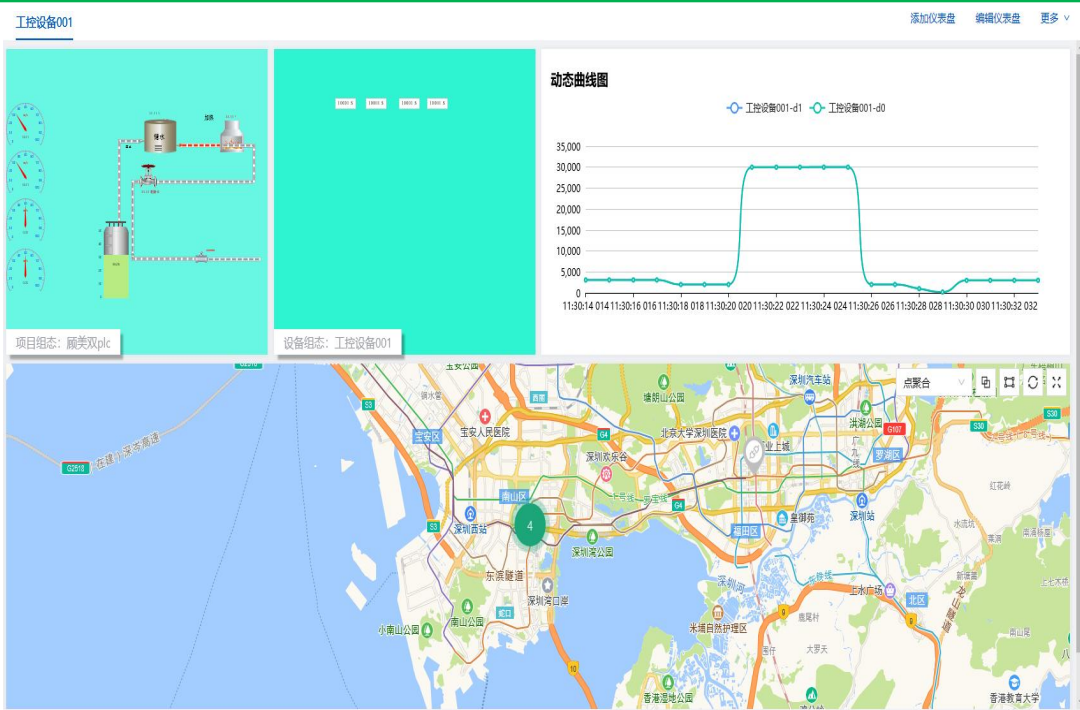
After selection, you can drag the configuration to move the position and zoom in and out!

8.2.3. Add device map

The map positioning of the device requires the positioning information when the device is established. If the positioning information is incorrect, you can go back to Chapter 4 to add the device and reset the positioning data;

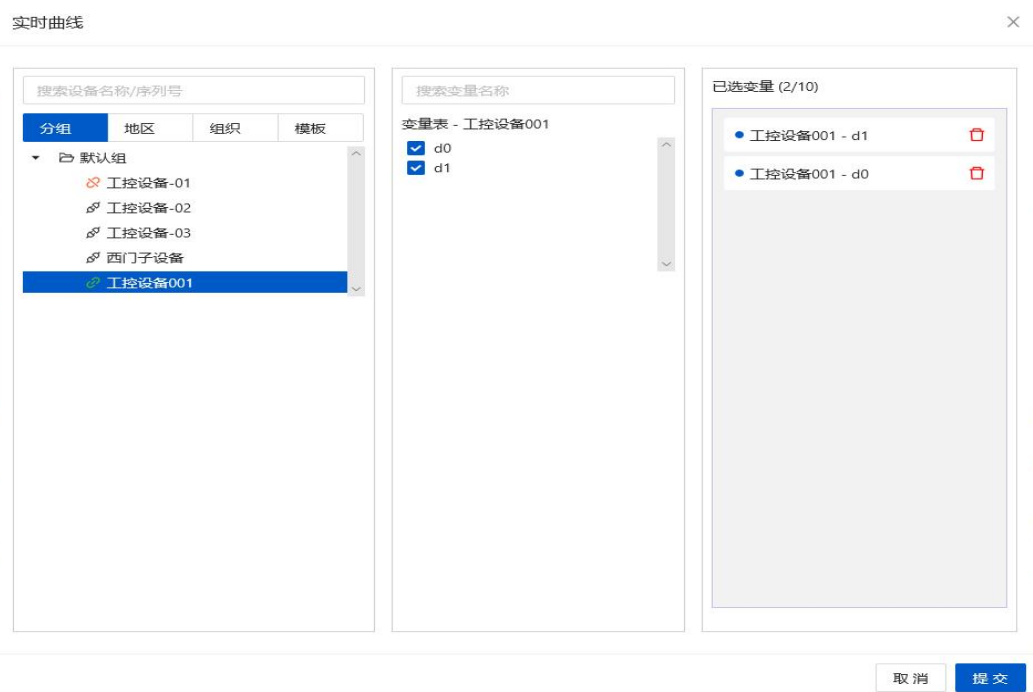


The map positioning information is determined according to the positioning information of the established device;

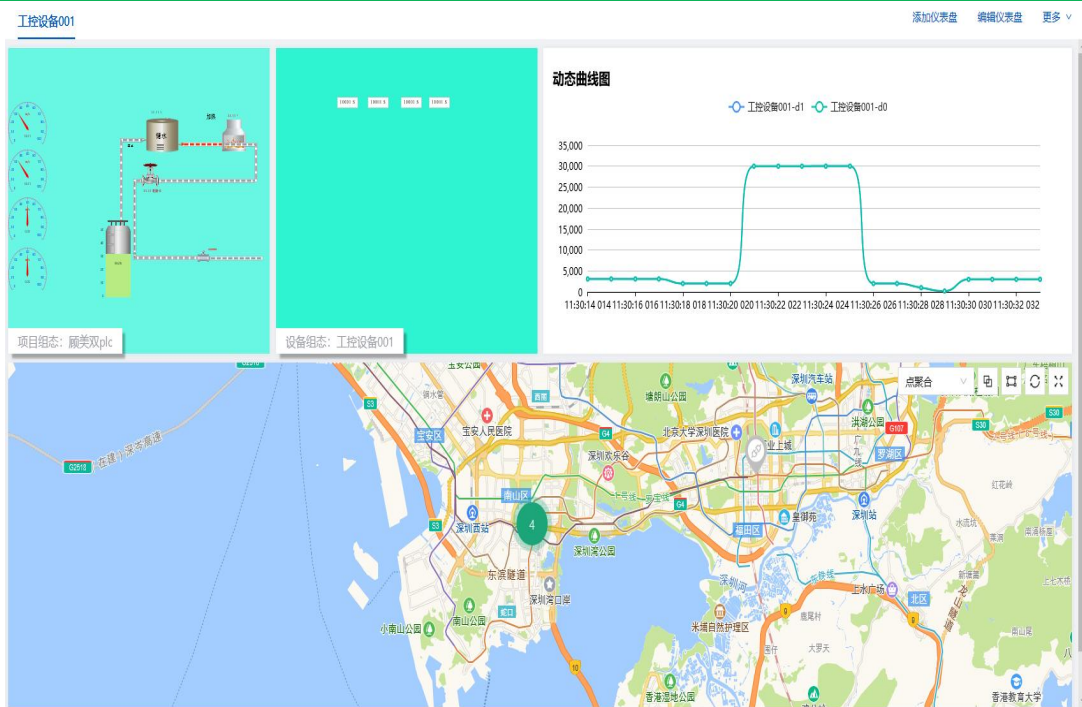


The combination can be seen as a simple effect. If you need to watch it separately, you can click the upper right corner of the component to zoom in and out;

8.2.4 Add real-time dynamic graph



Add any variable, the curve is a real-time curve function, and every record of data will be displayed in the real-time curve;

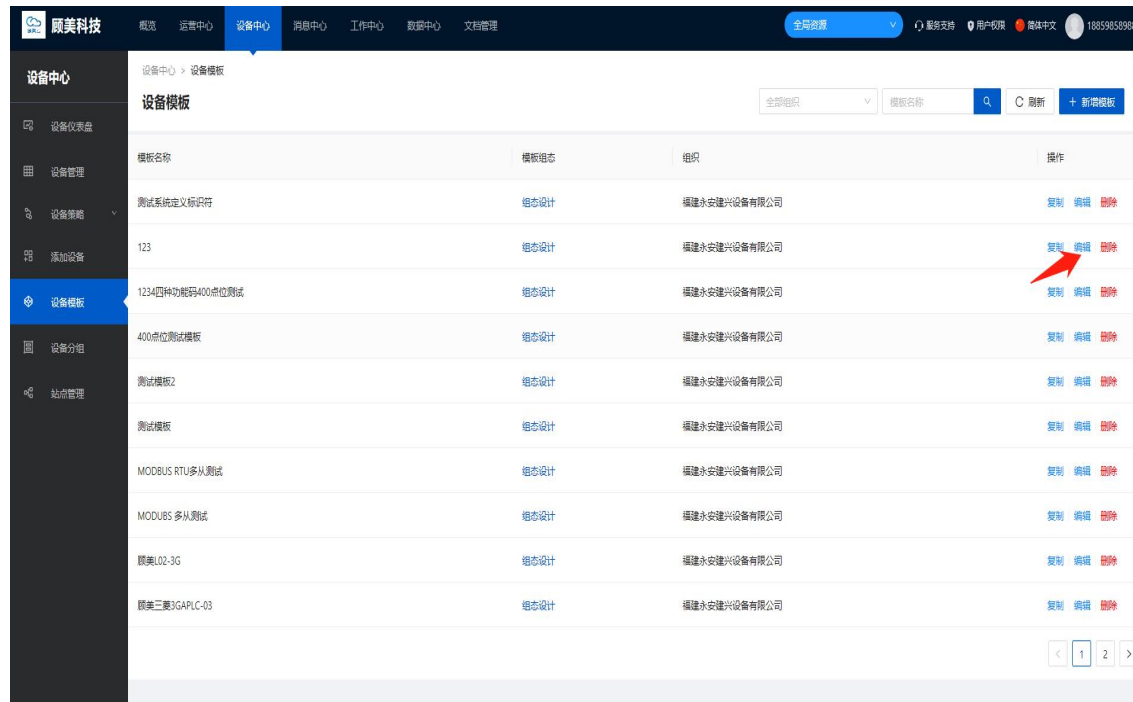


The combination can be seen as a simple effect. If you need to watch it separately, you can click the upper right corner of the component to zoom in and out;

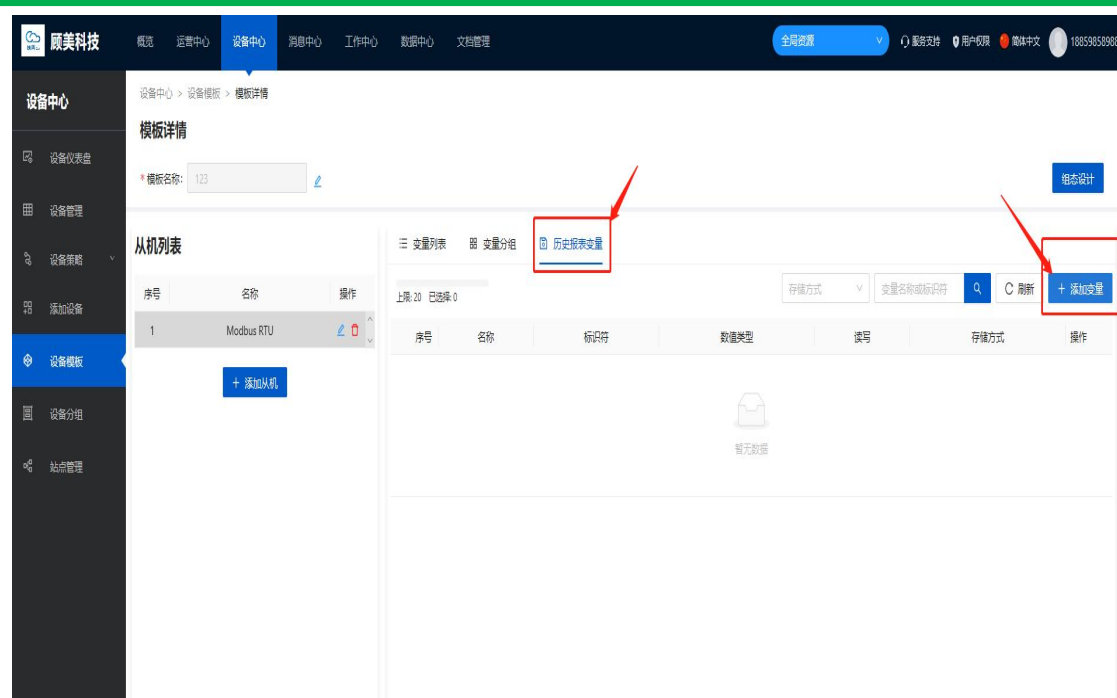
IX. Data center

9.1 History (query)

Before viewing the historical data, you must first set the historical report variables, otherwise you cannot view the historical data online on the cloud platform;



Device Center-
Device Template-Edit
Template;
Enter the
configuration
interface



To view historical data, you must add this step, otherwise you cannot view the data;

选择变量

变量名称或标识符



☒ 从机名称	变量名称	标识符
☒ Modbus RTU	d1	VAR2
☒ Modbus RTU	d0	VAR1

< 1 >

已选择: (2/20)

d1 × d0 ×

存储方式: ☐ 变化存储 ①
☐ 定时存储 ②
☐ 变化幅度存储 ③
☒ 全部存储 ④

取消

提交

Add a slave, and select a variable name;

- ① Store when the data changes;
- ② Store the data once at the specified time;
- ③ The change range exceeds the preset value storage;
- ④ All data are retained; Submit!

