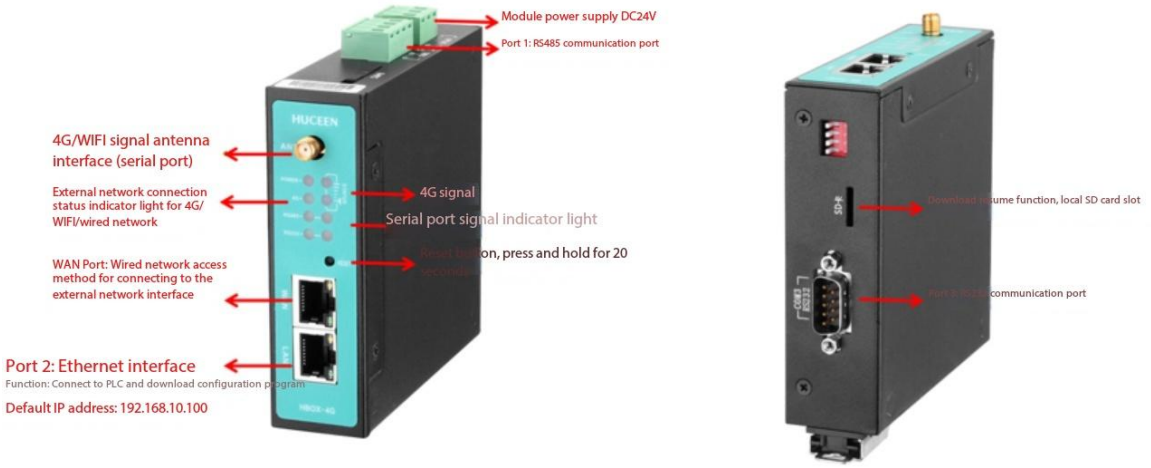
B510-EW User Guide

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B510-EW Appearance Diagram



Buttons and Indicator Lights

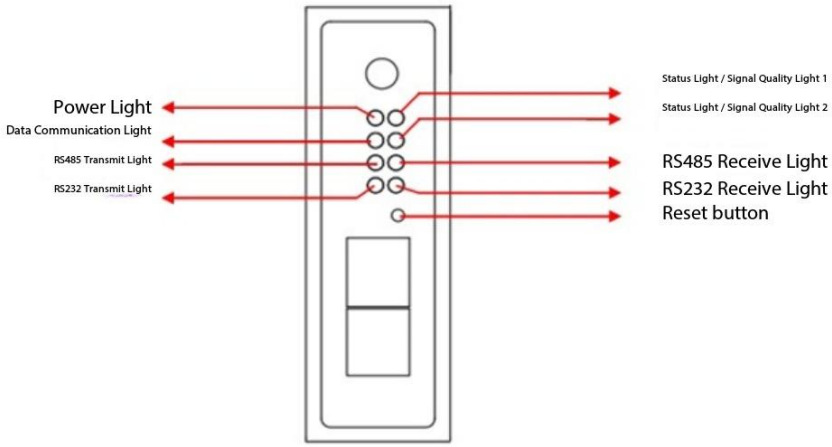


Figure 3-3

1. Indicator Light Description

Indicator Light Status	HBox Status
Data communication light flashes (once per second)	Data being sent normally
Data communication light stays on; 2 signal quality lights flash (once per second)	Cannot connect to the server
Data communication light stays on; 2 signal quality lights stay off	SIM card out of credit
Data communication light stays on; 2 signal quality lights stay off	Incorrect WIFI password
Data communication light stays on; 2 signal quality lights stay off	WAN port gateway not set
Signal quality light 1 stays on; signal quality light 2 stays off	Low signal quality
Signal quality lights 1 and 2 stay on	Normal signal quality
Data communication light and 2 signal quality lights: all 3 stay off	SIM card not recognized
Data communication light and 2 signal quality lights: all 3 stay off	No network cable detected on the WAN port
Both signal quality lights flash simultaneously (once every 3 seconds)	LAN port cannot connect to the PLC
Signal quality light 1 flashes (once every 3 seconds); signal quality light 2 stays on	No network cable detected on the LAN port
Data communication light and 2 signal quality lights flash quickly 5 times and then stop	Reset successful
Signal quality lights 1 and 2 flash simultaneously (3 times per second)	Configuration file error

Table 3-4

Preparation

Ensure that the HBOX is powered normally (DC24V supply voltage) and the indicator light flashes normally.

Operation Steps

Enter the account and password to log in to the configuration software (WEB version). Note: Ensure that the computer is connected to the Internet during login.

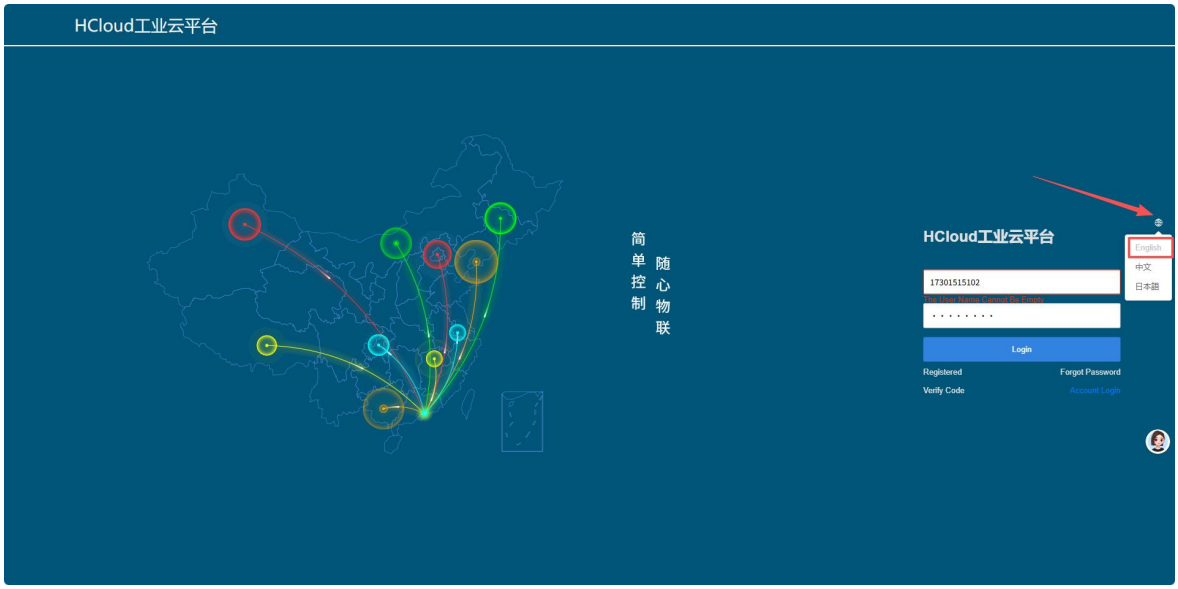
1. Log in to the Client

1. Register an Account

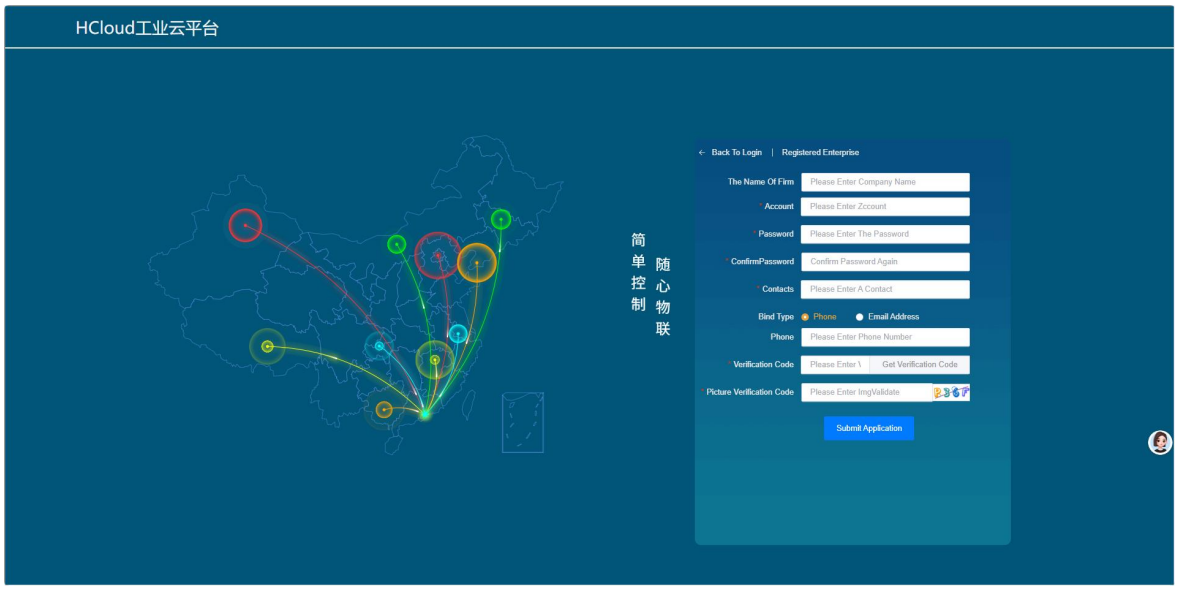
Register the account and password on the official website of the Huceen Industrial Cloud Platform: hcloud.huceen.com

(Fill in the company name and other information clearly during registration; otherwise the review will not pass. Email registration is currently supported for overseas users.)

