



Product Name	GAOTek Gateway Automation Healthcare
Product SKU	GAOTek-HI-182
Product URL	https://gaotek.com/product/gaotek-gateway-automation-healthcare/

Based in New York City & Toronto, GAO Tek Inc. is ranked as one of the top 10 global B2B technology suppliers. GAO ships overnight within the U.S. & Canada & provides top-notch support thanks to its 4 decades of experience



Content

Chapter 1: Product Overview.....	3
1.1. Product summary.....	3
1.2. Product support and application environment.....	4
1.3. Product characteristics.....	5
1.4. Interface specification.....	6
1.5. Indicator light description.....	8
1.6. Technical specifications.....	10
Chapter 2: Installation.....	12
2.1. Installation requirements and instructions.....	12
Chapter 3: Gaohua Cloud Internet of Things Cloud platform.....	14
3.1. Platform login.....	14
3.2. Essential information.....	15
3.3. Add a gateway drive management.....	16
3.4. Variable management.....	18
3.5. D I/DO 、 AI.....	18
3.6. Variable preview.....	20
3.7. Historical statements.....	20
3.8. Configuration Management.....	21
3.9. End / view of the device.....	23
3.10. SMS management.....	23
3.11. Alarm management.....	24
3.12. Work order management.....	25

Based in New York City & Toronto, GAO Tek Inc. is ranked as one of the top 10 global B2B technology suppliers. GAO ships overnight within the U.S. & Canada & provides top-notch support thanks to its 4 decades of experience



GAOTek Gateway Automation Healthcare

Chapter 1: Product Overview

1.1. Product summary

GAOTek Gateway Automation Healthcare is a 4G full network gateway used to connect the cloud platform of Guohua Cloud. It is designed to fully meet the needs of industrial standards and industrial users. It adopts high-performance industrial-grade ARM 9, processor and 4G communication module, and improves the stability of equipment through software multistage detection and hardware multiple protection mechanism. The product can be connected to the Iot cloud platform through 4G / 2G network or wired network. With isolation protection, EMC protection and other protection designs, suitable for harsh industrial sites.

The GAOTek Gateway Automation Healthcare supports Siemens, Mitsubishi, Omron, Schneider, Delta, and MODBUS series PLC, and realizes PLC remote data monitoring, remote debugging of PLC and programming, remote download of PLC programs, PLC remote control and other functions. When the device is abnormal (abnormal data, communication, etc.), GH-G801A will send alarm information to users (wechat, APP, SMS, phone, etc.) in various ways. Users can remotely configure the GH-G801A parameters through the platform, which is easy to use and can easily create a reliable data communication network.

Based in New York City & Toronto, GAO Tek Inc. is ranked as one of the top 10 global B2B technology suppliers. GAO ships overnight within the U.S. & Canada & provides top-notch support thanks to its 4 decades of experience



Main diagram of the industrial intelligent gateway

1.2.Product support and application environment

- To realize the remote control of industrial site equipment.
- Solar photovoltaic, boiler, cold storage, grain depot, agricultural breeding, intelligent manufacturing, intelligent transportation, state grid and other fields.
- Realize the remote upgrade of equipment firmware, download from the program, and flexible access to various equipment management platforms.
- Realize remote control of industrial field touch screen and configuration screen mapping and can communicate with multiple PLC or touch screen at the same time.
- Siemens, Mitsubishi, Schneider, Delta, Xinjie, Heli, Panasonic, Yonghong, Haiwei and MODBUS series.
- Realize PLC remote monitoring, remote debugging and programming, remote download, remote control, data acquisition, PLC remote communication.

Based in New York City & Toronto, GAO Tek Inc. is ranked as one of the top 10 global B2B technology suppliers. GAO ships overnight within the U.S. & Canada & provides top-notch support thanks to its 4 decades of experience



- Support for standard ModBus-TCP main station, slave station and ModBus-RTU main station, slave station protocol.
- Support Haikang fluorite camera video transmission transmission.
- Support MQTT protocol to connect Ali Cloud and OneNet and other Internet of things platforms.

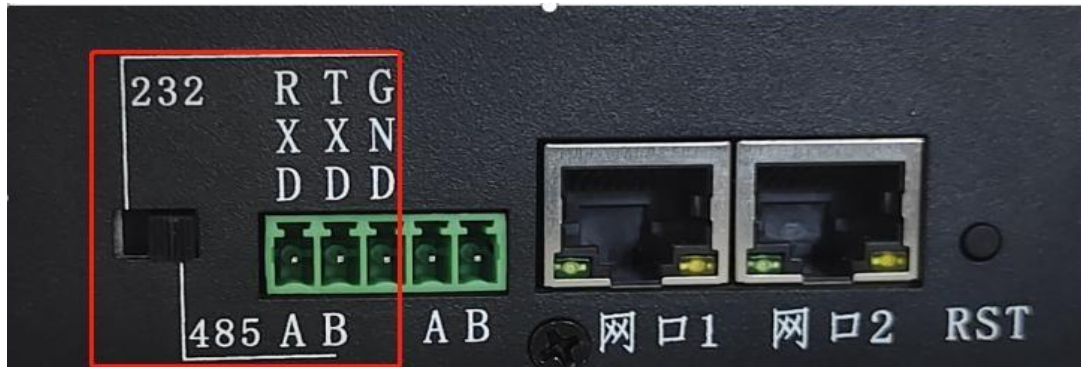
1.3.Product characteristics

- Support 4G / 2G communication, support network cable directly connected to WAN (network port 2) Internet, priority to use the network cable Internet.
- With communication isolation and port protection, especially suitable for industrial field applications.
- Wide power supply input (DC12-48V), power interface built-in reverse protection and over-voltage protection.
- WDT watchdog design, to ensure the stability of the system.
- Adopt a complete anti-line drop mechanism to ensure that the data terminal is always online, and the power-on can enter the data transmission state.
- Support the standard industry mainstream PLC communication protocol, 232 / 485 / network port, support the simultaneous connection to the lower machine equipment for communication.
- Support PLC program remote debugging, download function.
- Provide edge node data optimization, real-time response, rapid connection and intelligent application, and effectively share the load of cloud computing resources.
- Support remote configuration of gateway and online upgrade of remote programs.
- Support for standard DIN35mm guide rail installation.
- The gateway supports the local storage of historical data to realize the function of break point continuous transmission.