数据表 历史记录

设备: 工控设备001 从机: Modbus RTU 变量: d0 起始时间: 2022-10-23 00:00 结束时间: 2022-11-22 23:59 查询 导出

序号	时间	值
1	2022-11-22 14:18:54	29593
2	2022-11-22 14:18:55	29595
3	2022-11-22 14:18:56	29597
4	2022-11-22 14:18:57	29599
5	2022-11-22 14:18:58	29601
6	2022-11-22 14:18:59	29603
7	2022-11-22 14:19:00	29605
8	2022-11-22 14:19:01	29607
9	2022-11-22 14:19:02	29609
10	2022-11-22 14:19:03	29611

1 2 3 4 5 ... 25 > 10 页/页

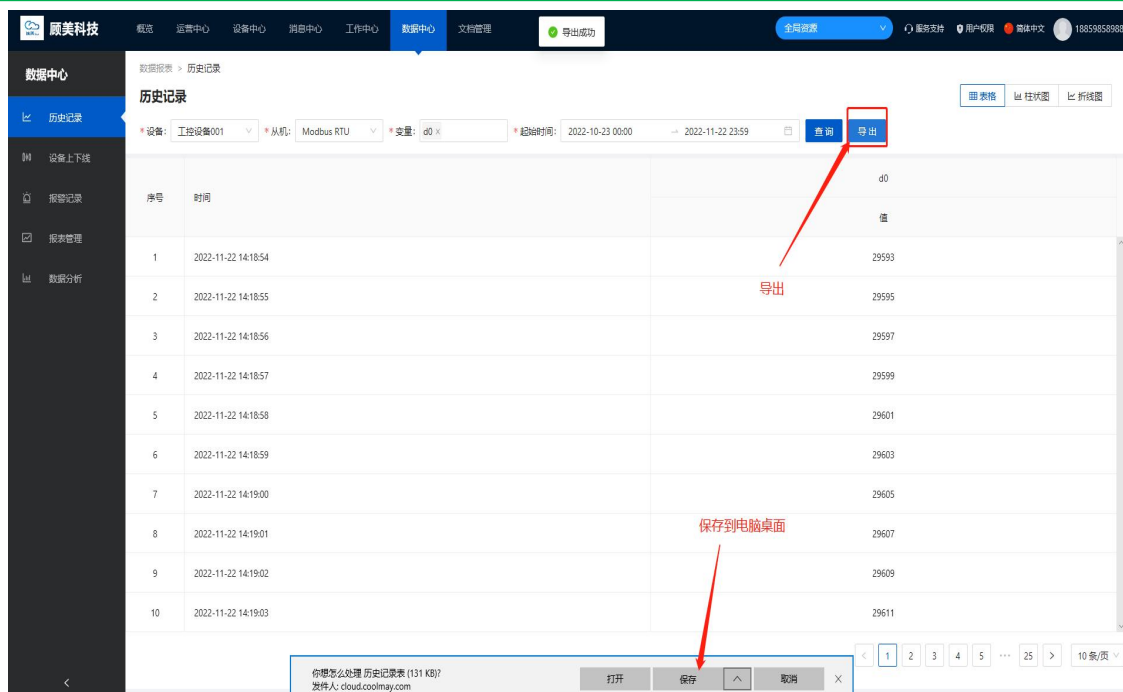
Data Center - History

- ① Select device
- ② Select slave
- ③ Select variable
- ④ Check the start time
- ⑤ Check the end time

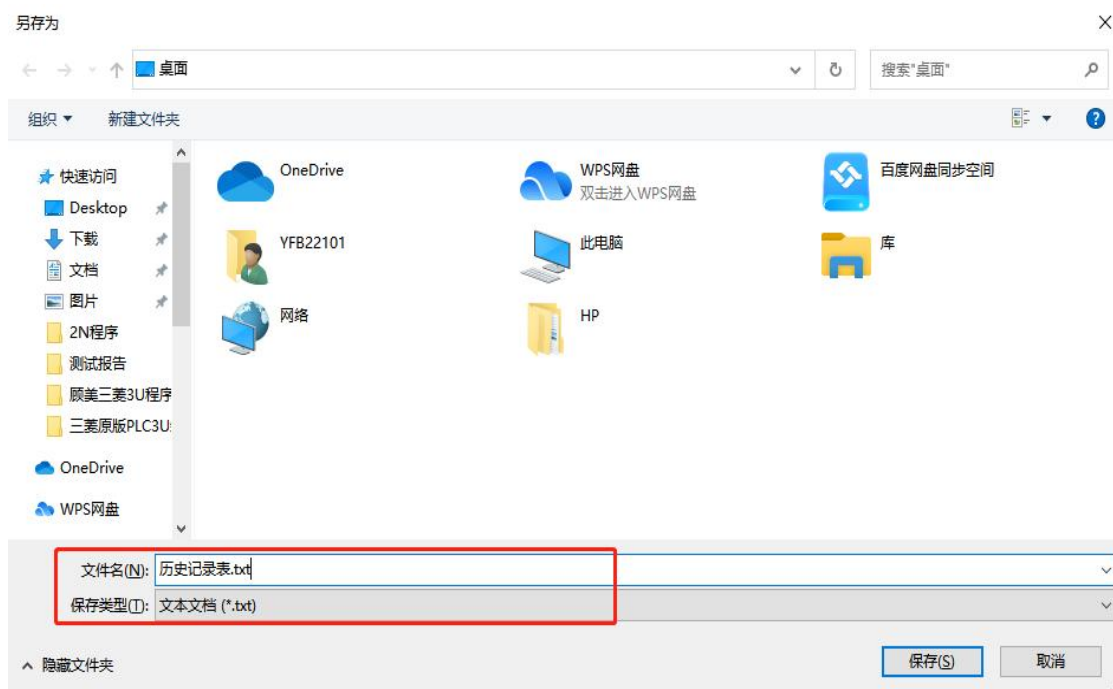
When the above steps are completed, click Query

9.2 History (export)

Before exporting, go to History Export, Chapter 8.1:



Click Export:
It will automatically
jump out to save the
file to the specified
folder;



When saving as, the
suffix of the file name
will appear (history
table.txt). This is a
text file, and the suffix
needs to be changed
to (history table.xlsx)

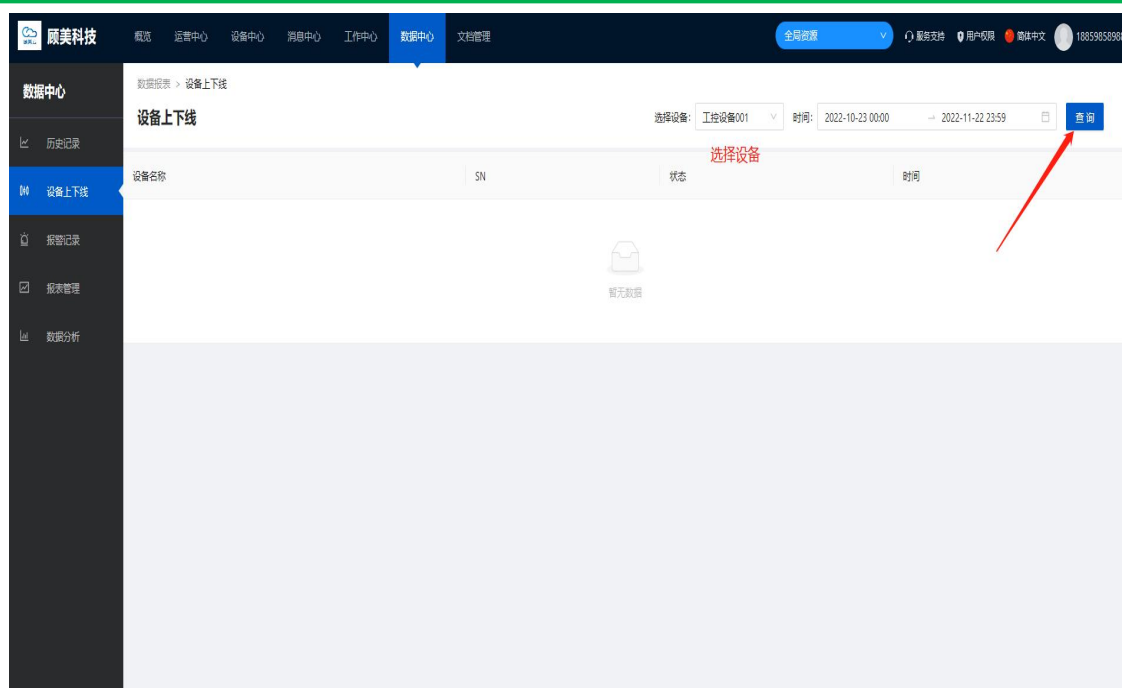
According to the next three pictures, change the file suffix toxlsx in turn, and the file will automatically generate a historical data table. If it has been automatically generated, you can choose to skip this operation



74	工控设备Cd0	29735	2022-11-22	14:20:06				
75	工控设备Cd0	29737	2022-11-22	14:20:07				
76	工控设备Cd0	29739	2022-11-22	14:20:08				
77	工控设备Cd0	29741	2022-11-22	14:20:09				
78	工控设备Cd0	29743	2022-11-22	14:20:10				
79	工控设备Cd0	29745	2022-11-22	14:20:11				
80	工控设备Cd0	29747	2022-11-22	14:20:12				
81	工控设备Cd0	29749	2022-11-22	14:20:13				
82	工控设备Cd0	29751	2022-11-22	14:20:14				
83	工控设备Cd0	29753	2022-11-22	14:20:15				
84	工控设备Cd0	29755	2022-11-22	14:20:16				
85	工控设备Cd0	29757	2022-11-22	14:20:17				
86	工控设备Cd0	29759	2022-11-22	14:20:18				
87	工控设备Cd0	29761	2022-11-22	14:20:19				
88	工控设备Cd0	29763	2022-11-22	14:20:20				
89	工控设备Cd0	29765	2022-11-22	14:20:21				
90	工控设备Cd0	29767	2022-11-22	14:20:22				
91	工控设备Cd0	29769	2022-11-22	14:20:23				
92	工控设备Cd0	29771	2022-11-22	14:20:24				
93	工控设备Cd0	29773	2022-11-22	14:20:25				
94	工控设备Cd0	29775	2022-11-22	14:20:26				
95	工控设备Cd0	29777	2022-11-22	14:20:27				
96	工控设备Cd0	29779	2022-11-22	14:20:28				
97	工控设备Cd0	29780	2022-11-22	14:20:29				
98	工控设备Cd0	29782	2022-11-22	14:20:30				

Historical data can be stored offline;

9.3 Device online and offline (device online and offline record query)



Data center—device
online and offline—
select device—select
time period—query

设备上下线			
		选择设备:	工控设备001
		时间:	
设备名称	SN	状态	时间
工控设备001		上线	2022-11-22 14:02:38
工控设备001		下线	2022-11-22 13:58:44
工控设备001		上线	2022-11-22 13:54:14
工控设备001		下线	2022-11-22 13:52:45
工控设备001		上线	2022-11-21 03:01:20
工控设备001		上线	2022-11-20 03:01:21
工控设备001		上线	2022-11-19 03:01:20
工控设备001		上线	2022-11-18 02:14:14
工控设备001		上线	2022-11-17 11:28:00
工控设备001		下线	2022-11-17 10:46:32

This function can
query the online time
and offline time of the
device

9.4 Alarm record (query)

设备名称	报警名称	状态	变量名称	触发值	报警时间	恢复时间
工控设备001	检测到上电	未恢复	bit0	1	2022-11-23 11:47:21	
工控设备001	11111111111111111111	已恢复	bit0	1	2022-11-23 10:34:17	2022-11-23 11:31:30
工控设备001	11111111111111111111	已恢复	bit0	1	2022-11-23 09:32:50	2022-11-23 09:33:00
工控设备001	11111111111111111111	已恢复	bit0	1	2022-11-22 17:18:16	2022-11-23 09:30:12
工控设备001	11111111111111111111	已恢复	bit0	1	2022-11-22 17:17:11	2022-11-22 17:18:13
工控设备001	11111111111111111111	已恢复	bit0	1	2022-11-22 17:14:31	2022-11-22 17:16:31
工控设备001	通信故障	已恢复			2022-11-22 17:12:21	2022-11-22 17:12:42
工控设备001	通信故障	已恢复			2022-11-22 14:11:30	2022-11-22 14:11:57
工控设备001	通信故障	已恢复			2022-11-22 14:06:41	2022-11-22 14:07:10
工控设备001	通信故障	已恢复			2022-11-22 14:06:37	2022-11-22 14:07:08

- ① Select device
- ② Choose the status of the device you want to view 1, not restored 2, restored
- ③ Select time period
- ④ Click to query

9.5 Alarm log (export)

Stay tuned

9.6 Report management

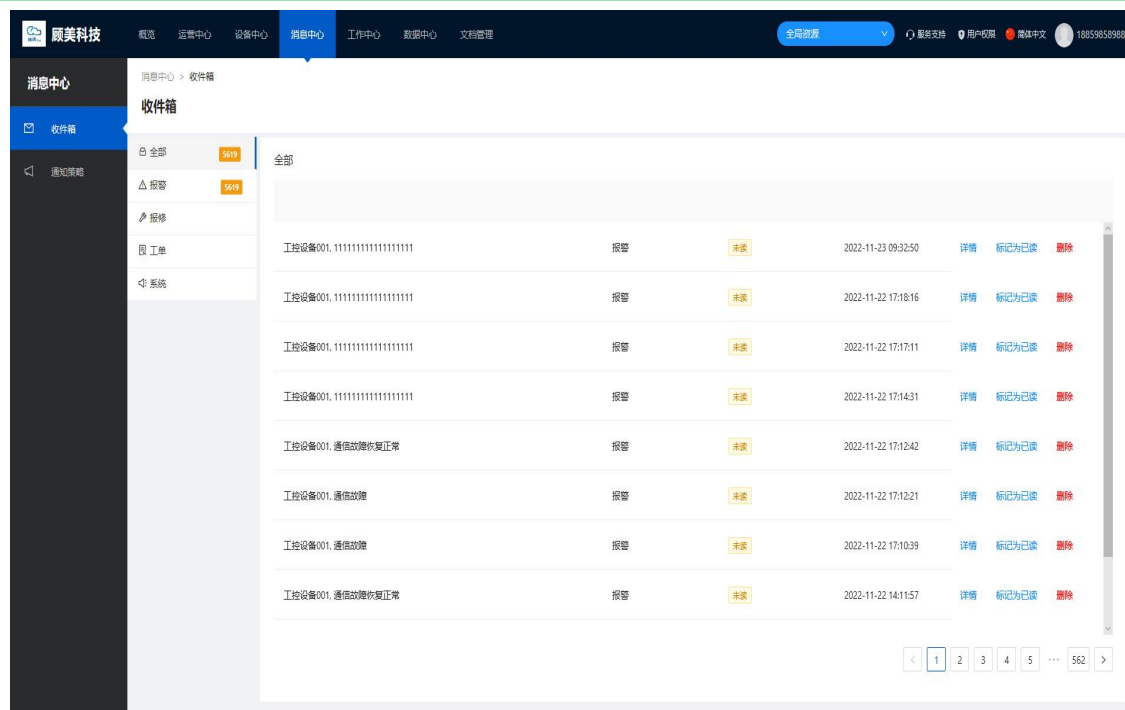
Stay tuned

9.7 Data analysis

Stay tuned

X. Message center

10.1 Inbox



All—alarm prompt, repair prompt, work order prompt, system prompt;

10.2 Notification strategy (WeChat alarm function)

10.2.1 WeChat alarm function introduction

WeChat alarm function:

Function ① When the device communication is interrupted, send an alarm push message;

Judgment conditions are as follows:

When the communication of the device's slaves is abnormal, an alarm push message is sent. If one or more slaves are connected and a certain slave is disconnected, the device will be displayed in the WeChat applet if it is not connected. Send an alarm message to WeChat, and tell you what device is notifying you to go online to view the alarm slave station information, and the device will send an alarm message as long as the communication is abnormal;

Function ② Send an alarm push message when the specified data changes in the real-time data of the device

Judgment conditions are as follows:

Condition 1: less than the specified value

Condition 2: greater than the specified value

Condition 3: The value greater than A is less than the value of B (the value of AB can be customized)

Condition 4: The value less than A is greater than the value of B (the value of AB can be customized)

Condition 5: equal to the specified value

Function ③ Send an alarm push message when the ON/OFF state of the device changes

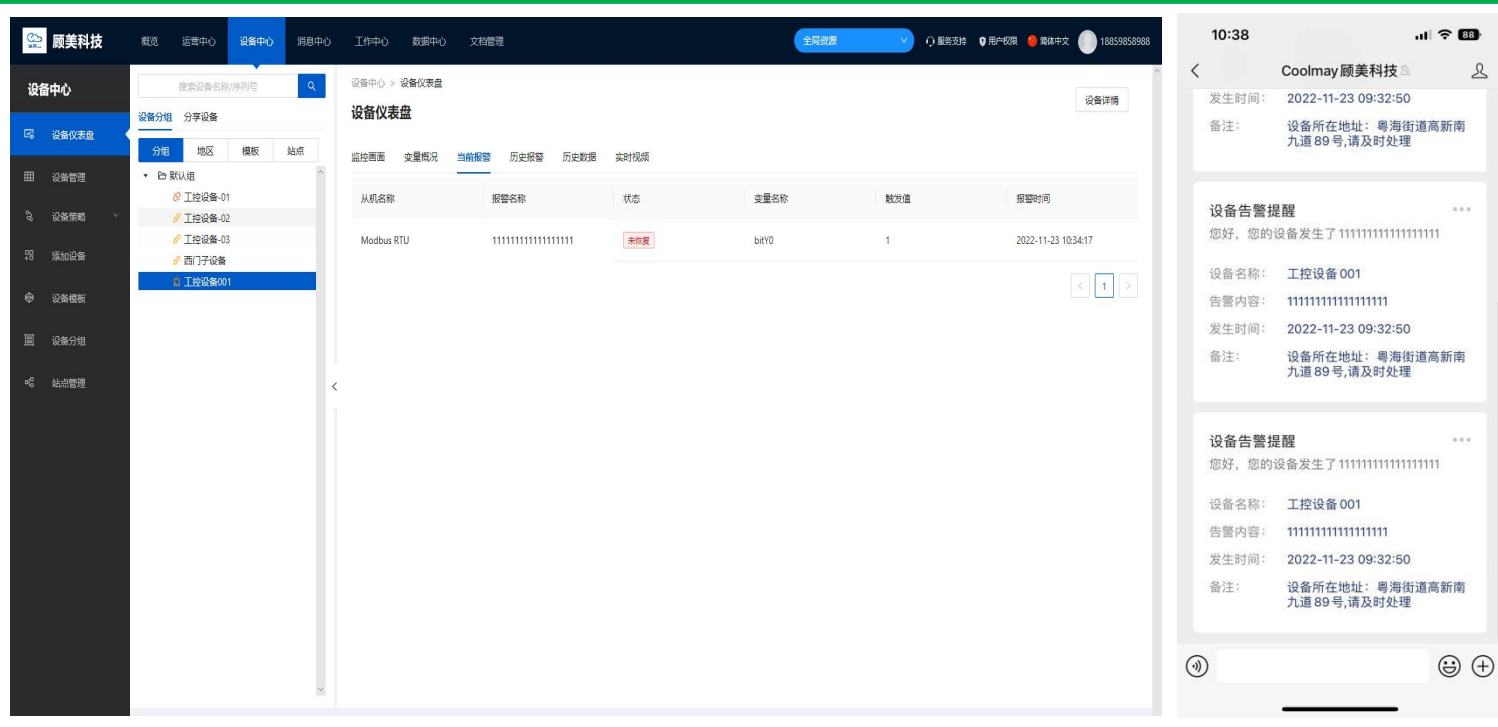
Judgment conditions are as follows:

Condition 1: Send an alarm push message when the data status is ON

Condition 2: Send an alarm push message when the data status is OFF

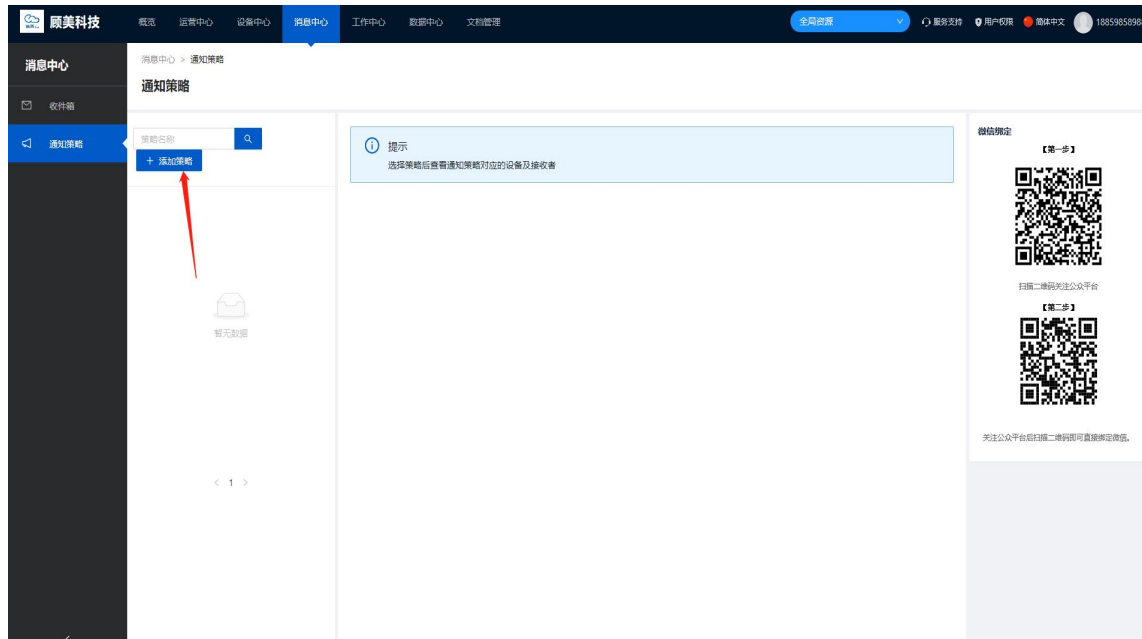
WeChat alarm recovery function:

When the device has a data alarm, if you want to remove the alarm, you must restore it to the original data state when there was no alarm, otherwise the alarm state will continue. You can go to Device Center - Device Dashboard - Device Name - Current Alarm, that is You can view the current alarm information;



10.2.2、WeChat alarm configuration steps

10.2.2.1、Bind device:



Message Center—
Notification Policy—
Add Policy, click Add
Policy to bind device
and account!

Add policy

* Policy name: Alarm push strategy **Custom**

Push mechanism: when the variable value reaches

① ☒ First push only

② ☐ Alarm silence time Minute ?

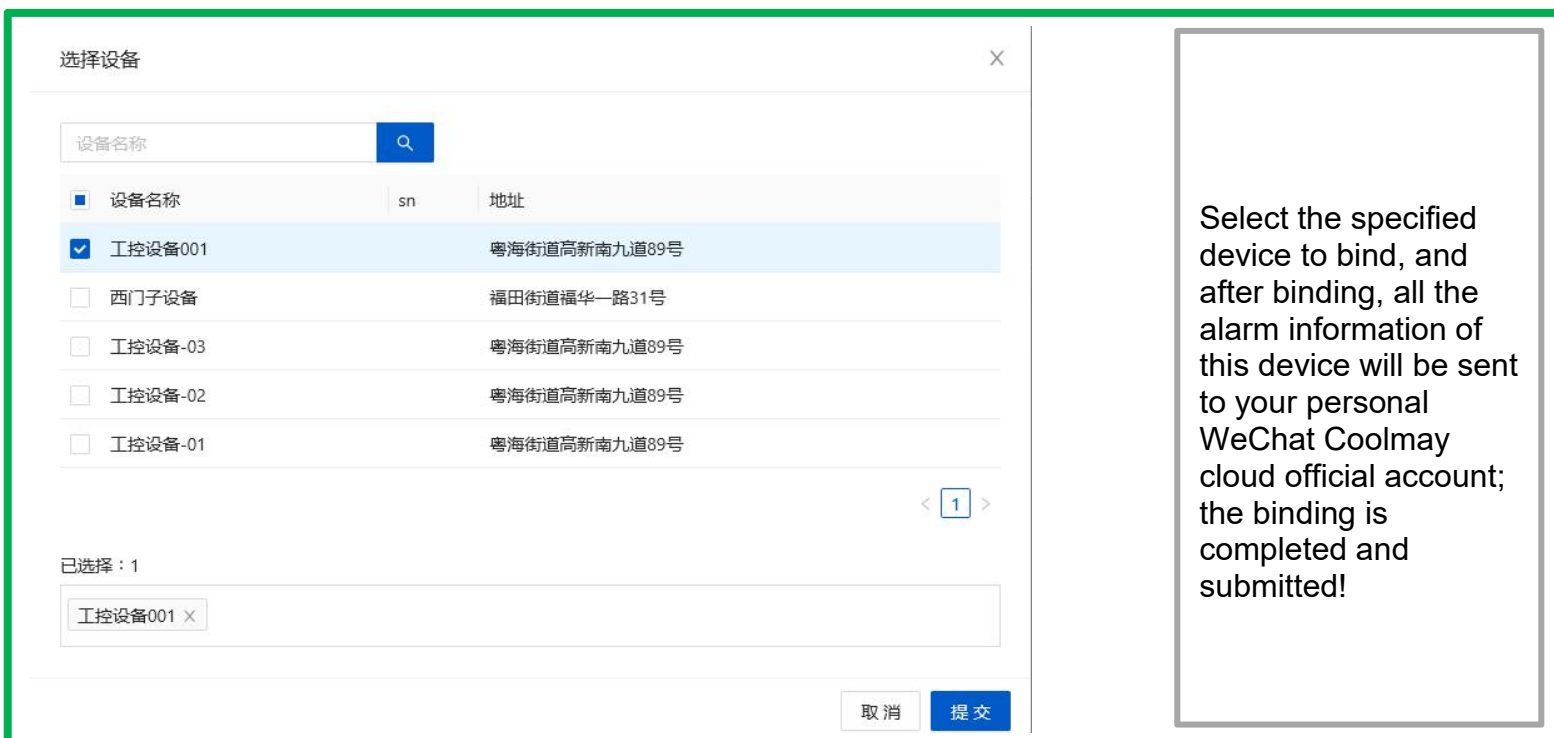
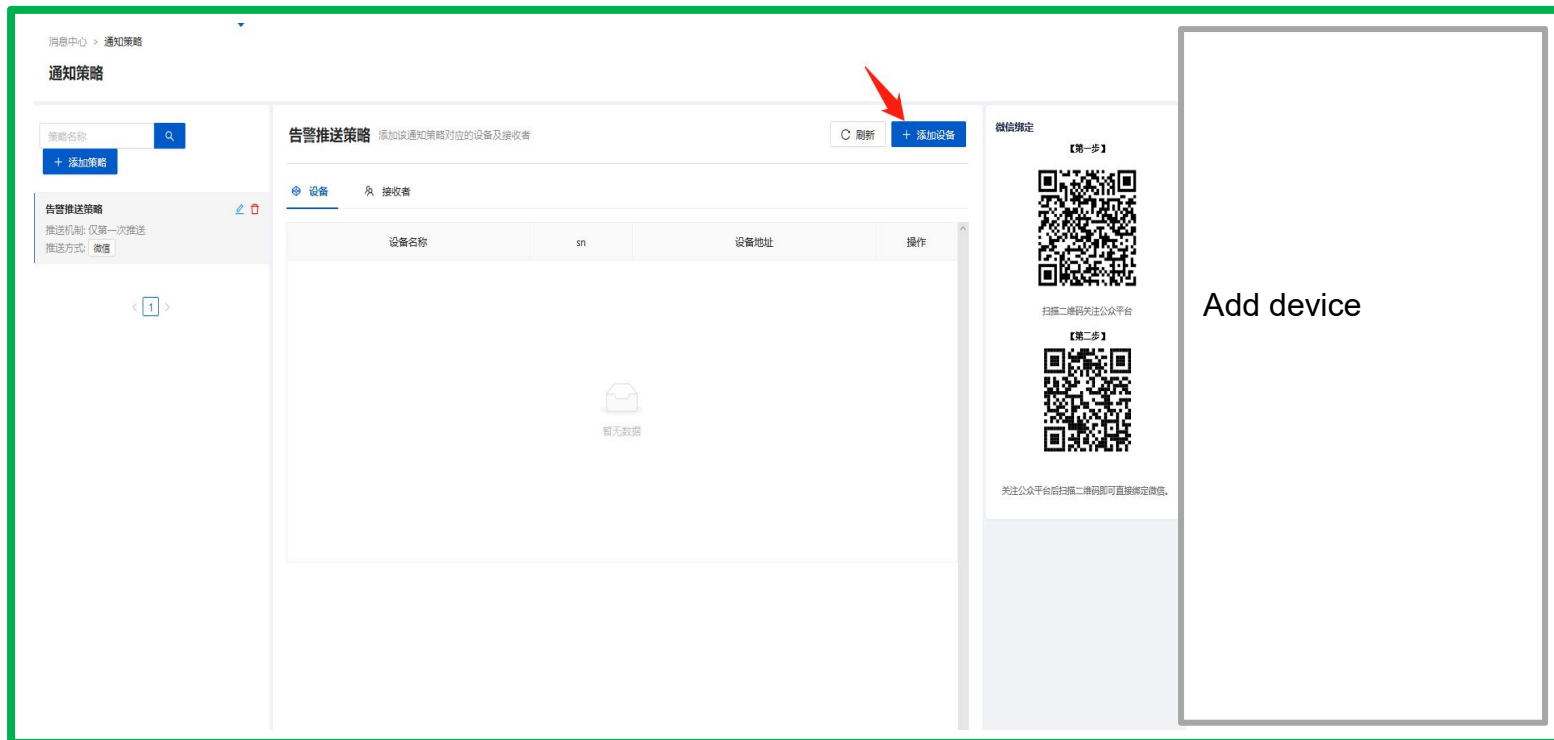
Alarm method: ☒ WeChat ☐ E-mail