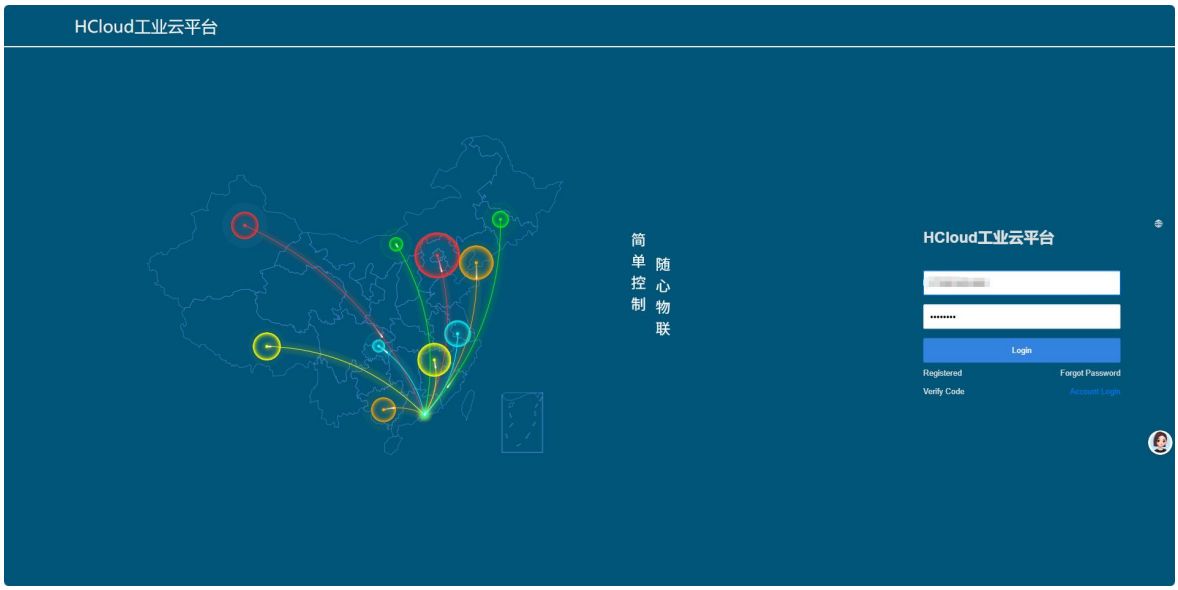
Switch the display language to English



2. Register an account via email



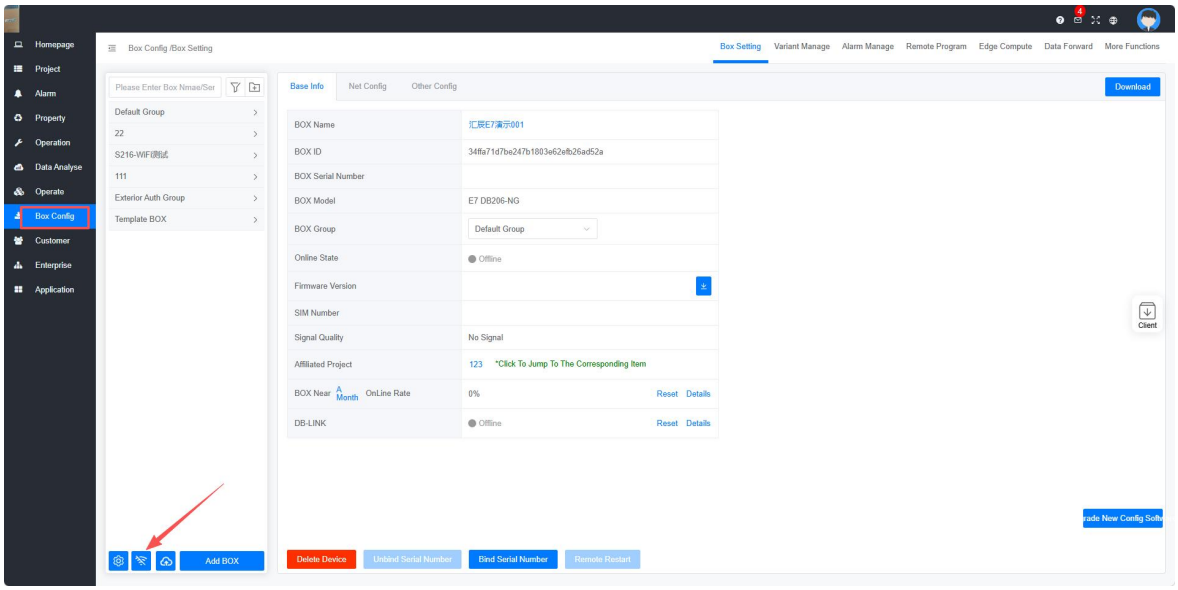
3. Enter the account and password to log in to the Client



2. Add a BOX

1. BOX Configuration

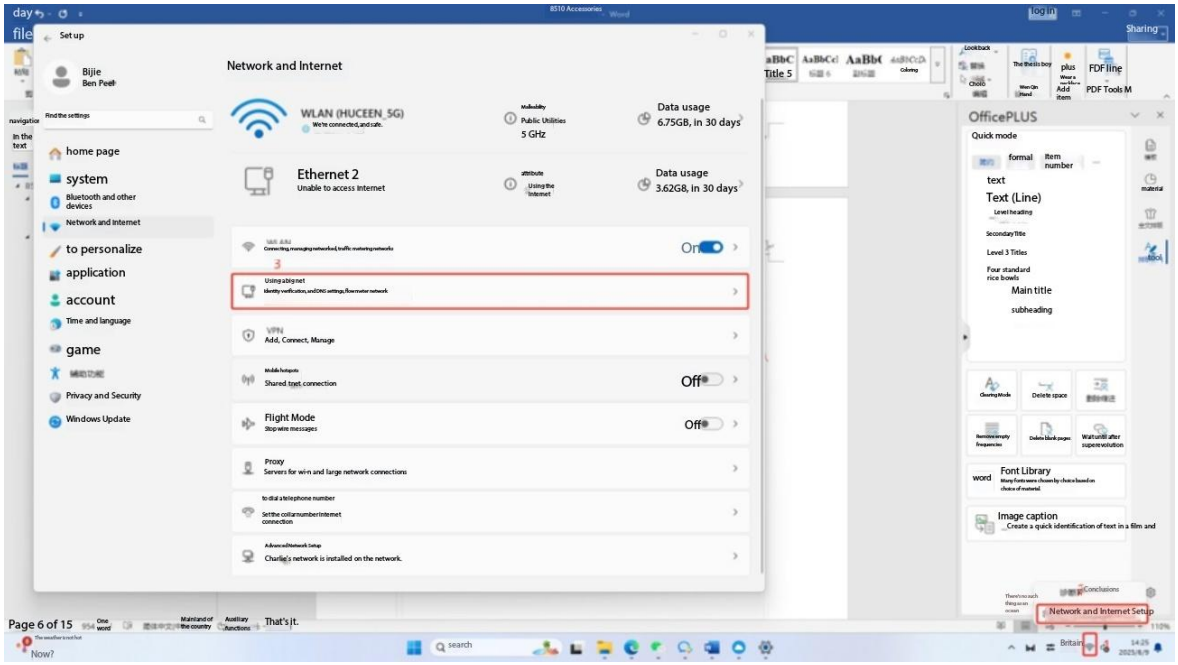
On the “BOX Config” page, click “Offline Network Configuration”