Based in New York City & Toronto, GAO Tek Inc. is ranked as one of the top 10 global B2B technology suppliers. GAO ships overnight within the U.S. & Canada & provides top-notch support thanks to its 4 decades of experience

1.4. Interface specification

The product has a fixed RS485 interface, another RS232 or RS485 interface (can be selected by dial switch); two network ports (one WAN port, one LAN port), one RST button, 2 DI, 2 DO, 2 AI detection, as shown in the following figure:



RS232 / RS485 interface

- When the dial switch is on the left side, the RS232 interface is enabled; when the dial switch is on the right side, the RS485 interface is enabled; the other way is fixed to the RS485 interface.

LAN / WAN interface

- Network port 1 is LAN port, used for following PLC device or network port interface; network port 2 is WAN port, and the router can realize network function.

Restore the factory setting button

- Long press the button for about 3 seconds to restore the default parameters (Note: do not trigger the special case, do not trigger the button).



Product interface diagram

DI / DO / AI interface

- DI 1 to DI 2: digital input, used with the GND in the figure above; the input voltage cannot be greater than the supply voltage of the equipment.
- DO 1 to DO 2: digital output, used with GND 1 in the figure above; the output voltage is the supply voltage of the equipment.
- AI 1 to AI 2: analog input, used with the GND 2 in the figure (Note: optional function, support 4~20mA and 0~5V signal).

The power supply interface

- V + is the positive electrode of power supply, and V -is the negative electrode of power supply.



1.5. Indicator light description

Name	State	State description
PWR	The light goes off	No power supply or abnormal power supply
	The light long bright	The power supply is normal
LINK	The light goes off	No SIM card was identified
	The lights flicker alternately	Identify the SIM card
	The LINK light flashes and the RSSI flashes alternately	Identify the SIM card, SIM, card overdue shutdown
	The light long bright	Successfully connected to the network, and successfully registered on the login platform
RSSI	The light flashes for 5 times and goes out for 1 second	4G signal intensity: 80% -100%
	The light flashes for 4 times and goes out for 1 second	4G signal intensity: 60% -80%
	The light flashes for 3 times and goes out for 1 second	4G signal intensity: 50% -60%
	The light flashes for 2 times and goes out for 1 second	4G signal intensity: 30% -50%
	The light flashes for 1 time and goes out for 1 second	4G signal intensity: 0% -30%
	The light goes off	No 4G signal or WAN port Internet access failure
2G	The light long bright	The gateway is in a 2G networking state
4G	The light long bright	The gateway is in the 4G networking state
	The light is on 0.5, seconds, out 0.5 seconds	Network port 2 is not connected

Based in New York City & Toronto, GAO Tek Inc. is ranked as one of the top 10 global B2B technology suppliers. GAO ships overnight within the U.S. & Canada & provides top-notch support thanks to its 4 decades of experience



WAN	The light long bright	Network port 2 network is normal
232	The light is on 0.5, seconds, out 0.5 seconds	Abnormal communication with the lower position computer
	The light long bright	RS232 / 485 serial port and lower communication normal
485	The light is on 0.5, seconds, out 0.5 seconds	Abnormal communication with the lower position computer
	The light long bright	RS485 Serial port and lower position computer communication is normal
LAN	The light is on 0.5, seconds, out 0.5 seconds	Communication between the network port 2 and the lower position computer is abnormal
	The light long bright	Communication between the network port 2 and the lower position computer is normal.

Based in New York City & Toronto, GAO Tek Inc. is ranked as one of the top 10 global B2B technology suppliers. GAO ships overnight within the U.S. & Canada & provides top-notch support thanks to its 4 decades of experience



1.6. Technical specifications

Name	Description	Specifications	
Hardware parameters	RS232/RS485_1	Paud rate: 600bps-115200bps	
	RS485_2	Paud rate: 600bps-115200bps	
	DI	2 Road	
	DO	2 Road	
	AI	2 road (4 ~ 20 mA / 0~5V) (optional according to customer requirements)	
	WIFI	Support (optional according to customer requirements)	
	GPS	Support (optional according to customer requirements)	
	LAN mouth	10 / 100M Adaptive Ethernet port, Meet the IEEE802.3-2005 criteria	
	WAN mouth	10 / 100M Adaptive Ethernet port, Meet the IEEE802.3-2005 criteria	
	working voltage	DC 12~48V, anti-reverse connection, anti-surge, overcurrent protection	
Software parameters	breakpoint resume	support	
	Power alarm	support	
	SMS alarm	support	
	protocol	gorge line	Siemens, Mitsubishi FX Series, Schneider, Delta DVP series, Xinjie, Yonghong, etc.
		internet access	Siemens, Mitsubishi Q Series, Fins _ Ethernet, Delta DVP series, Yong Hong, etc.
	Sub-frequency upload	Real-time upload, change upload, timing upload	
	Remote upgrade	Supports remote firmware upgrades	
PLC remote debugging	Support for remote PLC debugging and PLC program download.		