Cancel

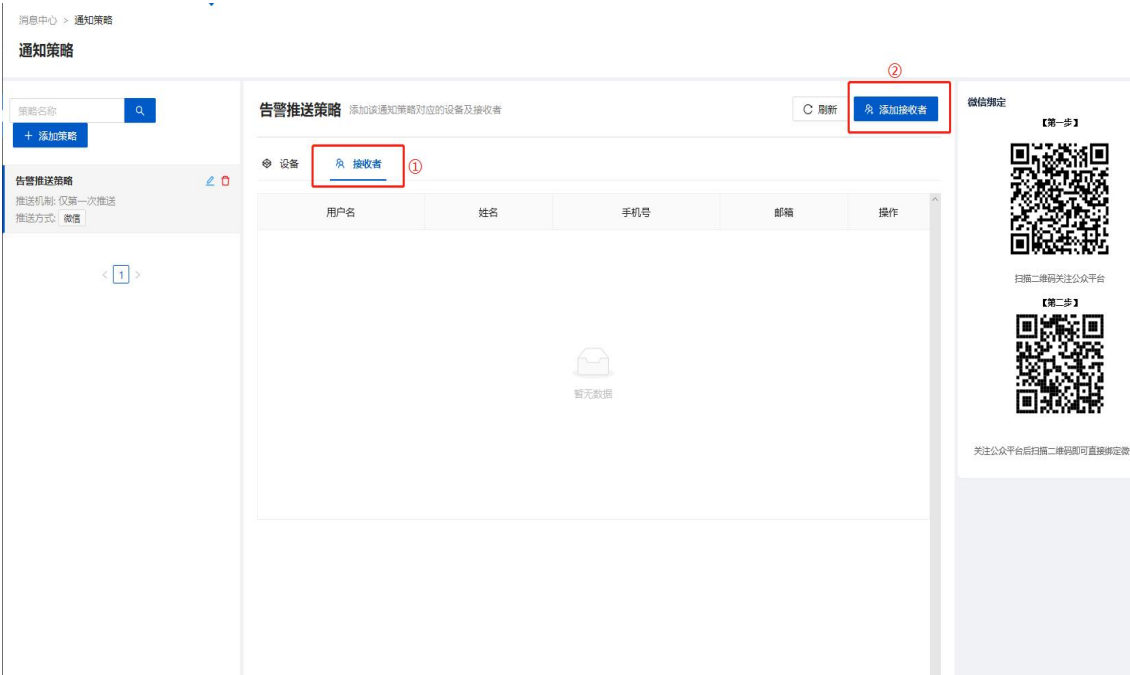
Submit

Push mechanism:

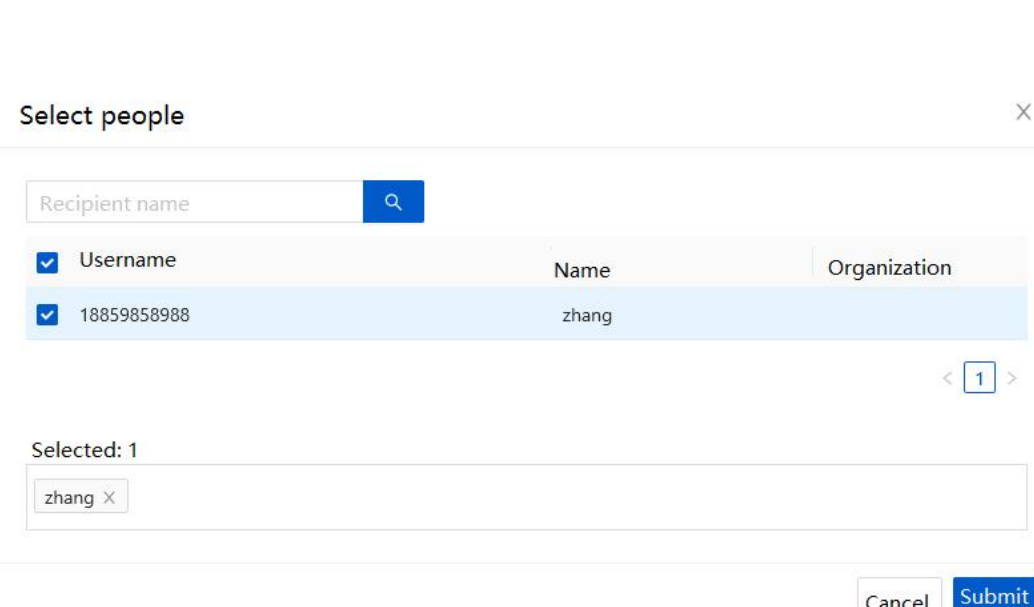
① Only the first push: the data is pushed once after the data is sent and changed;
② Alarm silence time: When an alarm is triggered, an alarm message will be sent first, and then the alarm will be alarmed according to the set minute time if the alarm is not restored, for example, an alarm will be issued every five minutes!



10.2.2.2. Binding receivers

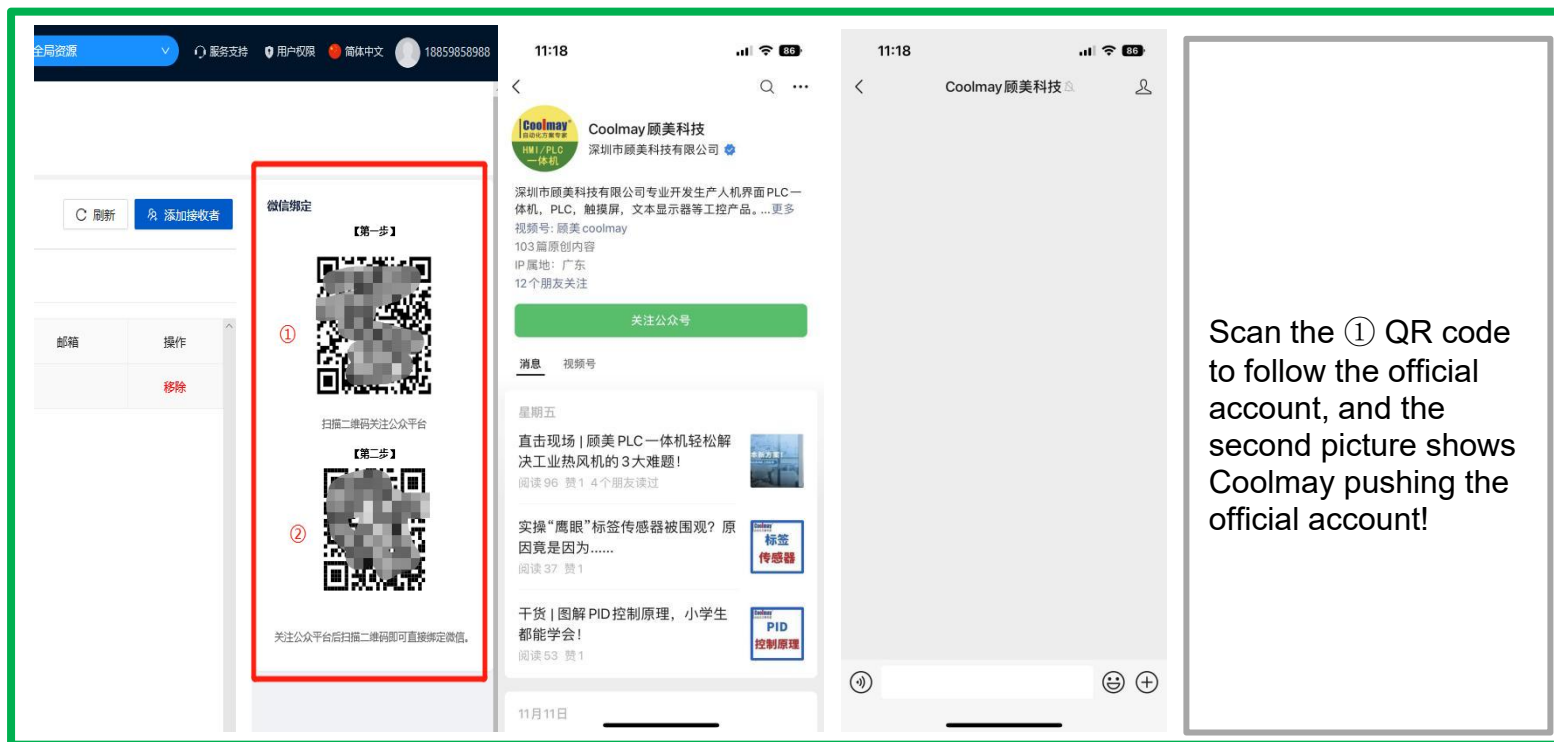


Just select the user name of the platform account;



The binding recipient is to bind the user's cloud platform account, and directly choose to submit after the binding is completed!

10.2.2.3 Follow Coolmay Technology WeChat official account

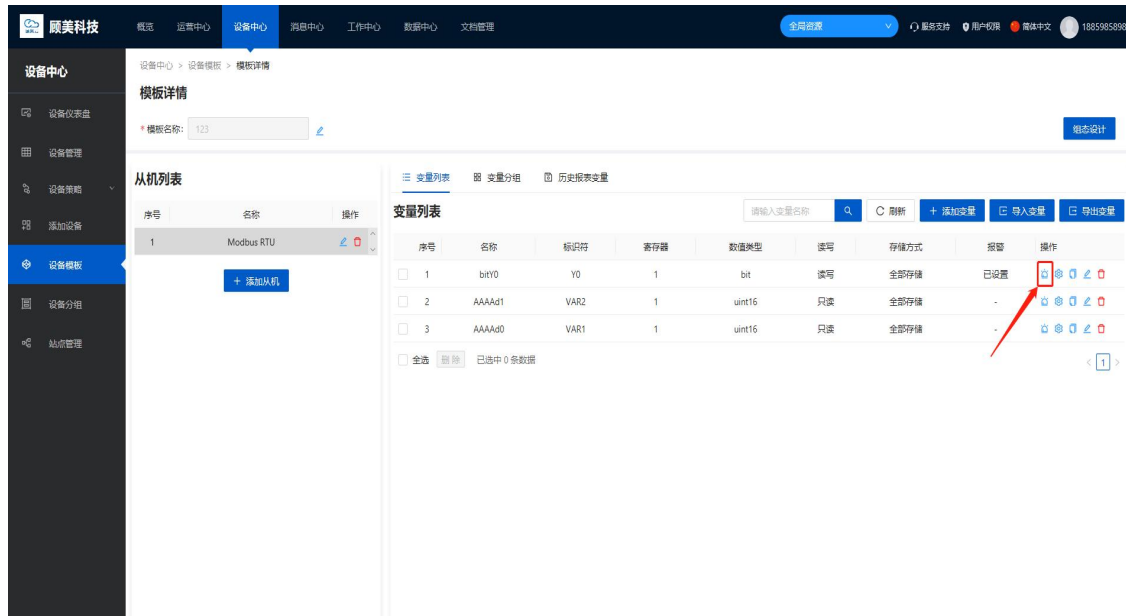


10.2.2.4. Binding Coolmay Technology WeChat official account



10.3 Alarm point configuration

The configuration is introduced in 9.2.1 WeChat alarm function introduction



Device Center—
Device Template—
Select Slave—Select
Set Alarm

Alarm Settings

Alarm rules: ☒

Triggering conditions: Switch ON

Alarm push content: Hit the upper limit

Return to normal
push content: Leave the upper limit

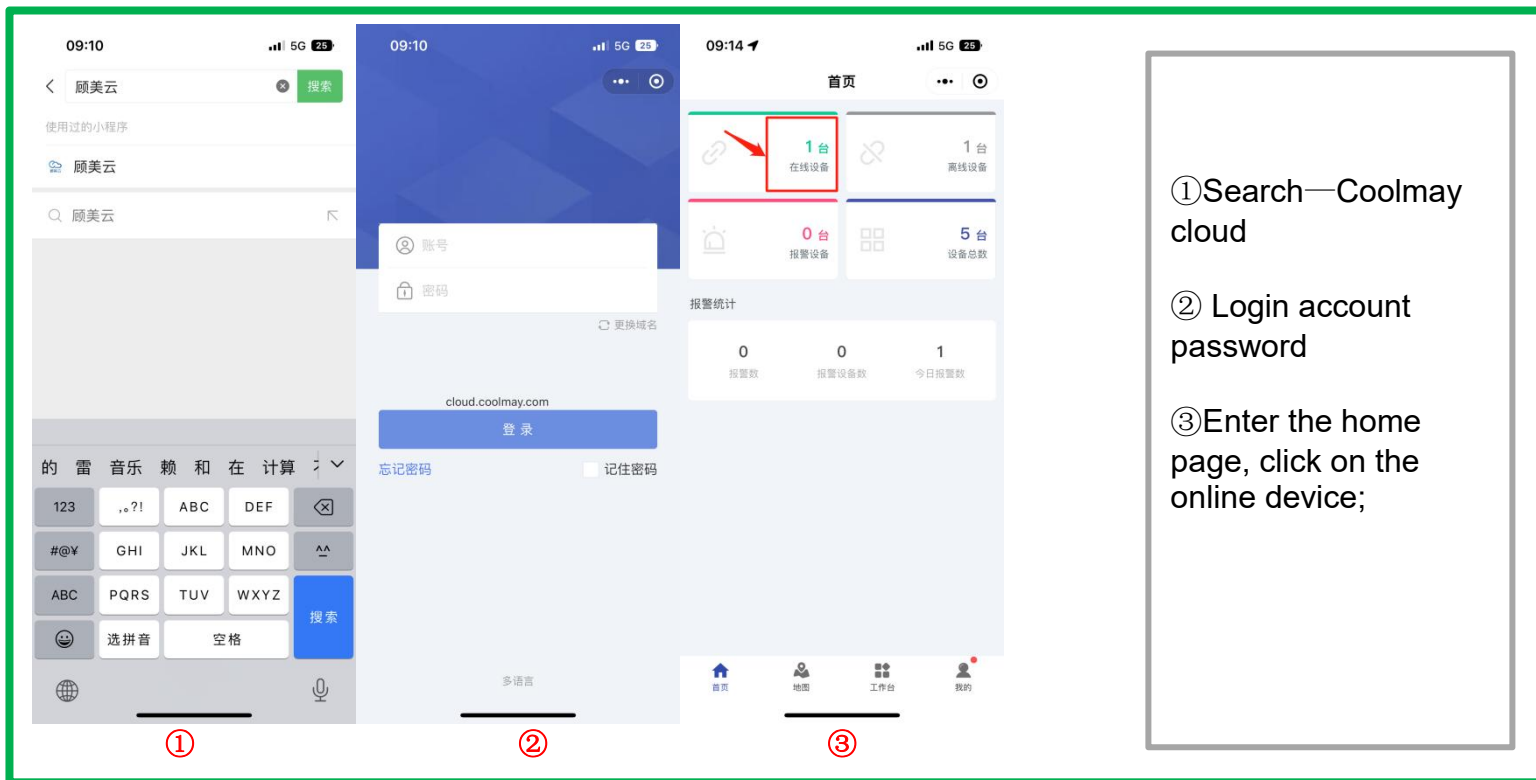
Cancel

Submit

Alert rules:
When the specified
data status is ON, an
alarm message will be
pushed, and the
content of the alarm
push = the message
pushed on the
WeChat official
account, and what
message will be
pushed;