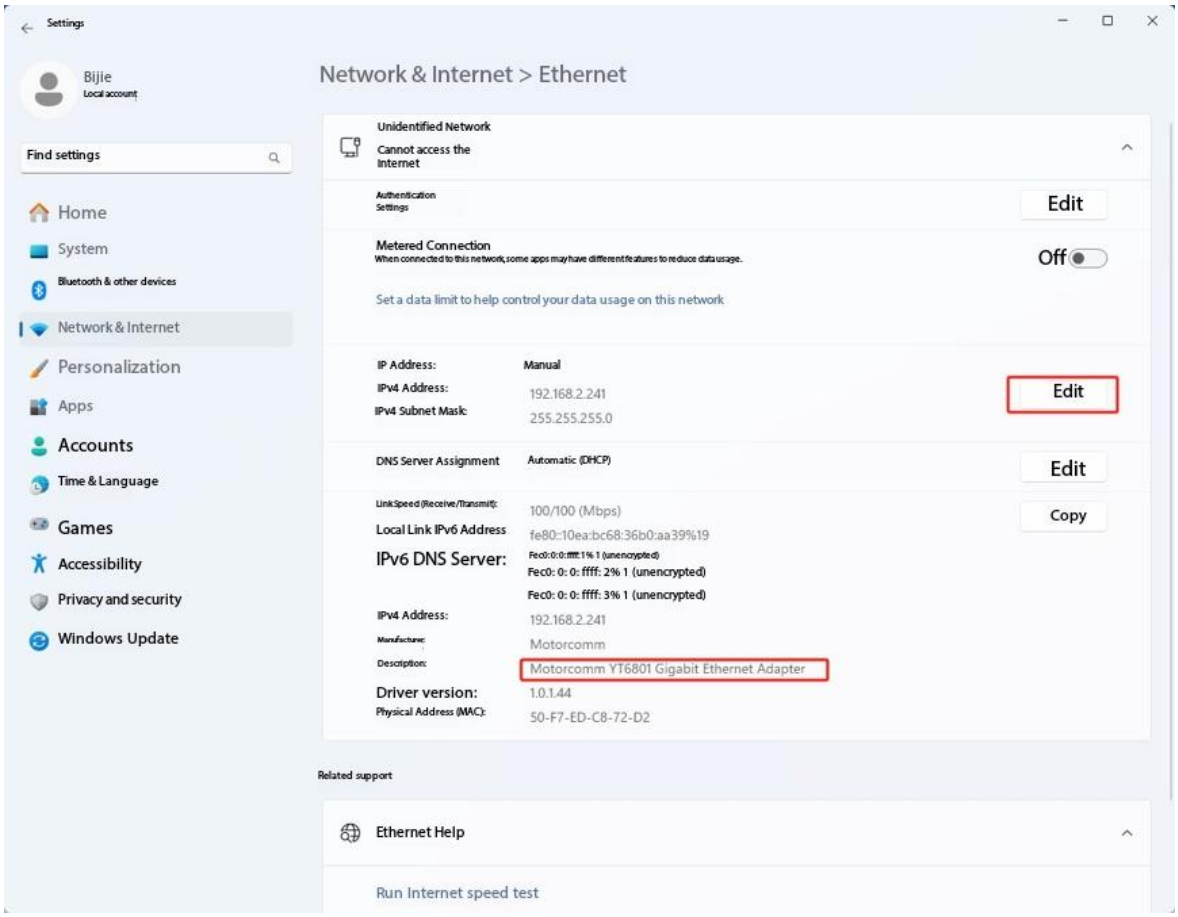
1. Connect the HBOX

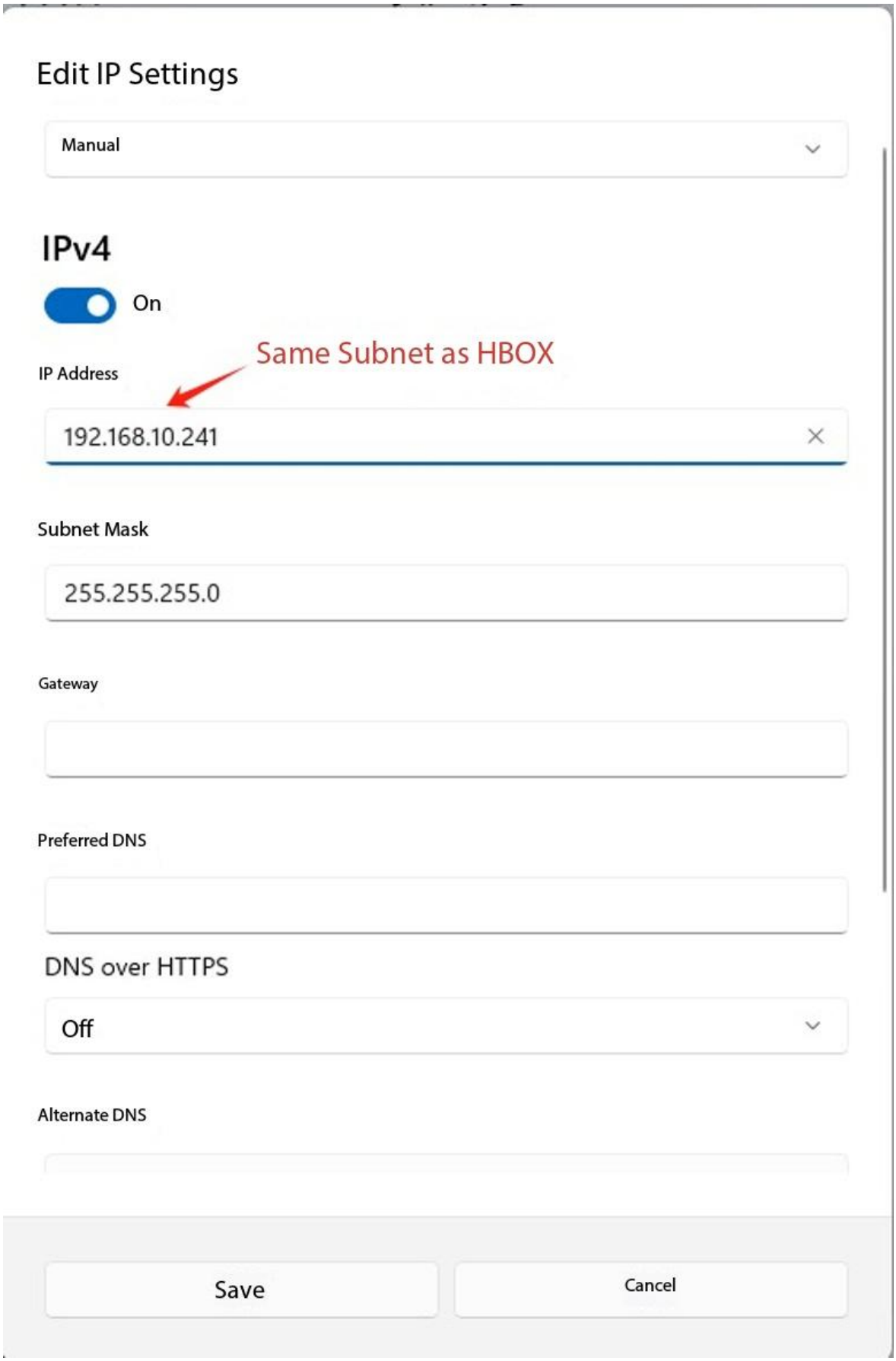
Change the computer's local IP address to the same subnet as the BOX.

Right-click the network connection icon in the lower-right corner, click "Network and Internet settings", then click "Ethernet" (using Windows 11 as an example). (Choose the Internet access method according to your actual needs.)