Based in New York City & Toronto, GAO Tek Inc. is ranked as one of the top 10 global B2B technology suppliers. GAO ships overnight within the U.S. & Canada & provides top-notch support thanks to its 4 decades of experience



Cloud platform function	Cloud configuration	support
	data storage	support
	Mobile terminal monitoring	support
	organizational structure	support
	Role permissions	support
	SMS alarm	support
	Internet of Things card management	support
	Style customization	support

Based in New York City & Toronto, GAO Tek Inc. is ranked as one of the top 10 global B2B technology suppliers. GAO ships overnight within the U.S. & Canada & provides top-notch support thanks to its 4 decades of experience

Chapter 2: Installation

2.1. Installation requirements and instructions

The industrial intelligent gateway must be installed correctly to achieve the designed function. Usually, the installation of the equipment must be carried out under the guidance of qualified engineers approved by Gaohua Information. Good ventilation and good signal coverage. Temperature and humidity should meet the requirements of the instrument technical indicators. The equipment should be kept away from the electromagnetic interference source and heat source to avoid mechanical vibration.

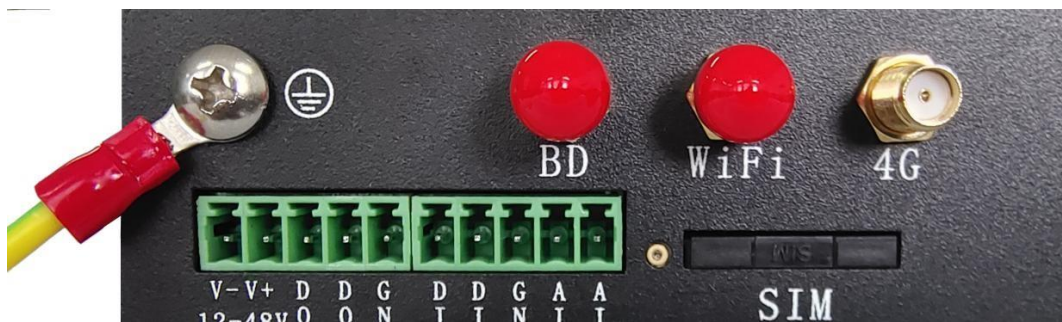
Matters need attention:

1. Please do not install the SIM card live.
2. The equipment must be connected to the earth, and the ground resistance is less than 4 ohms.
3. Please do not install the equipment.

Press the yellow slot with the pin, remove the holder, put the SIM card in the SIM drawer, and push down gently into the seat.as illustrated in following figure:



Note: If the SIM card is not inserted in place, the device will fail to recognize the SIM card, causing the device will not function properly. In order to prevent the SIM card insertion is not in place, after the SIM, card insertion, please carefully check whether the SIM card is installed. When returning the card, press the yellow button with the pin, and the SIM card will automatically pop out along the guide slot.



The yellow and green line in the figure above is the ground wire of the equipment to prevent electric shock or protect the safety of the equipment. The ground wire of the equipment and the earth will serve as the current loop.

Out of the box accessories

Please keep the packaging materials when you open the box for use in the future. The list is as follows:

- GH-G801A industrial intelligent gateway 1 set
- One certificate of qualification
- One for the 4G antenna
- Three 5-well terminals
- A copy of the manual

GAOTek Gateway Automation Healthcare are commonly applied in complex external environments. In order to adapt to the complex application environment and improve the working stability of the system, the gateway adopts the advanced wide voltage technology. The user can use 12-48VDC and power adapter to supply power to the gateway. When the user uses external power supply to power the gateway, the stability of the power supply (ripple is less than 300mV, and the instantaneous voltage does not exceed 48V), and the power supply is more than 4W.

Chapter 3: Gaohua Cloud Internet of Things Cloud platform

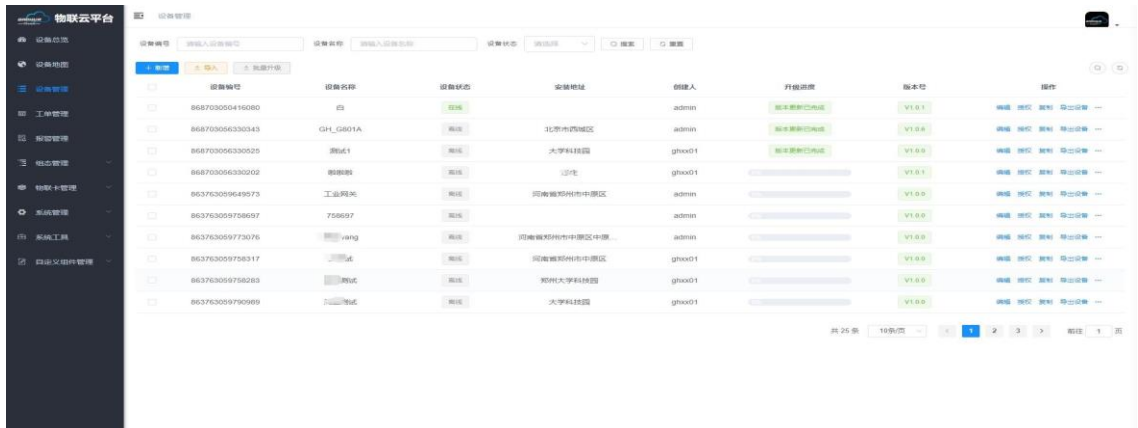
3.1. Platform login

Log in to the platform with the account and password assigned by the platform, and enter the login account and password (as shown below).