XI. WeChat Mini Programs



① Search—Coolmay cloud

② Login account password

③ Enter the home page, click on the online device;



① Click on the online device

② Process flow = configuration interface

③ Enter the configuration interface

XII. Gateway usage steps (beginners must read)

12.1 Operation steps of CX3G and BG200 (all Coolmay PLCs can be operated according to this step)

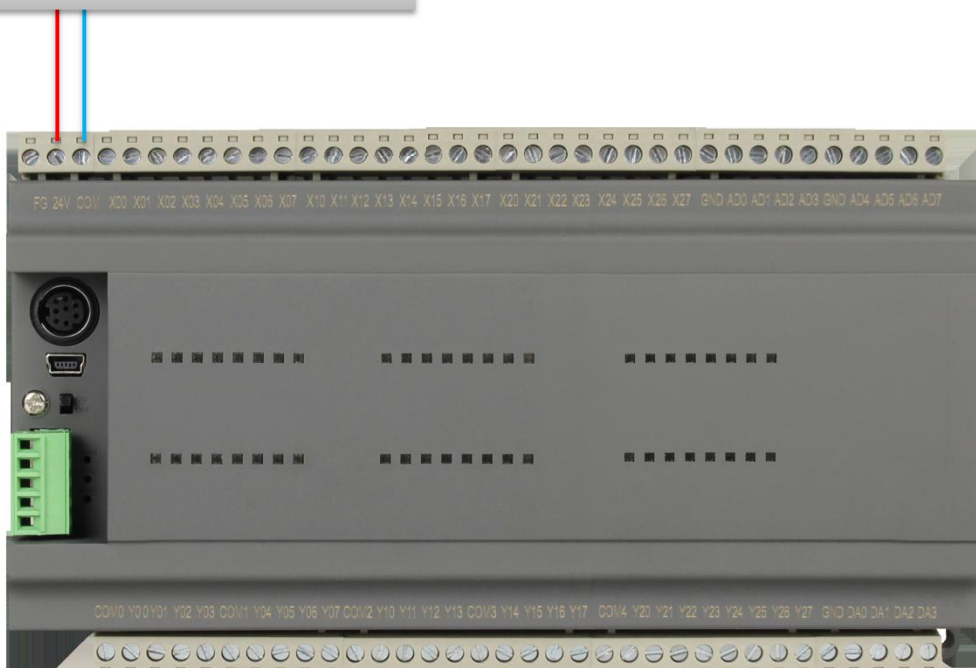
Step 1: Power on



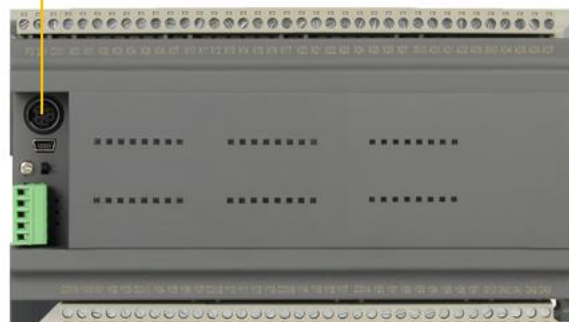
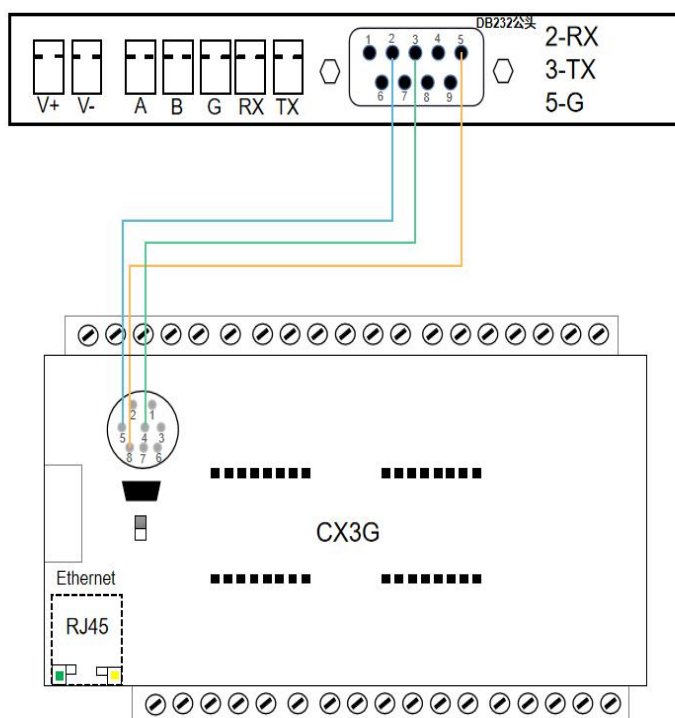
Get the BG200 device and connect it to the power supply. V+ is connected to the positive power supply, and V- is connected to the negative power supply; the power interface supports 9V, 12V, 24V, and 36V DC power signals;

Connect to DC9-38V power supply

Access to DC24V power supply



Connect the communication line according to the figure below
Use the special DB9232 to turn the 8-pin round 232 mouse head



Step 3: Networking

The access router will automatically address, no configuration is required! You can connect to the network only after accessing the WAN port. If the WAN port indicator is not lit, plug it again until the WAN port recognizes the network. It is recommended to try every 30 seconds;



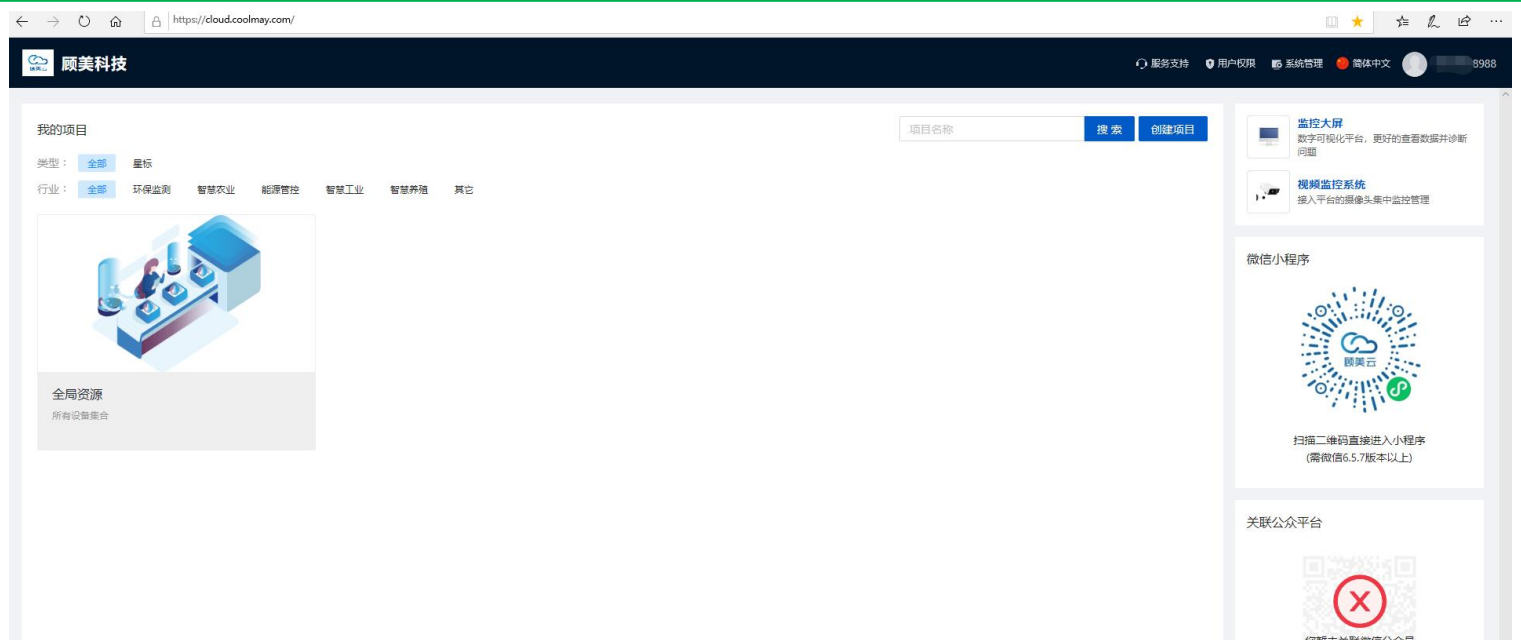
Step 4: Log in to the cloud platform

Cloud platform URL: <https://cloud.coolmay.com/>

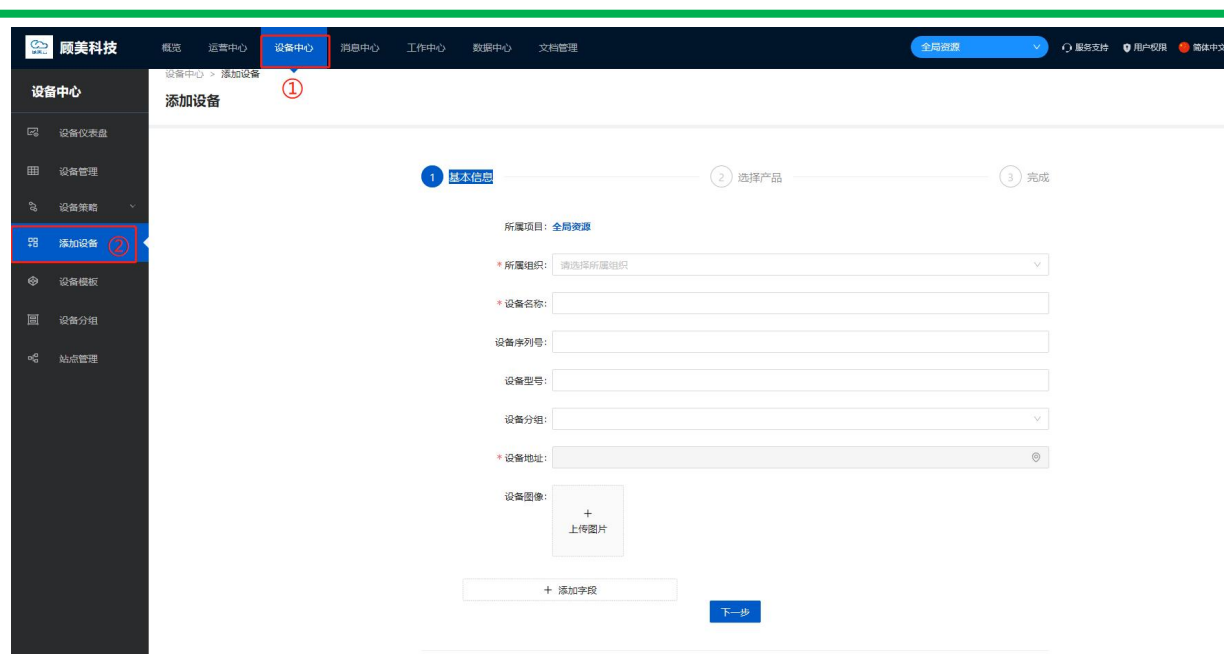
Enter the user account password to log in to the cloud platform



Enter the account password. If there is no account password, you can purchase various models of Coolmay gateways before you can apply for an account. Contact Coolmay before and after sales to apply for account permissions; When you log in to your account and see the following home page interface, the login is successful



Step 5: Create Device



Step 6: Fill in the device information

Organization: The company name filled in when applying for an account (required)

Device name: custom name (required)

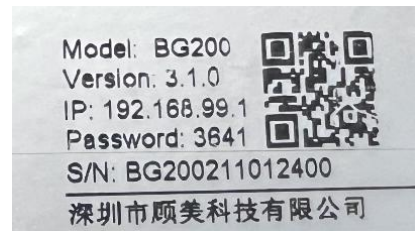
Device serial number: Refer to the S/N on the back of BG200, each is an independent number; the number on the right is invalid (required)

Device model: BG200 (required)

Device group: group can be used when adding device group (can be left blank)

Device address: Click on the location icon on the right to search for the location to locate successfully (required but not necessarily true)

Fill in the above required fields and click Next



1 Basic Information 2 Select product 3 Finish

Project: Global Resources

*Organization: 福建永安建兴设备有限公司

*Device name: Device name (custom)

Device serial number: BG200211012400

Device model: BG200

Device grouping:

*Device address: 广东省深圳市南山区沙河街道杜鹃山东街1号

Device image: +
Upload image

+ Add field

Next step

Step 7: Create Template

The template name can be customized, for example: Coolmay CX3G-01

Modbus/PLC—Coolmay—3G/L02 series serial port
 (this template is available for all Coolmay series PLCs)

1 Basic Information
2 Select product

3 Finish

Create template
Existing template

* Template name:

Modbus/PLC	Product	Protocol
	Modbus	
	Mitsubishi	
	Siemens	
	Coolmay	☒ 3G/L02 series serial port ☐ 3G/L02 series TCP

Submit
Previous

Step 8: Configure Slaves and Variables

Click Next to configure
slaves and variables

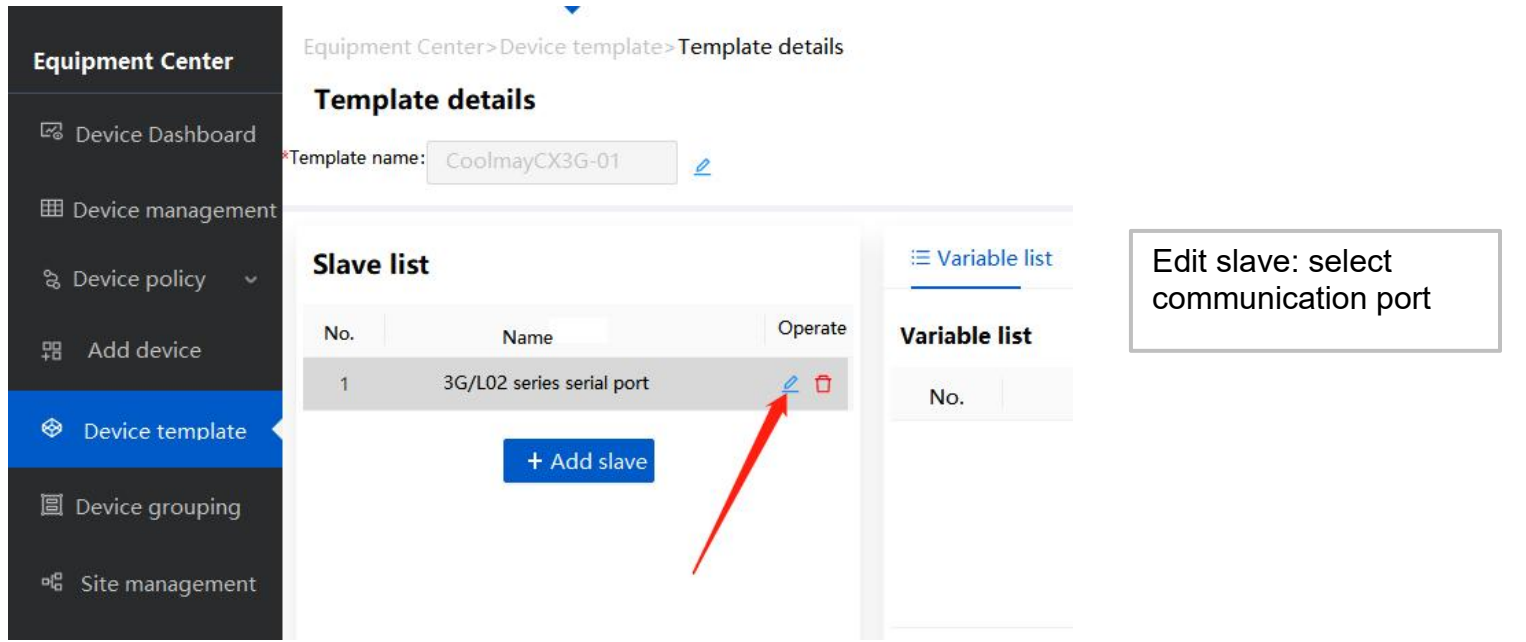


Device name: device name (custom)