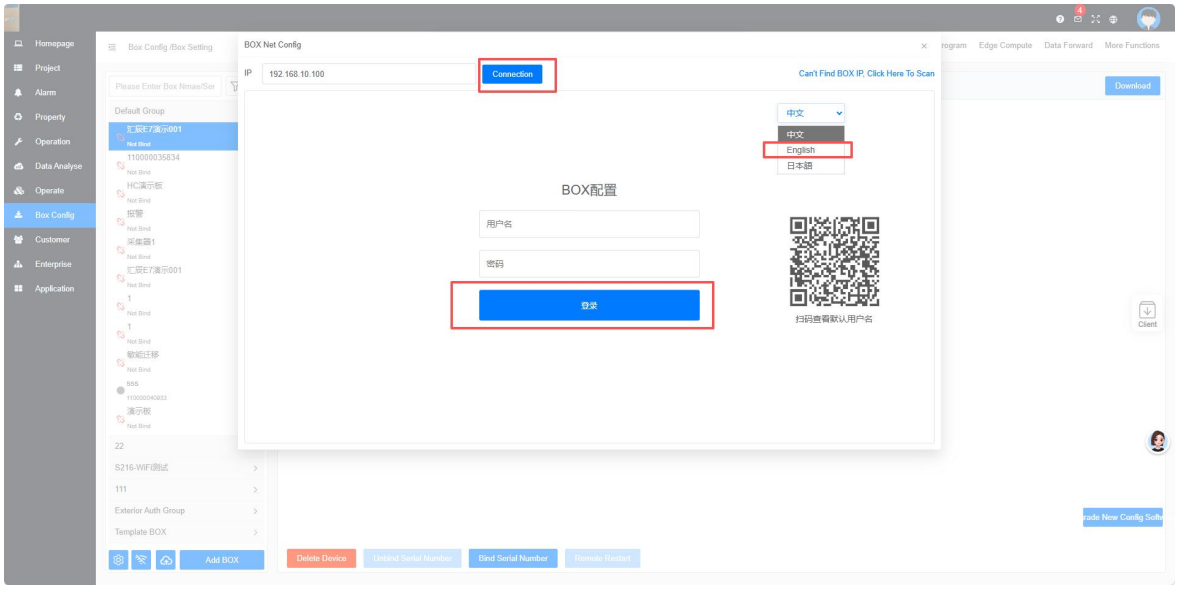


Select the network adapter connected to the HBOX, click "Edit", and change the IP address to one on the same subnet as the BOX.


Settings
Bijie
Local account
Find settings
Home
System
Bluetooth & other devices
Network & Internet
Personalization
Apps
Accounts
Time & Language
Games
Accessibility
Privacy and security
Windows Update
Network & Internet > Ethernet
Unidentified Network
Cannot access the Internet
Authentication Settings
Edit
Metered Connection
When connected to this network, some apps may have different features to reduce data usage.
Off
Set a data limit to help control your data usage on this network
IP Address:
Manual
IPv4 Address:
192.168.2.241
IPv4 Subnet Mask:
255.255.255.0
Edit
DNS Server Assignment
Automatic (DHCP)
Edit
Link Speed (Receive/Transmit):
100/100 (Mbps)
Local Link IPv6 Address
fe80::10ea:bc68:36b0:aa39%19
IPv6 DNS Server:
Fec0: 0: 0: ffff: 2% 1 (unencrypted)
Fec0: 0: 0: ffff: 3% 1 (unencrypted)
Copy
IPv4 Address:
192.168.2.241
Manufacturer:
Motorcomm
Description:
Motorcomm YT6801 Gigabit Ethernet Adapter
Driver version:
1.0.1.44
Physical Address (MAC):
50-F7-ED-C8-72-D2
Related support
Ethernet Help
Run Internet speed test


Edit IP Settings
Manual
IPv4
On
Same Subnet as HBOX
IP Address
192.168.10.241
Subnet Mask
255.255.255.0
Gateway
Preferred DNS
DNS over HTTPS
Off
Alternate DNS
Save
Cancel

Enter the actual LAN IP address of the HBOX, click “Connection”, switch the configuration page to English display, and log in.
(Factory default IP: 192.168.10.100. If you do not know the IP, press and hold the REST button below the indicator light for about 15 seconds to reset it to the default IP.)
Scan the QR code with your phone to view the account and password. The default account password are “yunbox”.

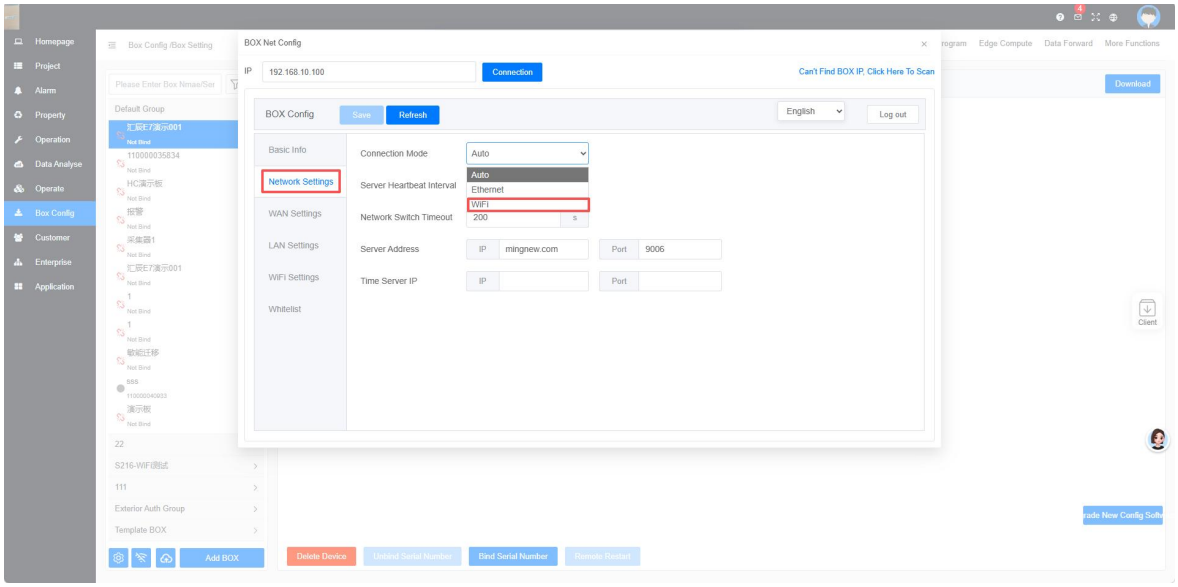


2. Configure the Network Mode

Set the BOX network mode as needed: WiFi, wired (Ethernet), or auto (auto mode prioritizes the wired connection).

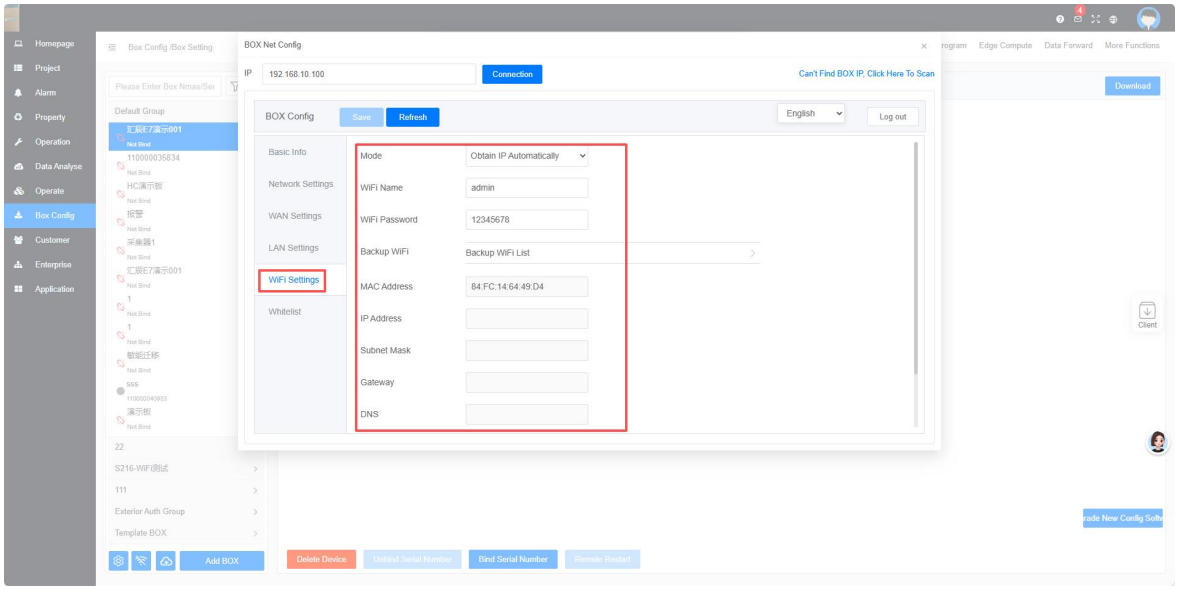
WiFi Internet Access

Click “Network Settings” and select “WiFi”;