Based in New York City & Toronto, GAO Tek Inc. is ranked as one of the top 10 global B2B technology suppliers. GAO ships overnight within the U.S. & Canada & provides top-notch support thanks to its 4 decades of experience

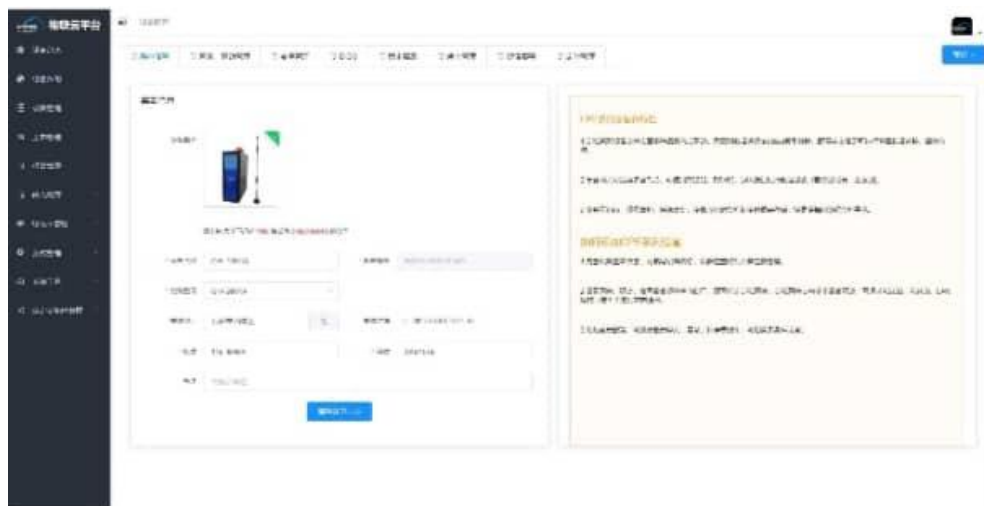
Open device management the new equipment configuration is shown in the following figure:



设备编号	设备名称	设备状态	安装地址	创建人	开模进度	版本号	操作
86870300416080	白	在线		admin	版本更新已完成	V1.0.1	编辑 删除 刷新 导出数据
868703006330343	GH_G601A	离线	北京市西城区	admin	版本更新已完成	V1.0.0	编辑 删除 刷新 导出数据
868703006330020	测试1	离线	大学科技园	ghw01	版本更新已完成	V1.0.0	编辑 删除 刷新 导出数据
868703006330202	测试2	离线	大学	ghw01	版本更新已完成	V1.0.1	编辑 删除 刷新 导出数据
863763009649073	工业网关	离线	河南省郑州市中原区	admin		V1.0.0	编辑 删除 刷新 导出数据
863763009758697	758697	离线		admin		V1.0.0	编辑 删除 刷新 导出数据
863763009773076	wang	离线	河南省郑州市中原区中原	admin		V1.0.0	编辑 删除 刷新 导出数据
863763009758317	测试	离线	河南省郑州市中原区	ghw01		V1.0.0	编辑 删除 刷新 导出数据
863763009758283	测试	离线	郑州大学科技园	ghw01		V1.0.0	编辑 删除 刷新 导出数据
863763009790989	测试	离线	大学科技园	ghw01		V1.0.0	编辑 删除 刷新 导出数据

3.2. Essential information

Fill in the basic information of the device in the configuration interface, and add the device picture and the device name. Device number, installation address, installation time, longitude and latitude, save and click Next. (as illustrated in following figure)

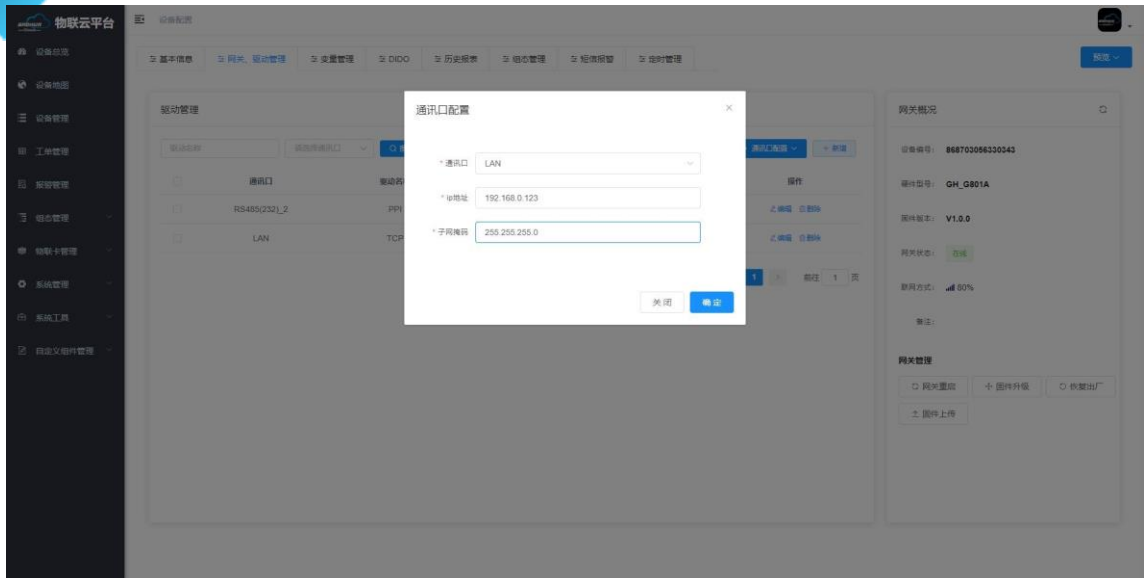


The configuration form includes the following fields and sections:

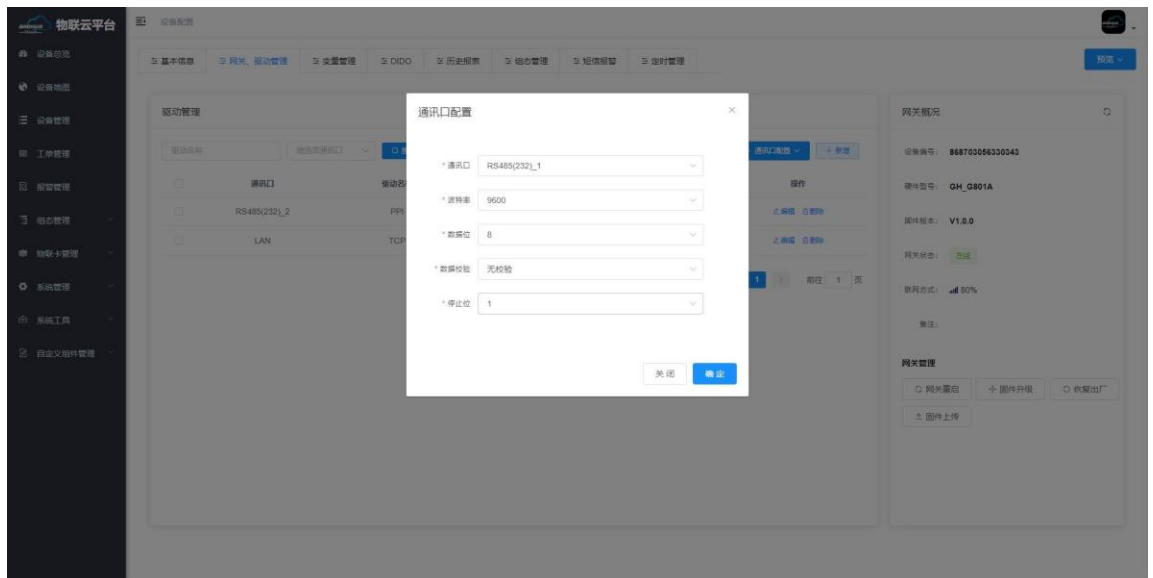
- 设备名称 (Device Name):** Input field for the device's name.
- 设备编号 (Device ID):** Input field for the device's unique identifier.
- 安装地址 (Installation Address):** Input field for the device's location.
- 设备照片 (Device Photo):** A section for uploading a photo of the device, showing a preview of a blue device.
- 设备状态 (Device Status):** A dropdown menu to select the device's status.
- 设备类型 (Device Type):** A dropdown menu to select the device category.
- 设备固件 (Device Firmware):** A dropdown menu to select the device's firmware version.
- 设备图标 (Device Icon):** A dropdown menu to select a representative icon for the device.
- 设备备注 (Device Remarks):** A text area for additional notes about the device.
- 下一步 (Next):** A blue button to proceed to the next step in the configuration process.

Based in New York City & Toronto, GAO Tek Inc. is ranked as one of the top 10 global B2B technology suppliers. GAO ships overnight within the U.S. & Canada & provides top-notch support thanks to its 4 decades of experience

3.3. Add a gateway drive management

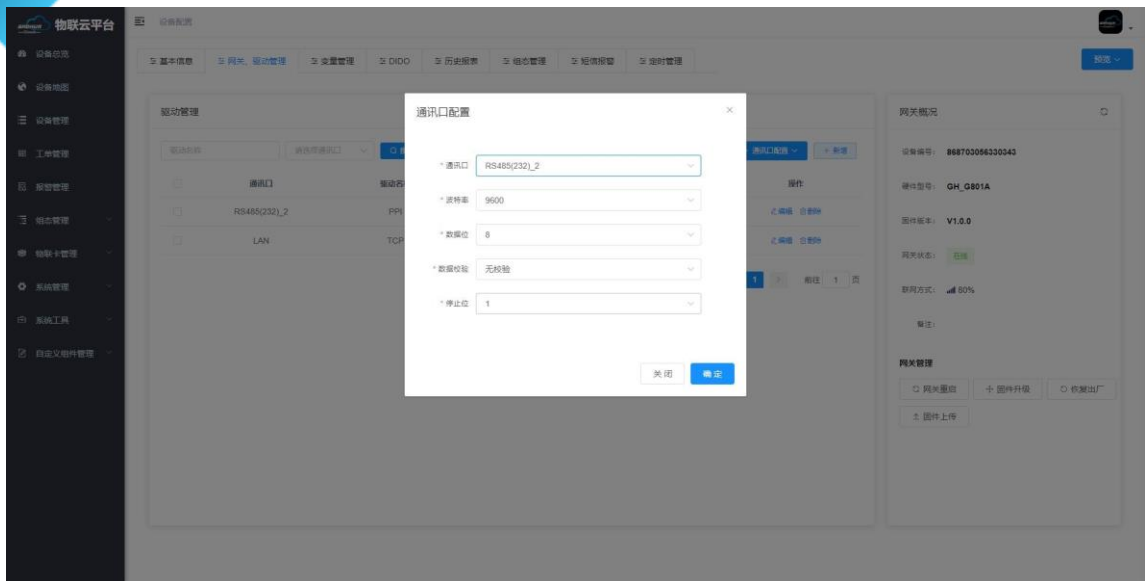


RS485 interface: fill in the port rate, data bit, data check, stop bit



Based in New York City & Toronto, GAO Tek Inc. is ranked as one of the top 10 global B2B technology suppliers. GAO ships overnight within the U.S. & Canada & provides top-notch support thanks to its 4 decades of experience

RS232 interface: fill in the port rate, data bit, data check, stop bit.