Bind communication
equipment

Next, configure slaves and variables

Configure the slave



Equipment Center > Device template > Template details

Template details

*Template name: CoolmayCX3G-01

Slave list

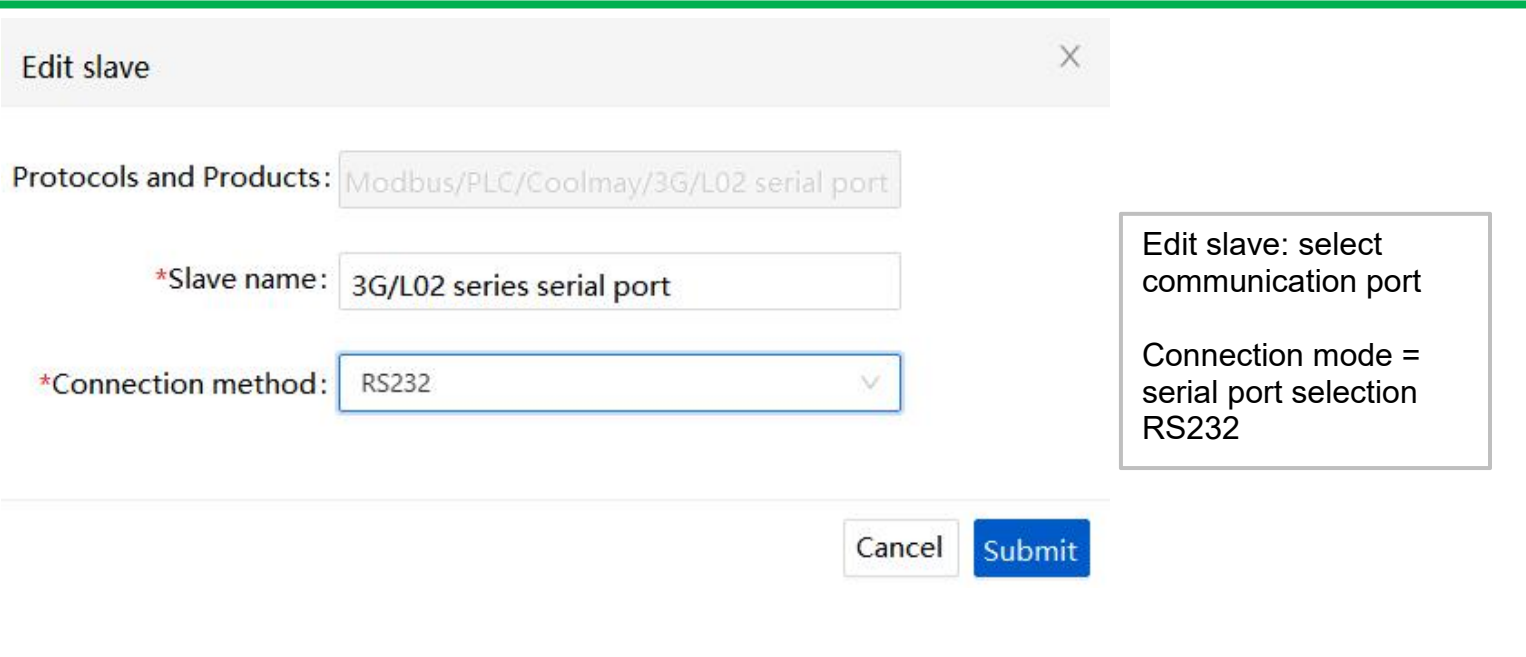
No.	Name	Operate
1	3G/L02 series serial port	 

+ Add slave

Variable list

No.

Edit slave: select communication port



Edit slave

Protocols and Products: Modbus/PLC/Coolmay/3G/L02 serial port

*Slave name: 3G/L02 series serial port

*Connection method: RS232

Cancel Submit

Edit slave: select communication port

Connection mode = serial port selection RS232

Add variable D0-16 bit signed value

Add variable

*Variable name: CX3G-D0

Unit: s

Register: D (Data) 0 D0(int16)

Identifier: D0

*Data Format: 16 bit signed

*Read and write mode: ☒ Read and write ☐ Read only

Advanced options

Variable name: custom (required)
 Unit: Custom (optional)
 Register: Click to select register D, the address in the right box is the actual address of the PLC, and this option is selected as D0; (required)
 Identifier: Fill in automatically (Identifiers cannot be the same - required)
 Data format: select 16-bit signed (required)
 Read and write mode: read and write (required)

Cancel

Submit

顾美科技 设备中心 模板详情

模板名称: 顾美CX3G-01

从机列表

序号	名称	操作
1	3G/L02系列 串口	+ 添加从机

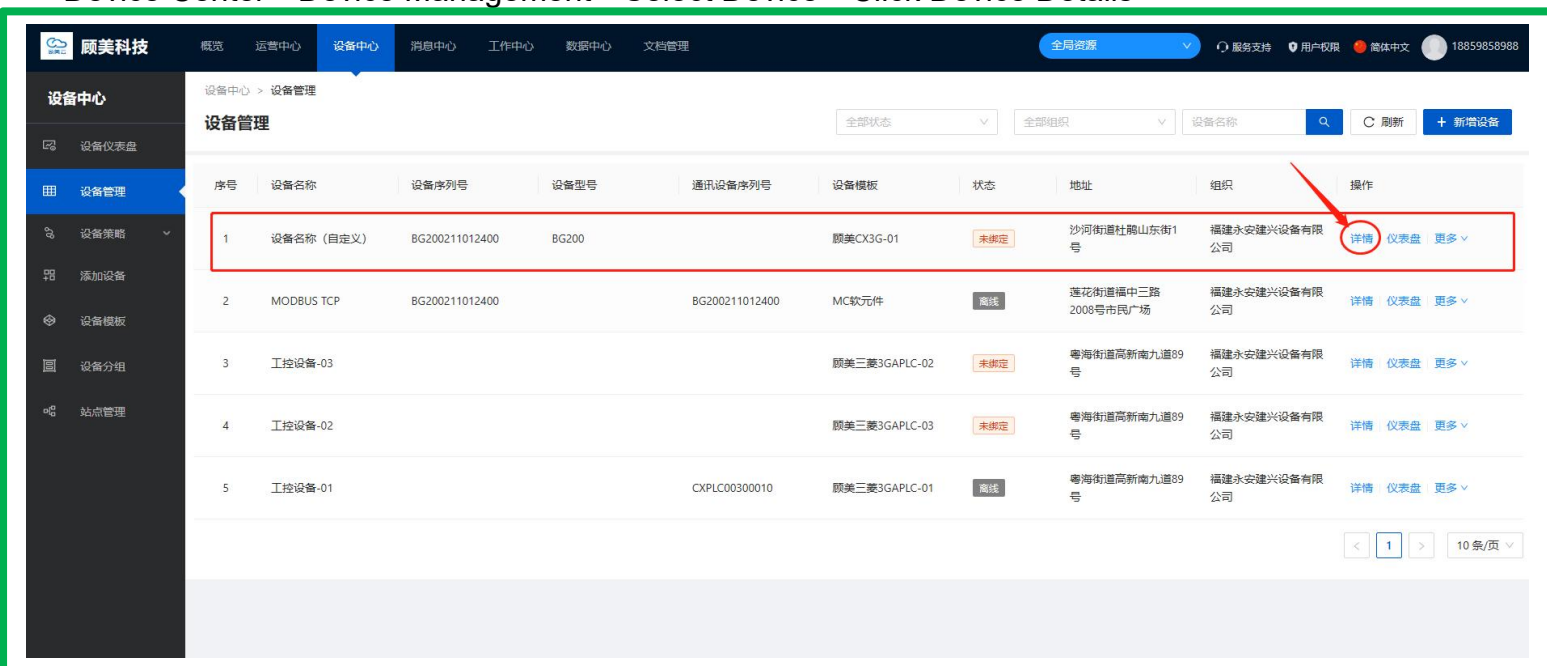
变量列表

序号	名称	标识符	寄存器	数值类型	读写	报警	操作
☐ 1	CX3G-D0	D0	0	int16	读写	-	+ - ↺ ↻

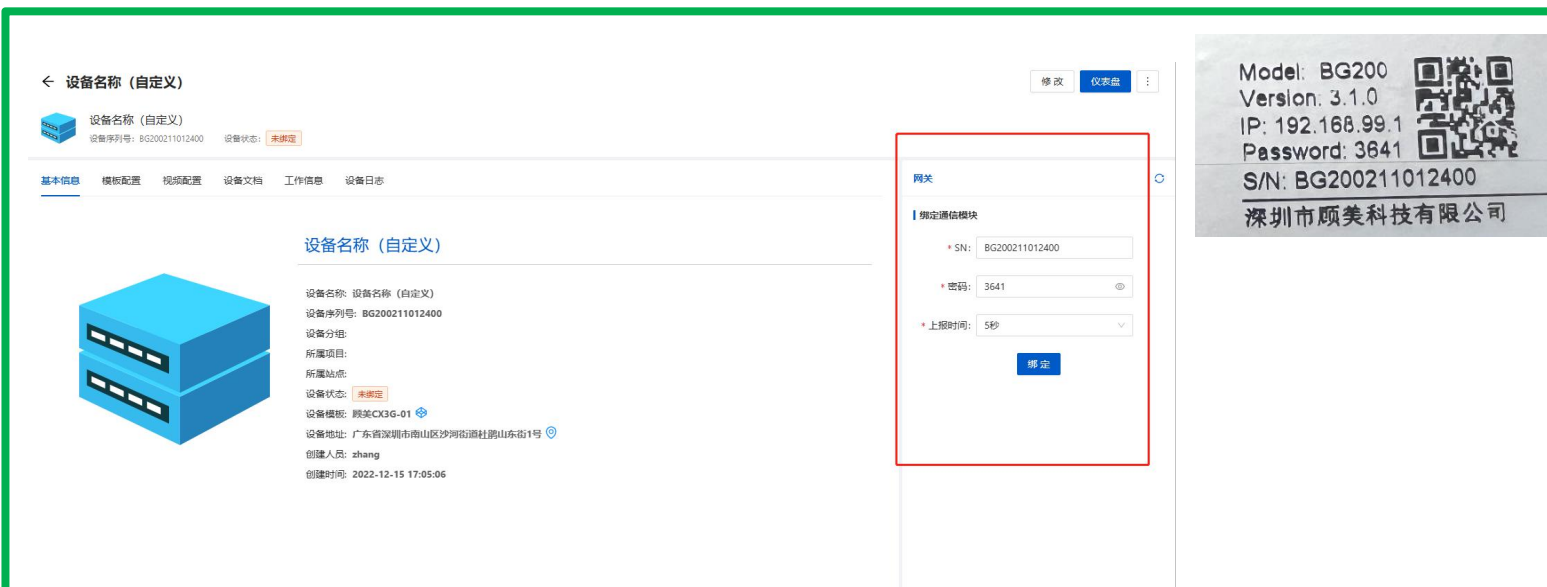
全选 删除 已选中 0 条数据

Step 9: Bind the communication module

Device Center—Device Management—Select Device—Click Device Details



Note: SN/password is unique, the following operations are for reference only, and should be filled in with the SM and password on the label of the field device!



Refer to the picture above: there are SN numbers and passwords on the back of the gateway BG200

SN=S/N

Password=Password

SN and password are independent. The above picture is for reference only, and should be filled in with the actual parameters of the field device;

The reporting time is the refresh rate recommended 1-5S, the more data you fill in, the higher; the binding prompt is successful

Step 10: Update configuration

Click Device Center—Device Management—Select the current device name—Click More—Update Configuration

Note: This step is very important. Every time there is any change in the device, you need to click Update Configuration!

设备中心 > 设备管理

全部状态 全部组织 设备名称 刷新 新增设备

序号	设备名称	设备序列号	设备型号	通讯设备序列号	设备模板	状态	地址	组织	操作
1	设备名称 (自定义)	BG200211012400	BG200	BG200211012400	顾美CX3G-01	警告	沙河街道社鼎山东街1号	福建永安建兴设备有限公司	详情 仪表盘 更多
2	MODBUS TCP	BG200211012400			MC软元件	未绑定	莲花街道福中三路2008号市民广场	福建永安建兴设备有限公司	详情 仪表盘 更多
3	工控设备-03				顾美三菱3GAPLC-02	未绑定	粤海街道高新南九道89号	福建永安建兴设备有限公司	详情 仪表盘 更多
4	工控设备-02				顾美三菱3GAPLC-03	未绑定	粤海街道高新南九道89号	福建永安建兴设备有限公司	详情 仪表盘 更多
5	工控设备-01			CXPLC00300010	顾美三菱3GAPLC-01	离线	粤海街道高新南九道89号	福建永安建兴设备有限公司	详情 仪表盘 更多

10条/页

Click Device Center—Device Dashboard—Select Device—Click Variable Overview—Query Current Value—you can see the uploaded value

设备中心 > 设备仪表盘

搜索设备名称/序列号

设备分组 分享设备

分组 地区 模板 站点

默认组

工控设备-01
工控设备-02
工控设备-03
MODBUS TCP
设备名称 (自定义)

设备仪表盘

监控画面 变量概况 当前报警 历史报警 历史数据 实时视频

分组名称

默认组 该分组对应的变量

从机名称	变量名称	当前值	标签	更新时间	操作
3G/L02系列 串口	CX3G-D0	6695		2022-12-15 18:34:04	刷新

1

XIV. Remote upload and download

13.1 Install the transparent transmission software BoxManager

The software installation package can be downloaded from the Coolmay Cloud official website/or obtained from Coolmay Sales!