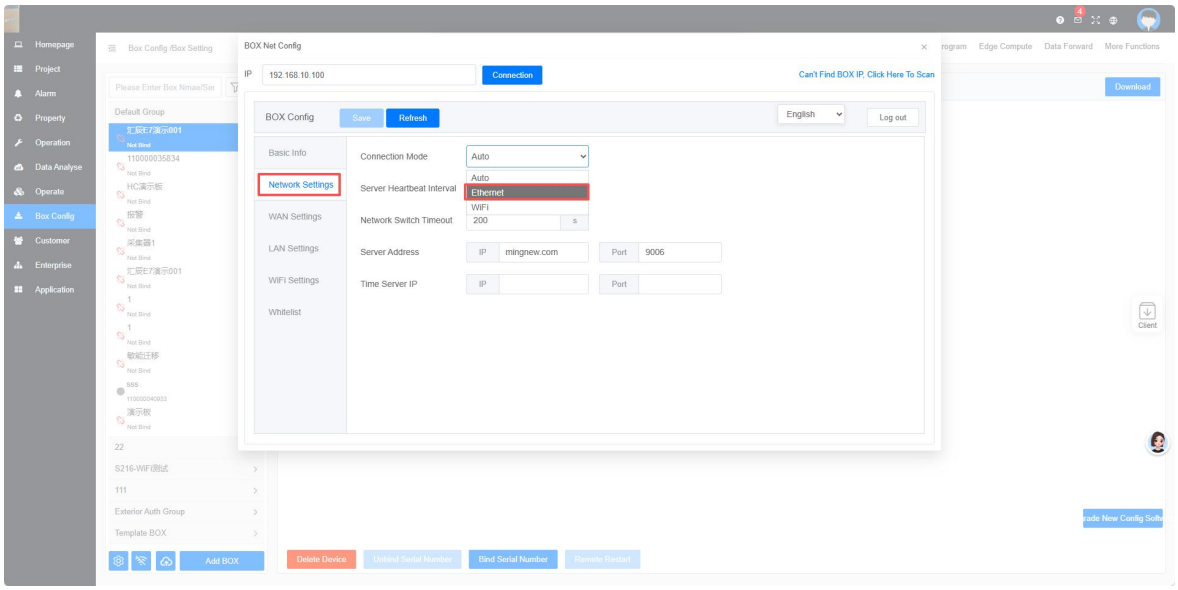
Set the WiFi connection parameters

Change the BOX WiFi name and password. (Default BOX WiFi name and password: admin / 12345678.) You can choose to set the WiFi connection parameters automatically or manually based on the actual situation, then click “Save”.

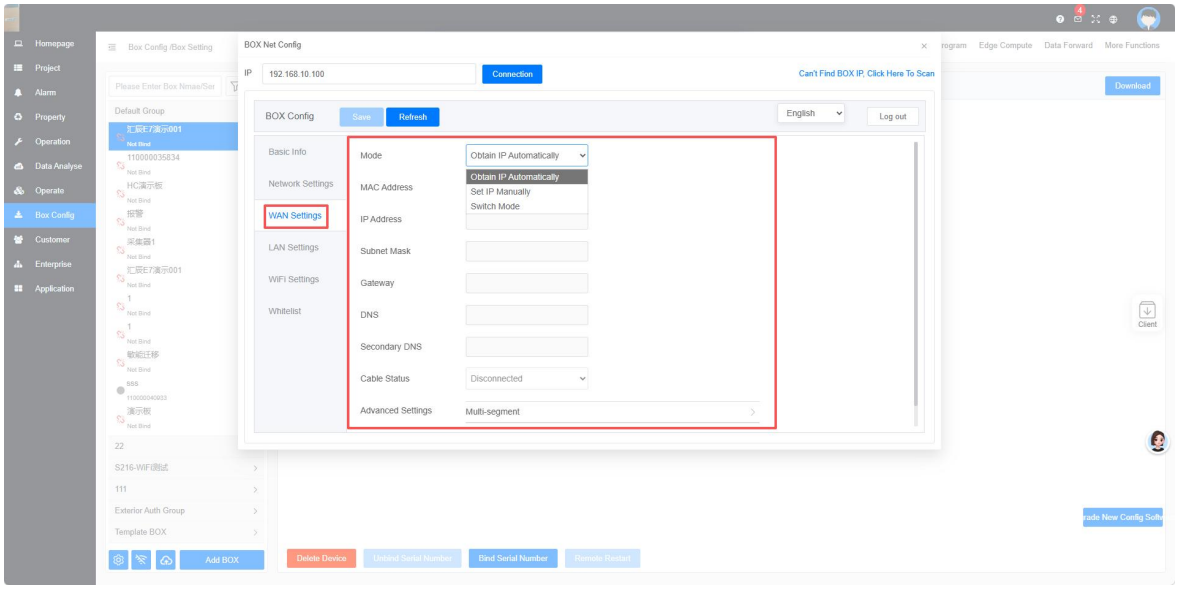


Ethernet Internet Access

Set the BOX Internet mode: Ethernet. Hardware connection: connect the Internet cable to the WAN port.

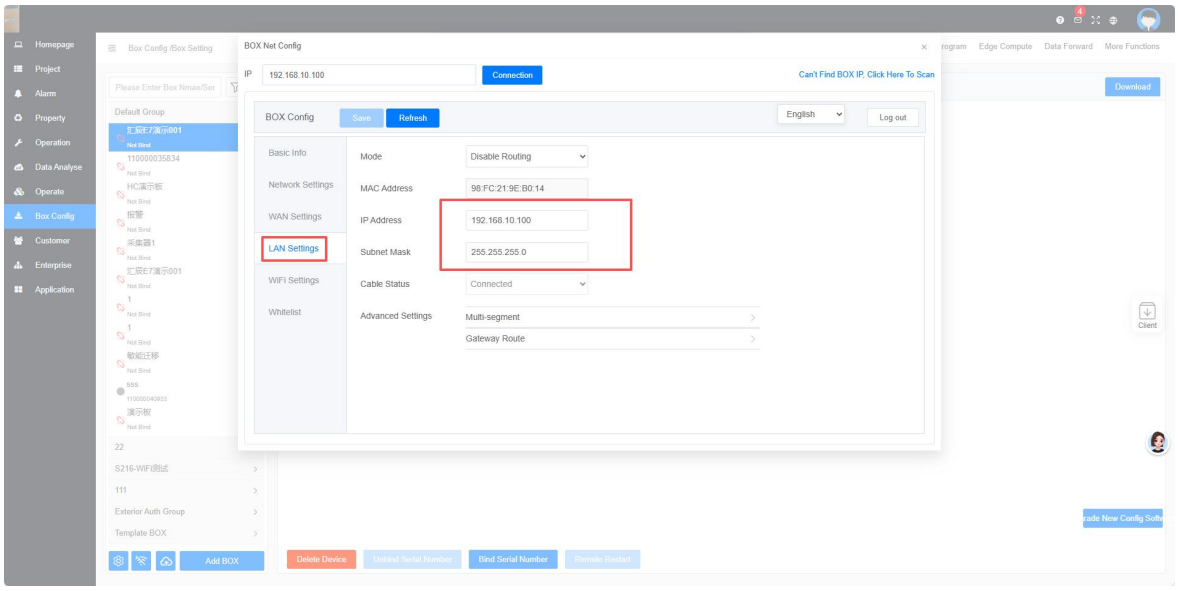


Click the WAN port to set the Ethernet connection parameters. According to the actual network conditions on site, set the network to obtain an IP address automatically or manually.