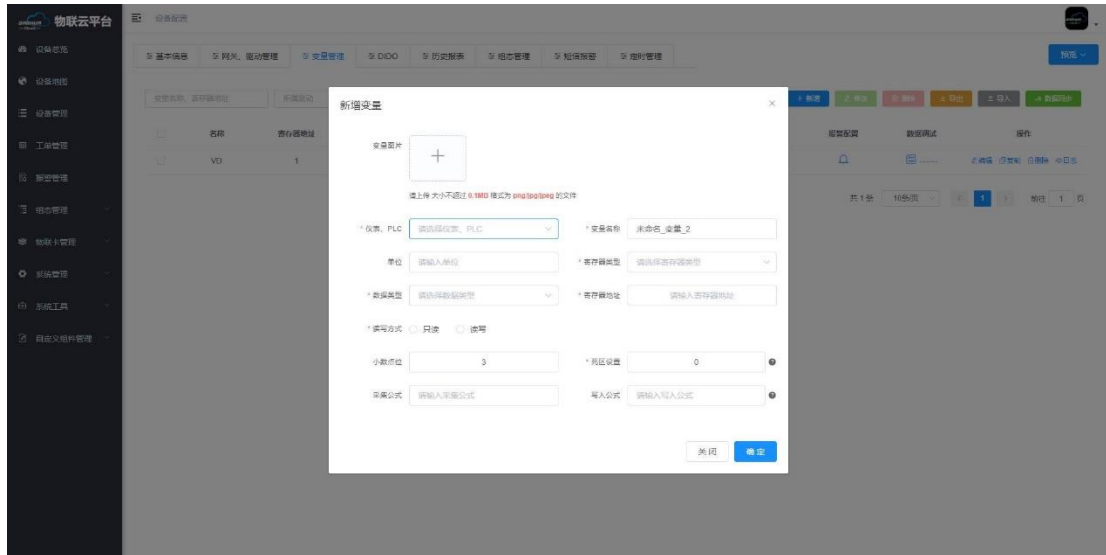
After completing the communication port configuration, click new: The new information is the terminal equipment configuration information, and fill in in turn according to the prompts. The details are as follows:



Based in New York City & Toronto, GAO Tek Inc. is ranked as one of the top 10 global B2B technology suppliers. GAO ships overnight within the U.S. & Canada & provides top-notch support thanks to its 4 decades of experience

3.4. Variable management

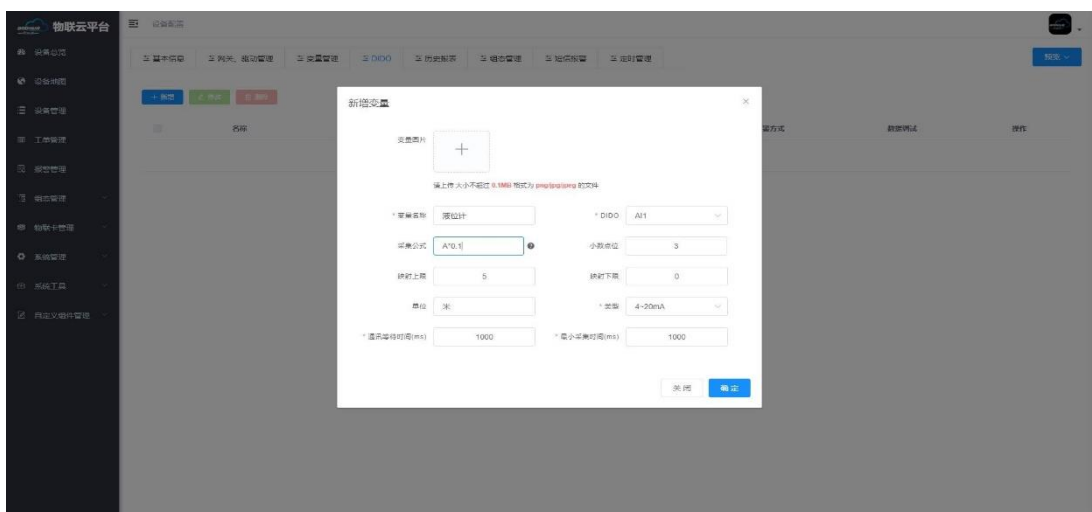
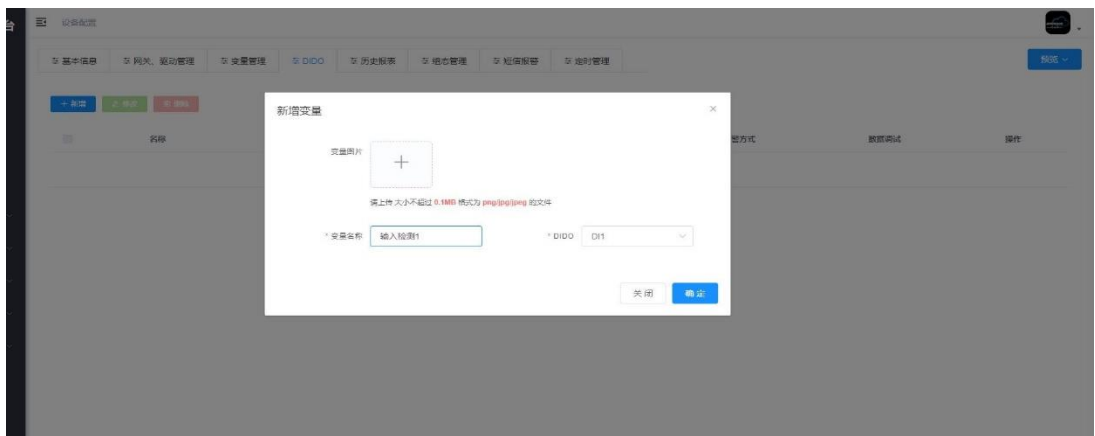
Click in the variable management interface- -add- -add variable related parameters- -instrument / PLC, variable name, unit, register type, data type, register address, read and write mode, decimal point, dead area setting, and other related information. Add complete click OK.as illustrated in following figure.