Step:

Unzip the installation package

名称	修改日期	类型	大小
BoxManager.rar	2023/1/14 14:27	360压缩 RAR 文件	83,119 KB

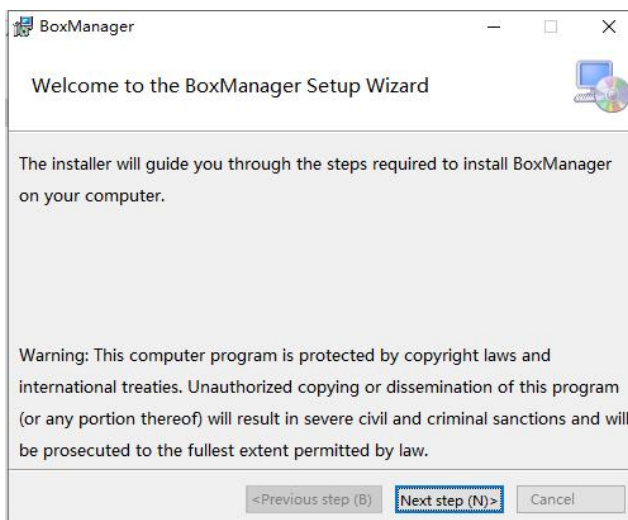


Open setup.exe

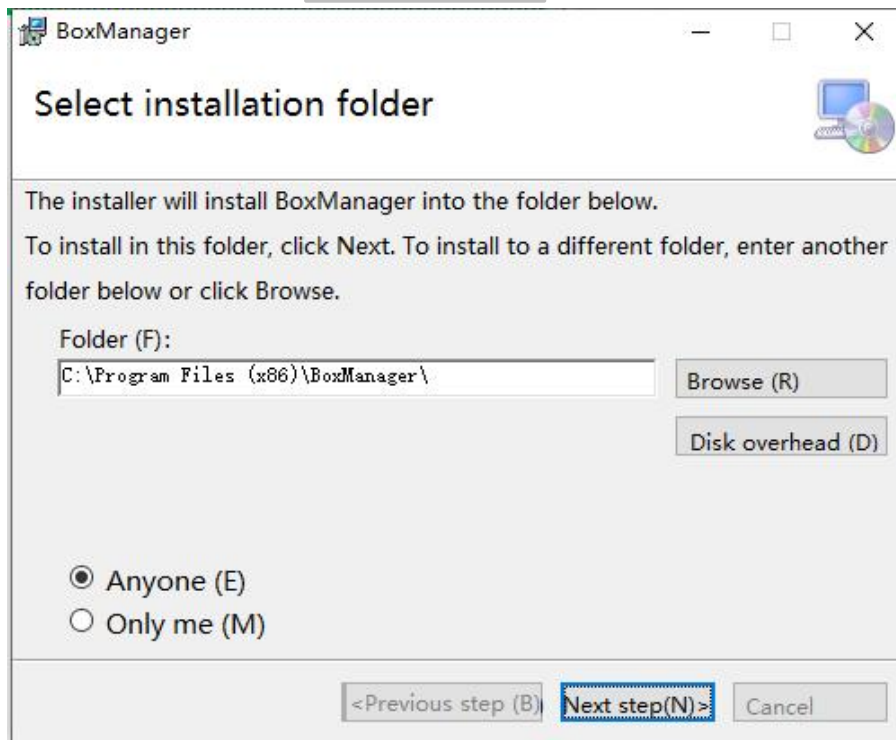
名称	修改日期	类型	大小
BoxManager.msi	2021/8/30 15:24	Windows Install...	83,925 KB
setup.exe	2021/8/30 15:24	应用程序	551 KB



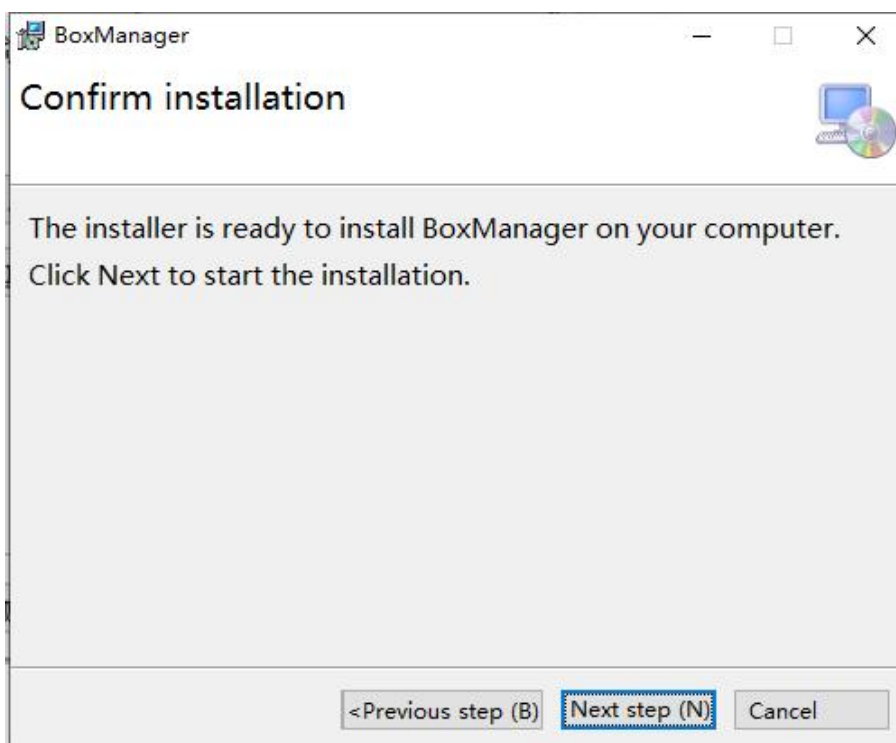
Follow the wizard to install



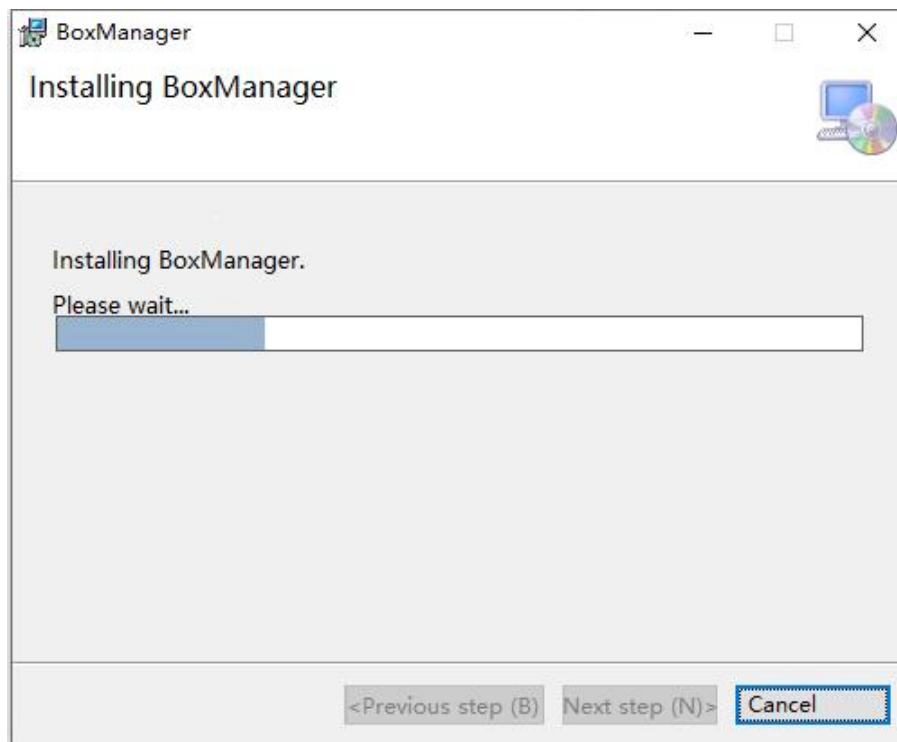
Next step



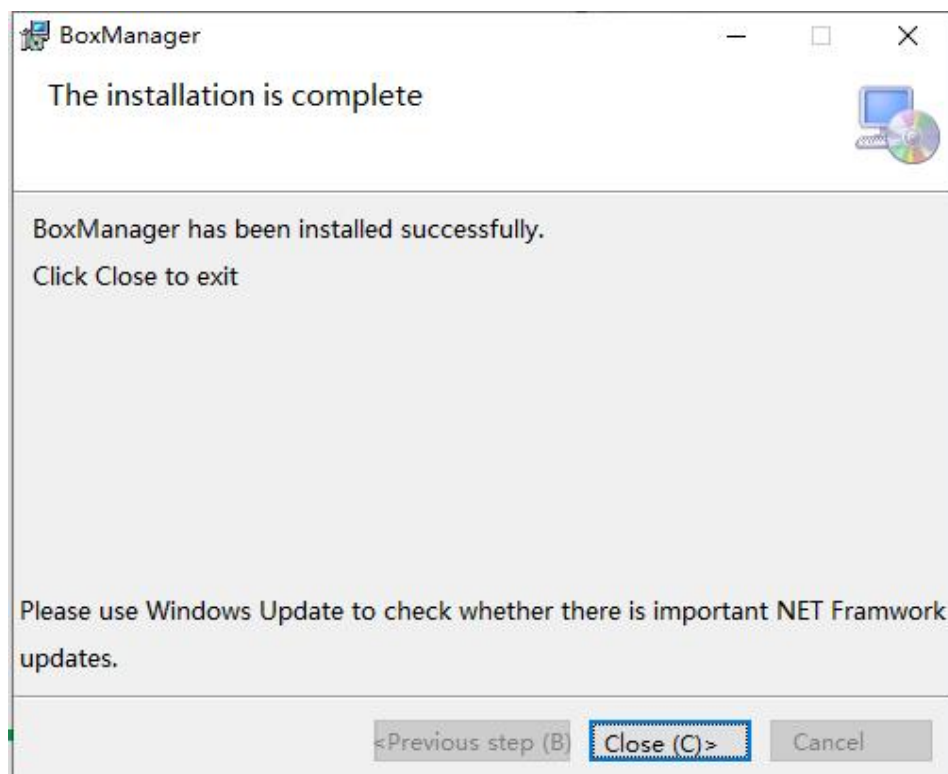
Next step



Installing



Closure



13.2 Serial port remote download

Serial port remote download is performed through the transparent transmission APP developed by coolmay. It is necessary to complete the transparent transmission software installation steps of 13.1 before proceeding to the next step, otherwise the normal remote transparent transmission operation cannot be performed;

Confirmation 1: Make sure the device is online before remote downloading

Click Device Center—Device Management—find the name of the connected device to check whether it is online

序号	设备名称	设备序列号	设备型号	通讯设备序列号	设备模板	状态	地址	组织	操作
1	123	123	L02	CXPLC00700016	666	离线	莲花街道深南大道2026号市民广场	福建永安建兴设备有限公司	详情 仪表盘 更多
2	设备名称 (自定义)	BG200211012400	BG200	BG200211012400	顾美CX3G-01	在线	沙河街道杜鵑山东街1号	福建永安建兴设备有限公司	详情 仪表盘 更多
3	MODBUS TCP	BG200211012400			MC软件	未绑定	莲花街道福中三路2006号市民广场	福建永安建兴设备有限公司	详情 仪表盘 更多
4	工控设备-03				顾美三菱3GAPLC-02	未绑定	粤海街道高新南九道89号	福建永安建兴设备有限公司	详情 仪表盘 更多
5	工控设备-02				顾美三菱3GAPLC-03	未绑定	粤海街道高新南九道89号	福建永安建兴设备有限公司	详情 仪表盘 更多
6	工控设备-01			CXPLC00300010	顾美三菱3GAPLC-01	离线	粤海街道高新南九道89号	福建永安建兴设备有限公司	详情 仪表盘 更多

Confirmation 2: Make sure that the device is in normal communication state before remote downloading

Click Device Center—Device Dashboard—Find Device Name—Click the current variable to check whether the variable is updated online in real time

从机名称	变量名称	当前值	标签	更新时间	操作
3G/L02系列 串口	D0	3333单位		2023-01-30 14:00:03	刷新

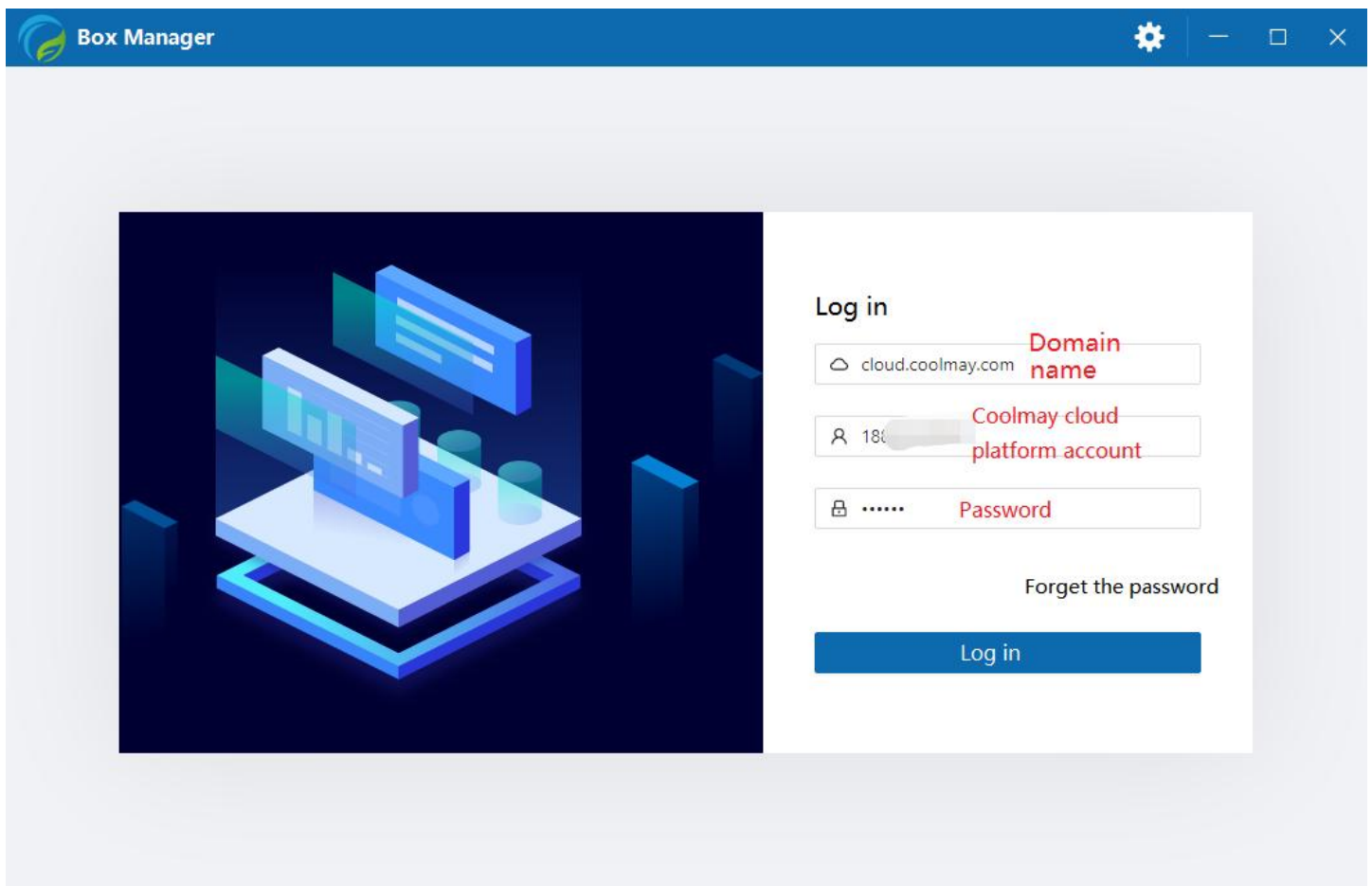


Open the transparent transmission software: log in account password, fill in the Coolmay cloud domain name, which is the Coolmay cloud platform URL;