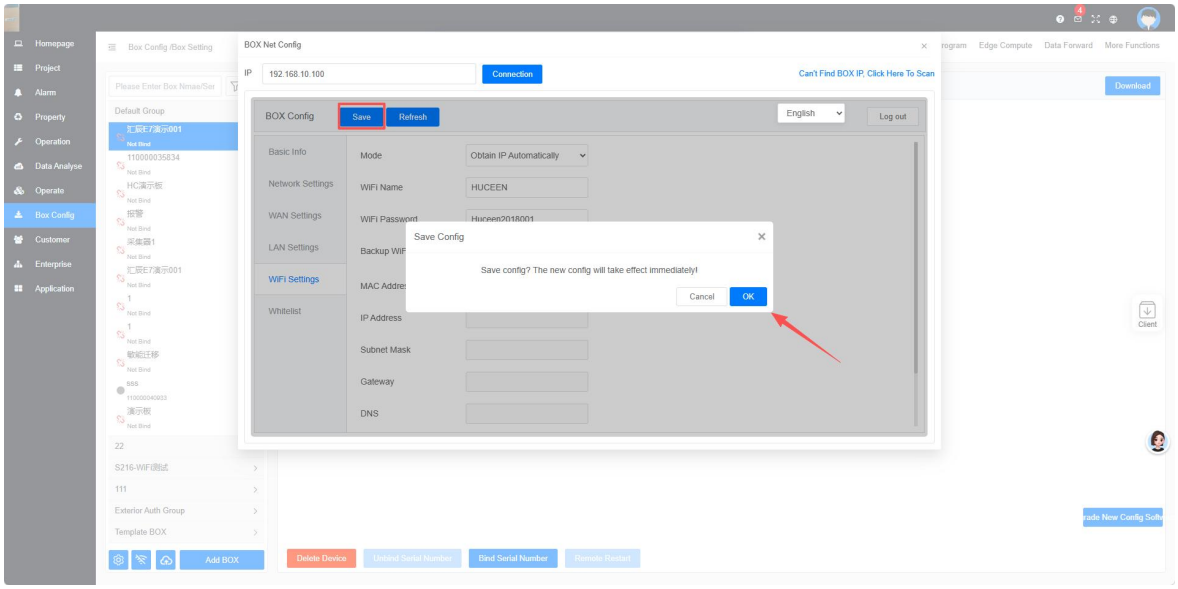
3. Set the LAN Port IP Address

Set the HBOX IP to the same subnet as the communication devices.



4. Save the Configuration

Click “Save” to download the configuration to the HBOX.

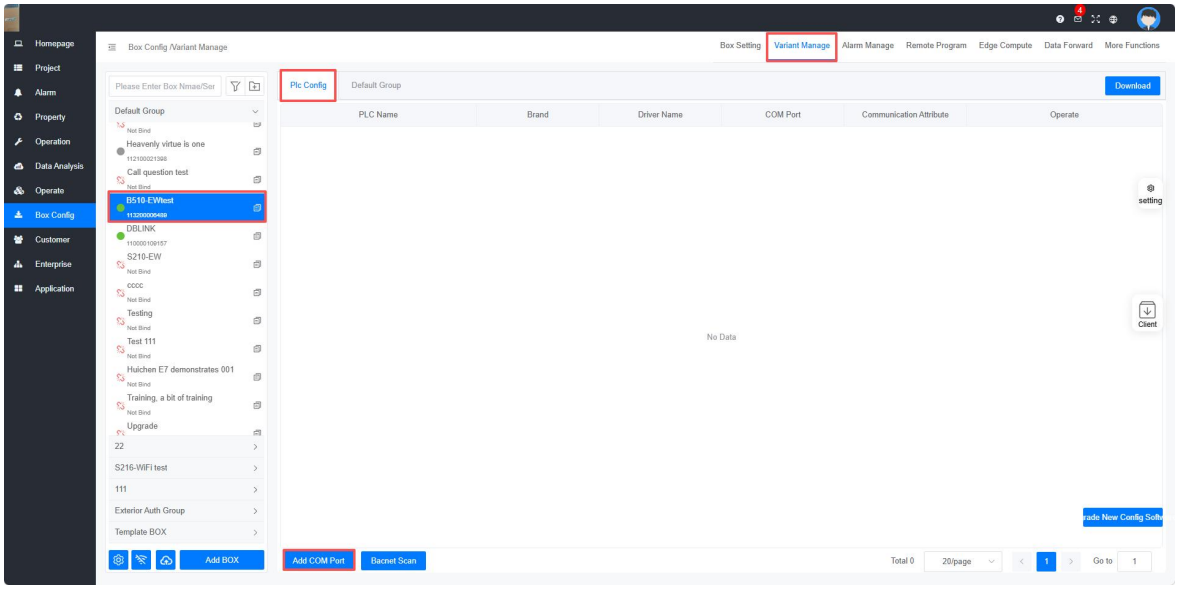


(After saving, wait 20 seconds, enter the serial number to add it, and check whether the HBOX is online. If it still cannot go online after configuration, contact Huceen after-sales service.)

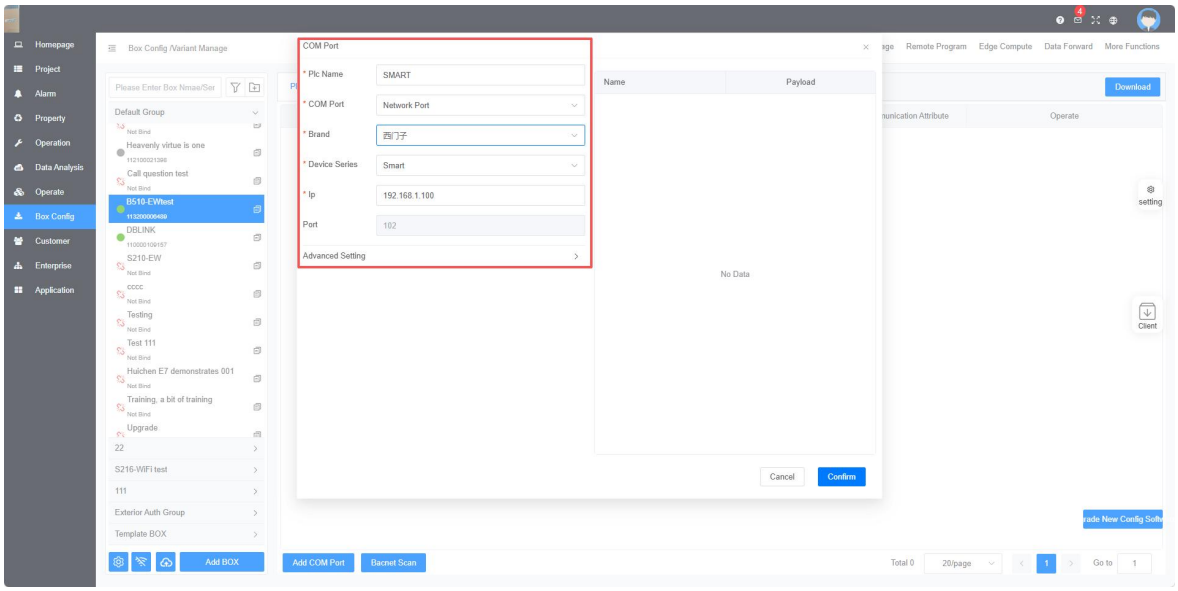
3. Add a Device

Click “Variant Manage” → “Communication Port

Configuration” → “Add COM Port”.