3.5. D I/DO 、 AI

In DI, DO and AI interfaces, DI switch quantity input and input voltage is the power supply voltage of the equipment. DO switch volume output, output electricity.

The voltage is the power supply voltage of the equipment not more than 130 mA, AI analog acquisition, acquisition formula, decimal point, mapping upper limit, mapping lower limit, unit and type.as illustrated in following figure:



Based in New York City & Toronto, GAO Tek Inc. is ranked as one of the top 10 global B2B technology suppliers. GAO ships overnight within the U.S. & Canada & provides top-notch support thanks to its 4 decades of experience

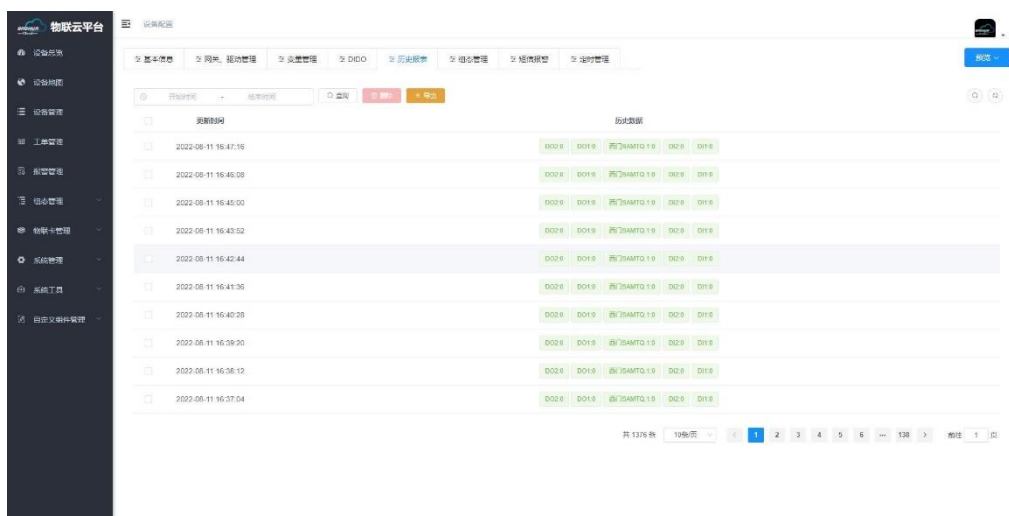
3.6. Variable preview

After configthe parameters, the gateway also collects data. At this time, you can delete the history data of the device through the preview function. The details are as follows:



3.7. Historical statements

Click the historical report to view the historical data of the device. The historical report data supports the form of table export, and you can delete the machine history data of the modified device. The details are as follows:



Based in New York City & Toronto, GAO Tek Inc. is ranked as one of the top 10 global B2B technology suppliers. GAO ships overnight within the U.S. & Canada & provides top-notch support thanks to its 4 decades of experience

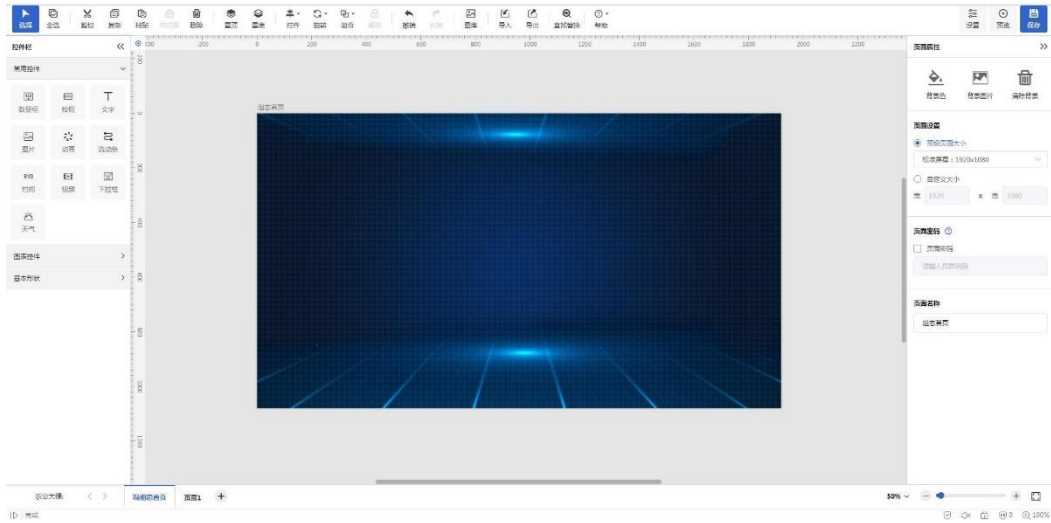
3.8. Configuration Management

Point configuration management- -add- -select the main interface- -fill in the page name- -select the interface size- -point determination.