Domain name: cloud.coolmay.com

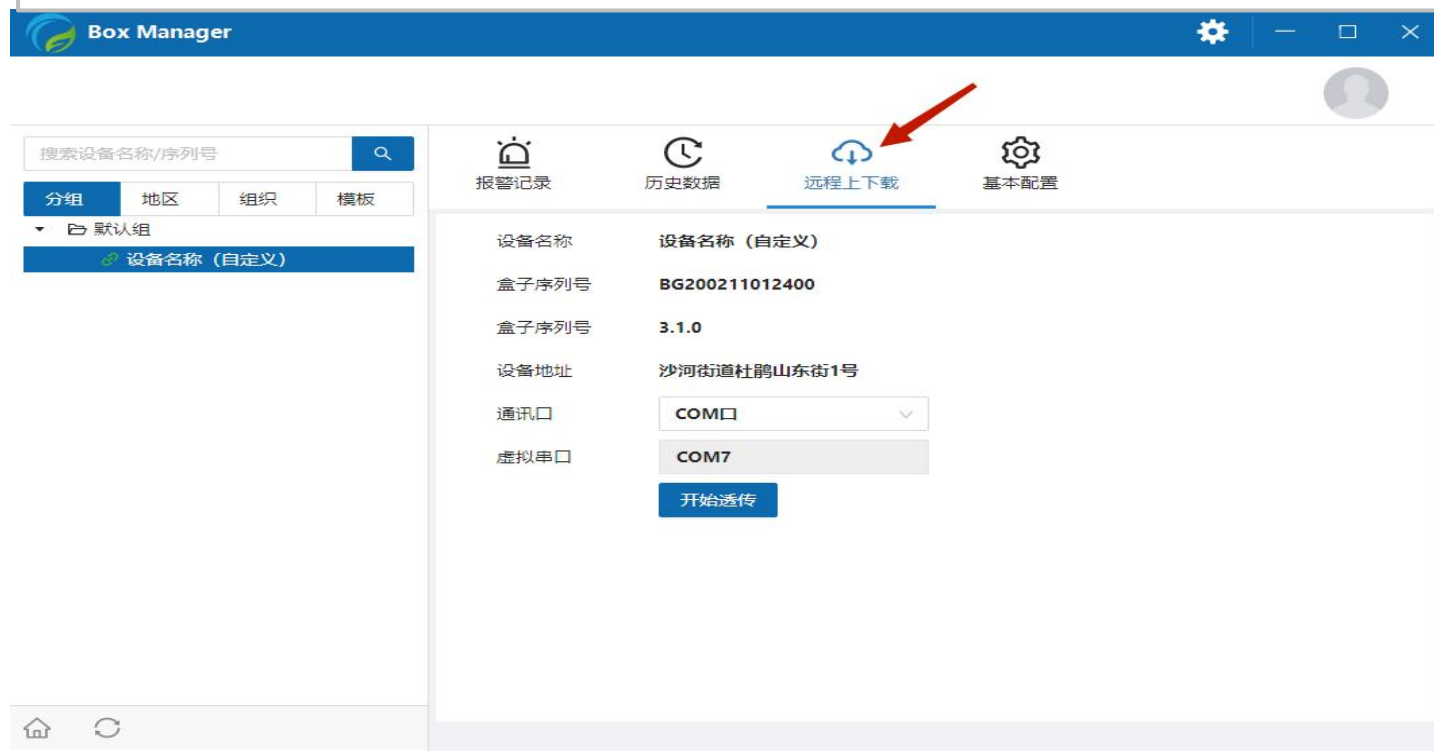
Coolmay cloud account: ***** (account fills in platform account)

Coolmay cloud password: 123456 (the default password of Coolmay cloud)

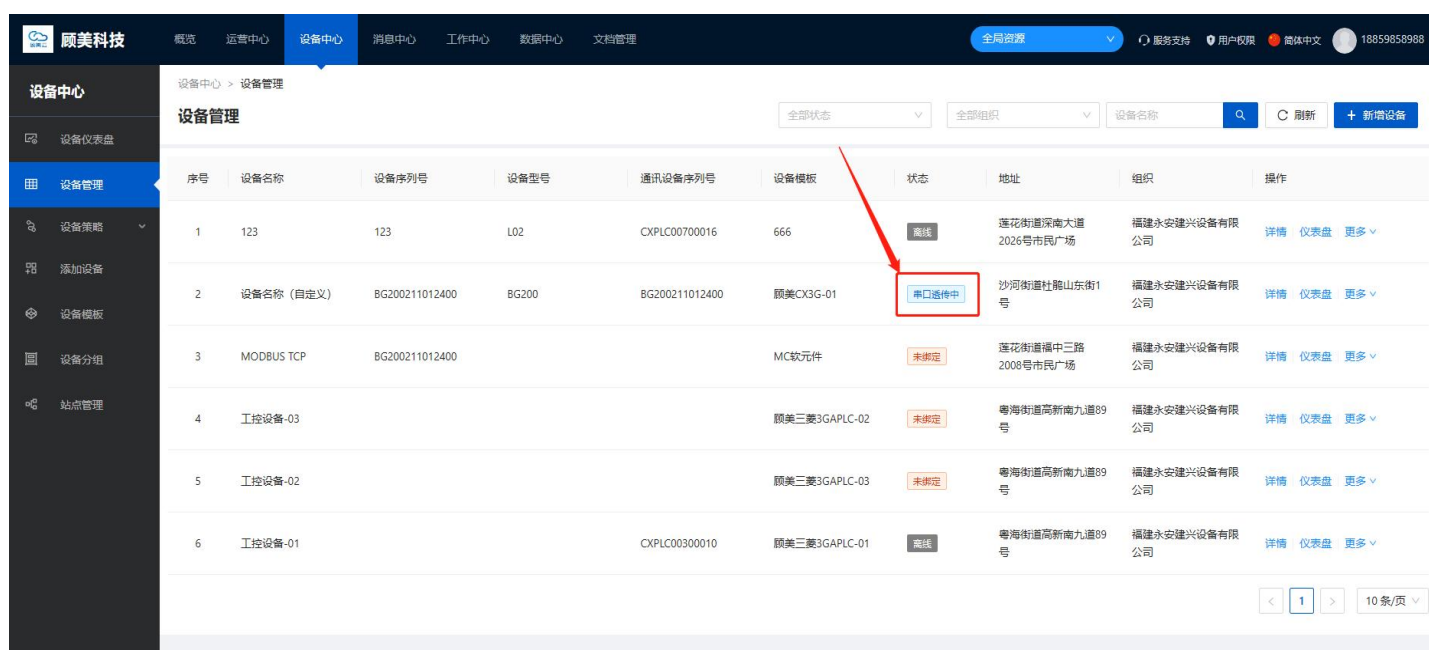


After successful login—click remote upload and download—default group—select the device to be remote

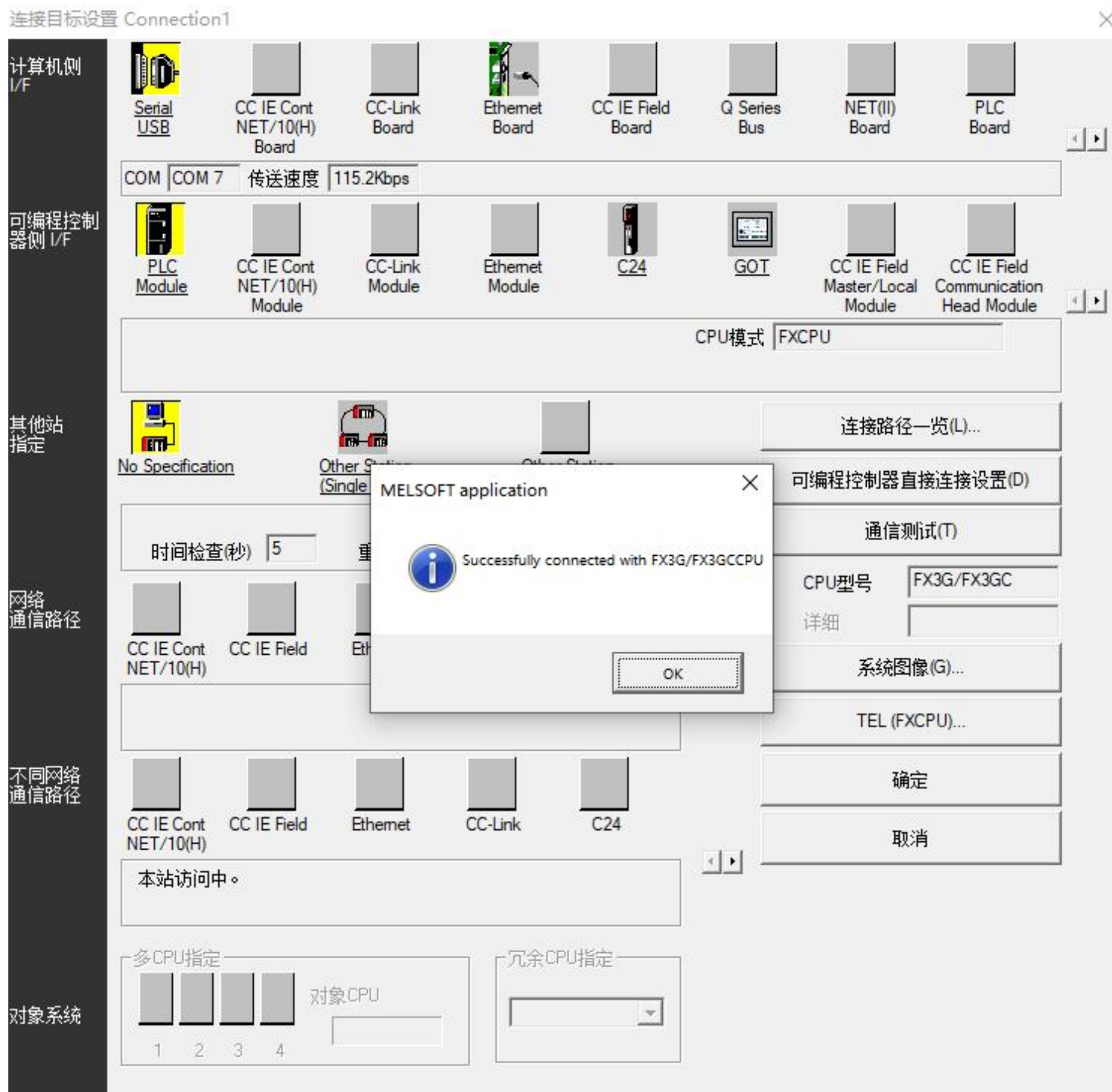
Click directly to start transparent transmission, the software will automatically match the virtual serial port



After the transparent transmission starts, the status of the device on the cloud platform will also change
The display status is: serial port transparent transmission
In this state, you can directly open the programming software
Select COM7 port communication



You can directly select COM7 communication to communicate successfully. After the communication is successful, you can upload and download the program normally.



When the transparent transmission is not required, click end the transparent transmission

The screenshot shows the 'Box Manager' interface. The top navigation bar includes 'Box Manager', a settings icon, and window controls. The left sidebar has a search bar and filters for 'Group', 'Region', 'Organization', and 'Template'. The main area has tabs for 'Alarm Record', 'History Data', 'Remote Upload/Download', and 'Basic Configuration'. The 'Remote Upload/Download' tab is active, showing fields for 'Device Name', 'Box Serial Number', 'Device Address', 'Communication Port', and 'Virtual Serial Port'. A red button labeled '结束透传' (End Transparent Transmission) is highlighted with a red arrow.

After the transparent transmission is over, the platform status will also change accordingly

The screenshot shows the 'Coolmay Technology' 'Device Center' interface. The top navigation bar includes 'Overview', 'Operation Center', 'Device Center', 'Message Center', 'Work Center', 'Data Center', and 'Document Management'. The left sidebar has a 'Device Center' section with options like 'Device Dashboard', 'Device Management', 'Device Strategy', 'Add Device', 'Device Template', 'Device Group', and 'Site Management'. The main area shows a 'Device Management' table with columns for 'Serial Number', 'Device Name', 'Device Serial Number', 'Device Model', 'Communication Device Serial Number', 'Device Template', 'Status', 'Address', 'Organization', and 'Operation'. A red arrow points to the 'Status' column of the device 'BG200211012400', which is highlighted as '在线' (Online).

序号	设备名称	设备序列号	设备型号	通讯设备序列号	设备模板	状态	地址	组织	操作
1	123	123	L02	CXPLC00700016	666	离线	莲花街道深南大道2026号市民广场	福建永安建兴设备有限公司	详情 仪表盘 更多
2	设备名称 (自定义)	BG200211012400	BG200	BG200211012400	顾美CX3G-01	在线	沙河街道杜鹃山东街1号	福建永安建兴设备有限公司	详情 仪表盘 更多
3	MODBUS TCP	BG200211012400			MC软元件	未绑定	莲花街道福中三路2008号市民广场	福建永安建兴设备有限公司	详情 仪表盘 更多
4	工控设备-03				顾美三菱3GAPLC-02	未绑定	粤海街道高南九道89号	福建永安建兴设备有限公司	详情 仪表盘 更多
5	工控设备-02				顾美三菱3GAPLC-03	未绑定	粤海街道高南九道89号	福建永安建兴设备有限公司	详情 仪表盘 更多
6	工控设备-01			CXPLC00300010	顾美三菱3GAPLC-01	离线	粤海街道高南九道89号	福建永安建兴设备有限公司	详情 仪表盘 更多

13.3 Remote download via network port

Stay tuned...