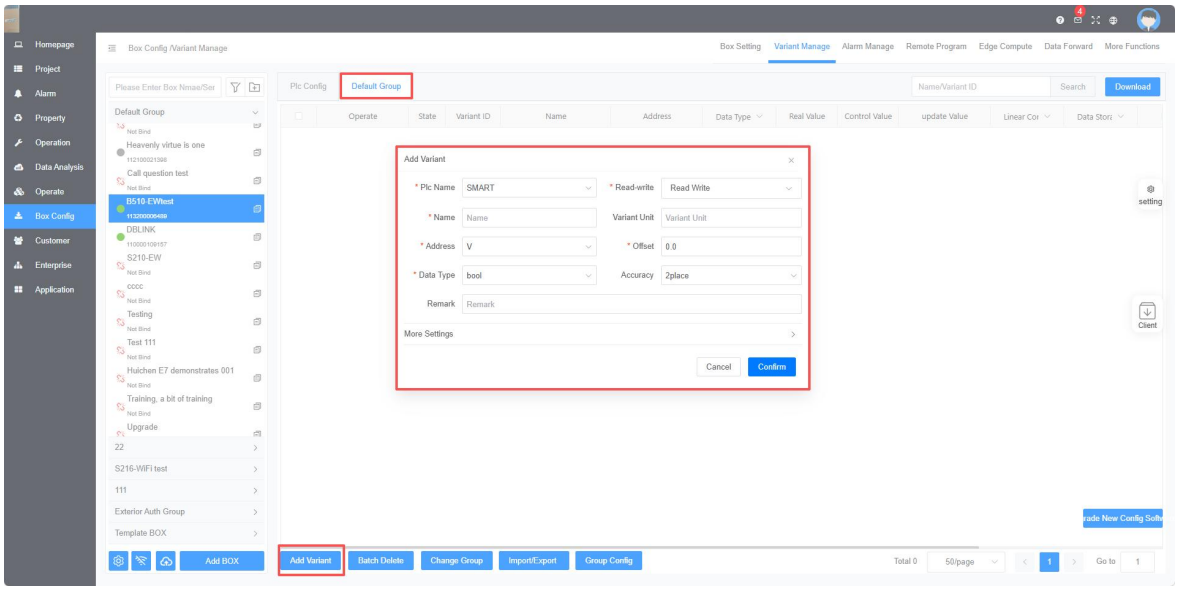


Enter the “PLC Name” in sequence, and set the connection port between the HBOX and the PLC, as well as the PLC brand, series, and address parameters.
(Using Siemens 200 SMART as an example.)

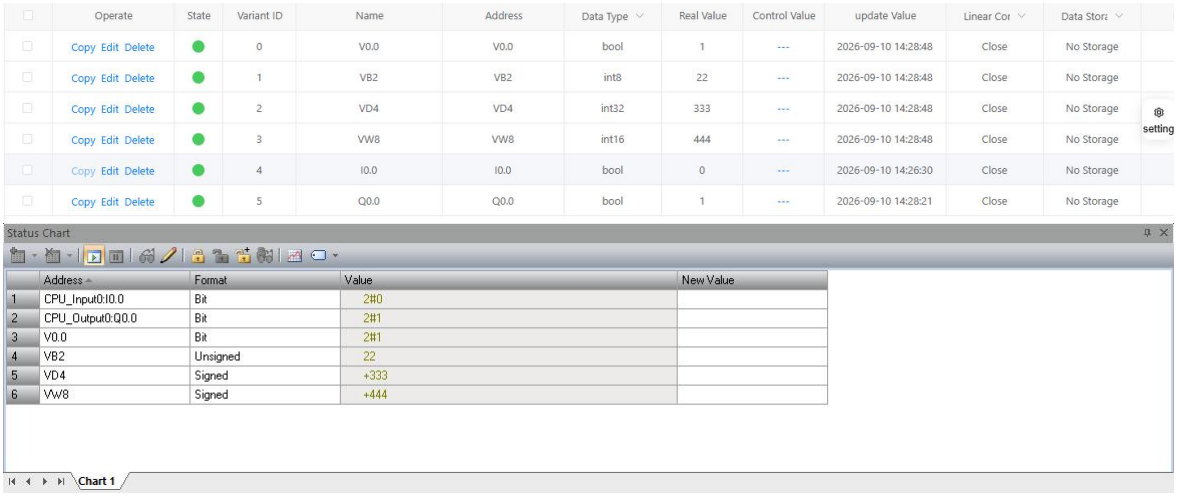


4. Add PLC Variables

In “Default Group”, click “Add Variant” to set the PLC variables to be added.



Example of the type mapping for PLC variables (using Siemens 200 SMART as an example)



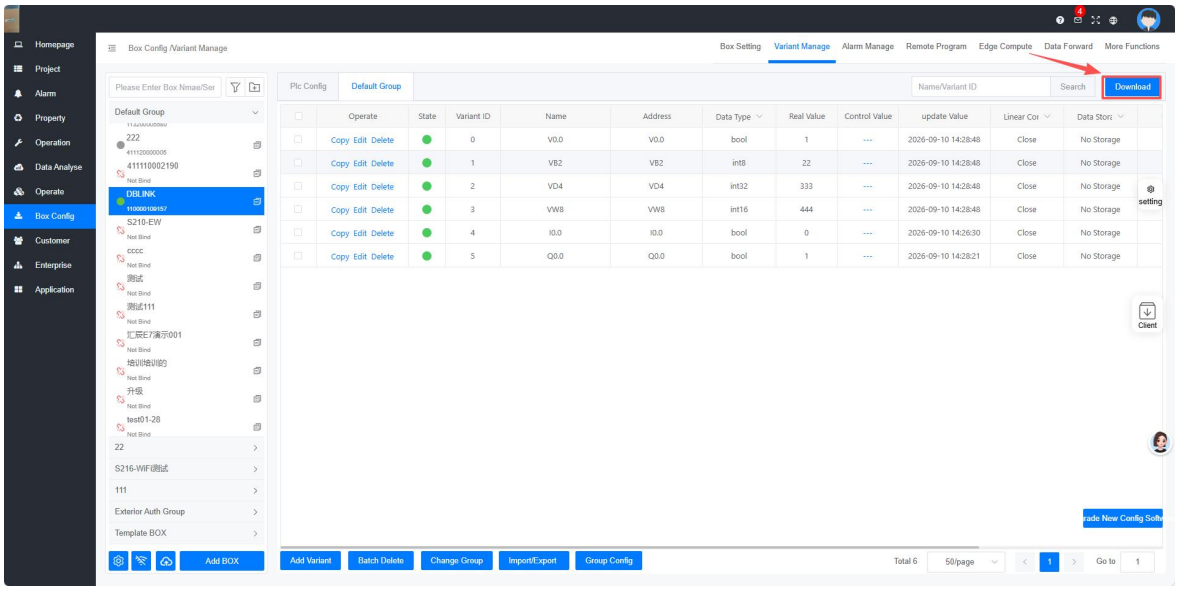
Operate	State	Variant ID	Name	Address	Data Type	Real Value	Control Value	update Value	Linear Cor	Data Stor
Copy Edit Delete		0	V0.0	V0.0	bool	1	---	2026-09-10 14:28:48	Close	No Storage
Copy Edit Delete		1	VB2	VB2	int8	22	---	2026-09-10 14:28:48	Close	No Storage
Copy Edit Delete		2	VD4	VD4	int32	333	---	2026-09-10 14:28:48	Close	No Storage
Copy Edit Delete		3	VW8	VW8	int16	444	---	2026-09-10 14:28:48	Close	No Storage
Copy Edit Delete		4	I0.0	I0.0	bool	0	---	2026-09-10 14:26:30	Close	No Storage
Copy Edit Delete		5	Q0.0	Q0.0	bool	1	---	2026-09-10 14:28:21	Close	No Storage

Status Chart

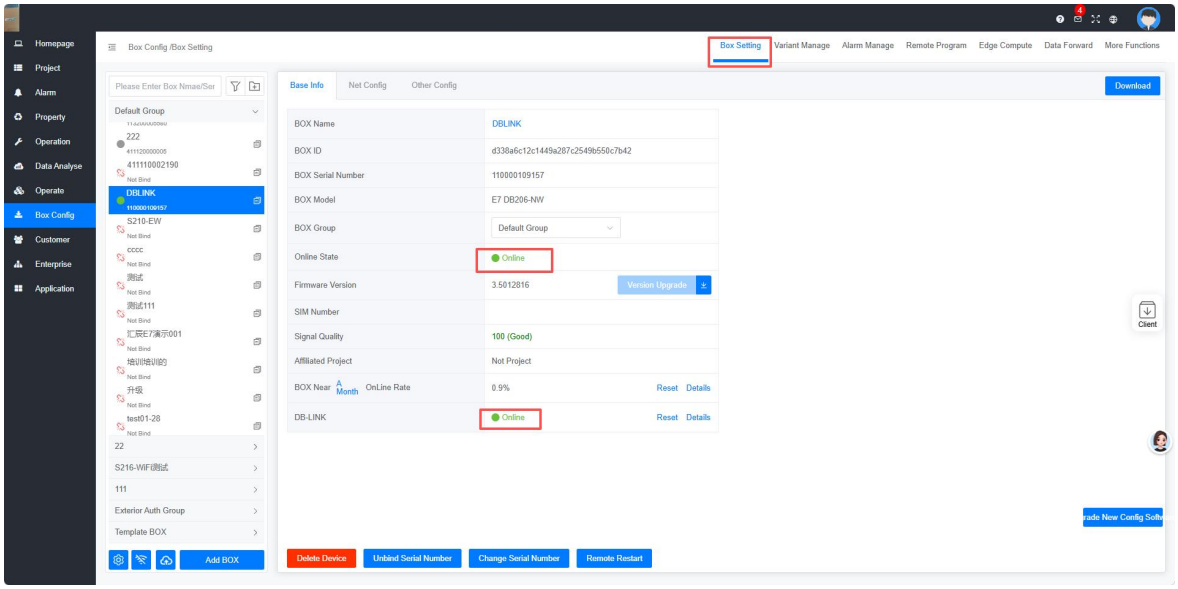
	Address	Format	Value	New Value
1	CPU_Input0:I0.0	Bit	2#0	
2	CPU_Output0:Q0.0	Bit	2#1	
3	V0.0	Bit	2#1	
4	VB2	Unsigned	22	
5	VD4	Signed	+333	
6	VW8	Signed	+444	