After adding, click Edit to edit the device for configuration. In the configuration editing interface, the configuration can be configured at will according to customer needs.

Configuration editing provides customers with a lot of application graphics. A drag and a drag can be edited.



The overall effect of configuration editing is shown below:



Based in New York City & Toronto, GAO Tek Inc. is ranked as one of the top 10 global B2B technology suppliers. GAO ships overnight within the U.S. & Canada & provides top-notch support thanks to its 4 decades of experience



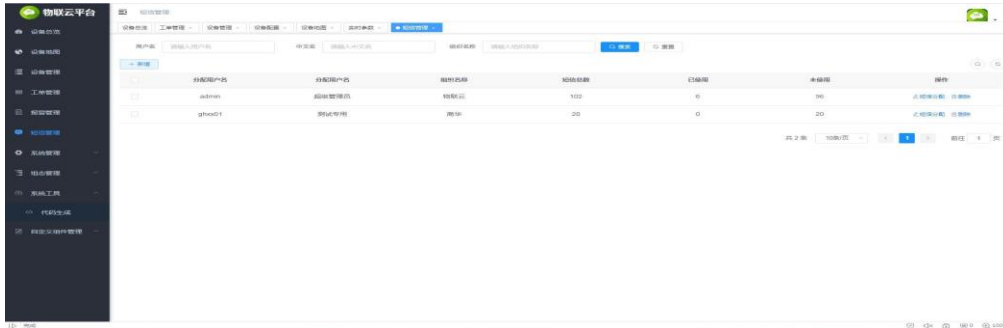
3.9. End / view of the device

Click [Device Overview] → [Select device] → [Real-time monitoring], click the device to open the data monitoring.

3.10. SMS management

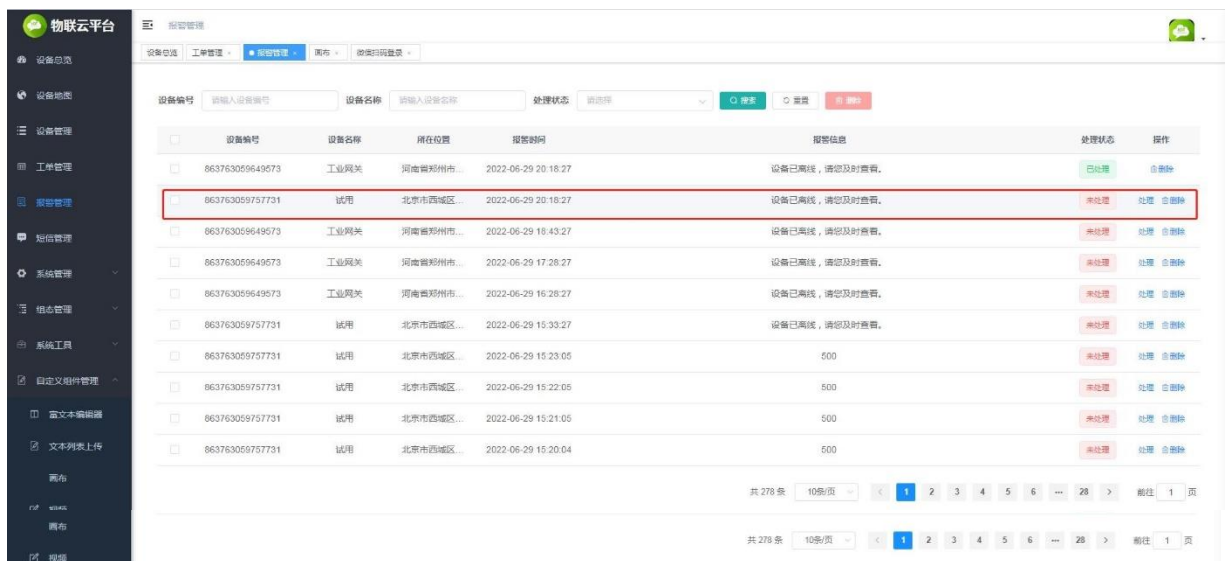
Based in New York City & Toronto, GAO Tek Inc. is ranked as one of the top 10 global B2B technology suppliers. GAO ships overnight within the U.S. & Canada & provides top-notch support thanks to its 4 decades of experience

In the short breath interface can set the short breath reminder, and the number of short messages. (Note: the function is a value-added service, need to pay for use.



3.11. Alarm management

Open the alarm management interface and display the abnormal alarm of the equipment. If the equipment alarm is not processed and the processing status is left untreated, click the processing button- -fill in the equipment alarm reason- -to be sure. Processing status is processed. At this time, a work order information is generated in the work order management interface.as illustrated in following figure:



Based in New York City & Toronto, GAO Tek Inc. is ranked as one of the top 10 global B2B technology suppliers. GAO ships overnight within the U.S. & Canada & provides top-notch support thanks to its 4 decades of experience

3.12. Work order management

Play the start order management interface, and the work order management interface will display the equipment alarm information processing results, and the site staff can conduct on-site investigation according to the alarm type and the problems existing in the equipment. After the equipment investigation is finished, click the patrol inspection and fill in the processing result. At this time processing, Status display and processing, if not processed, untreated. If there is a false alarm. You can click invalid to cancel this work order:



Based in New York City & Toronto, GAO Tek Inc. is ranked as one of the top 10 global B2B technology suppliers. GAO ships overnight within the U.S. & Canada & provides top-notch support thanks to its 4 decades of experience



Based in New York City & Toronto, GAO Tek Inc. is ranked as one of the top 10 global B2B technology suppliers. GAO ships overnight within the U.S. & Canada & provides top-notch support thanks to its 4 decades of experience