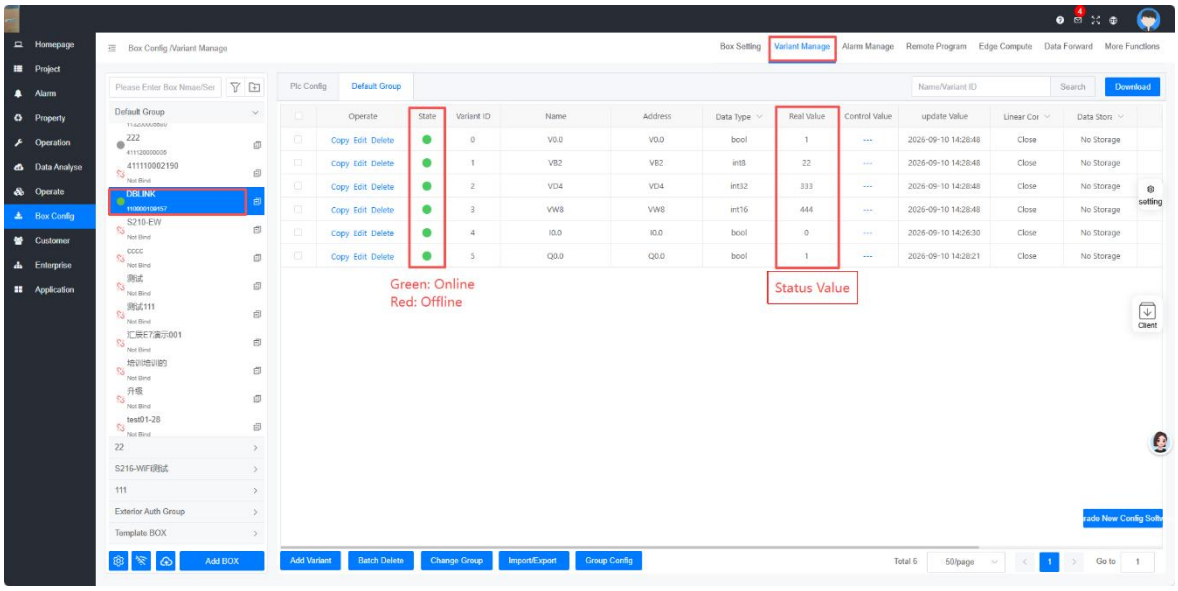
Chart 1

After the configuration is complete, click “Download to BOX” to download the modified configuration to the HBOX.



Check the online status of the HBOX, PLC, and variables.





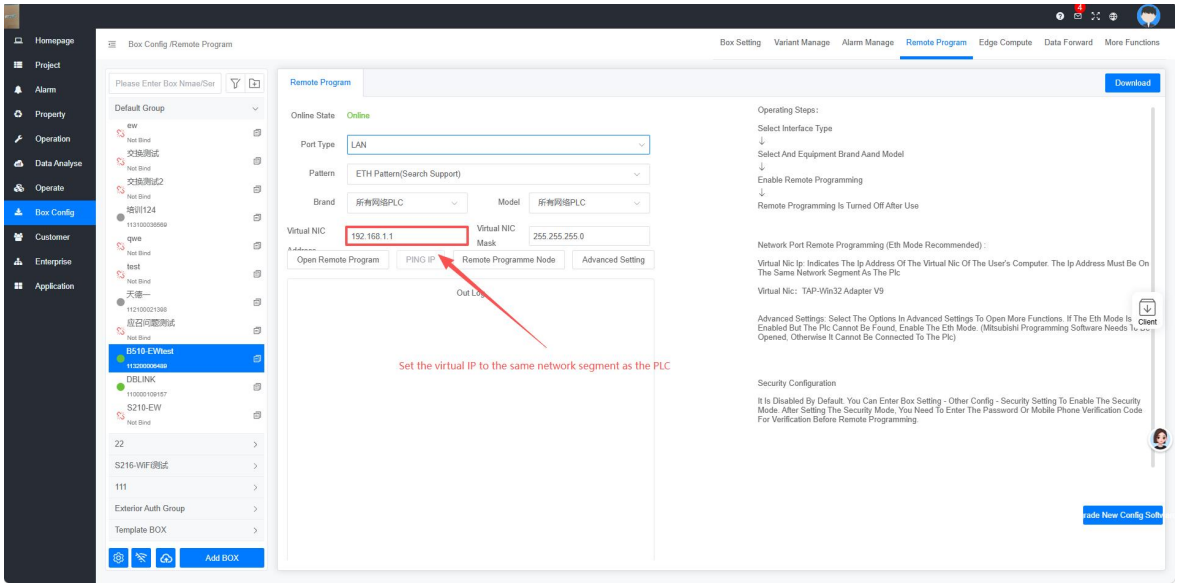
5. Remote Programming

In “Remote Program”, set the interface type (the connection type between the HBOX and the PLC).

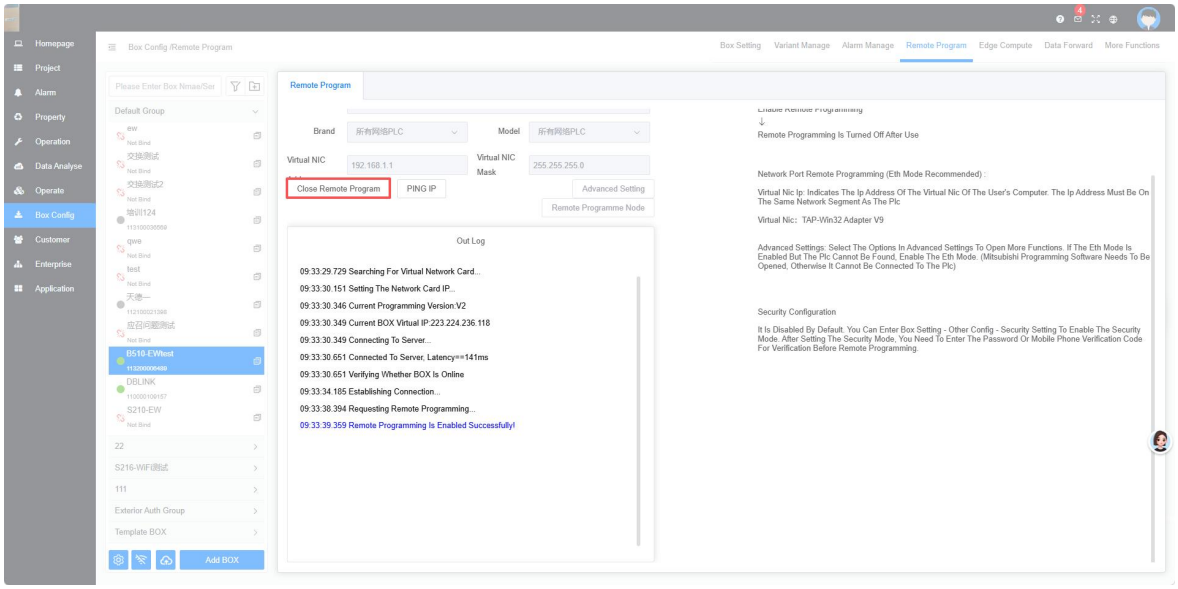
In “Select Mode”: ETH supports search, and IP supports manual addition.

In “Virtual Network Adapter”, set the IP to the same subnet as the device to be accessed remotely.

(No need to select the device brand or model.)



Click “Enable Remote Programming”.

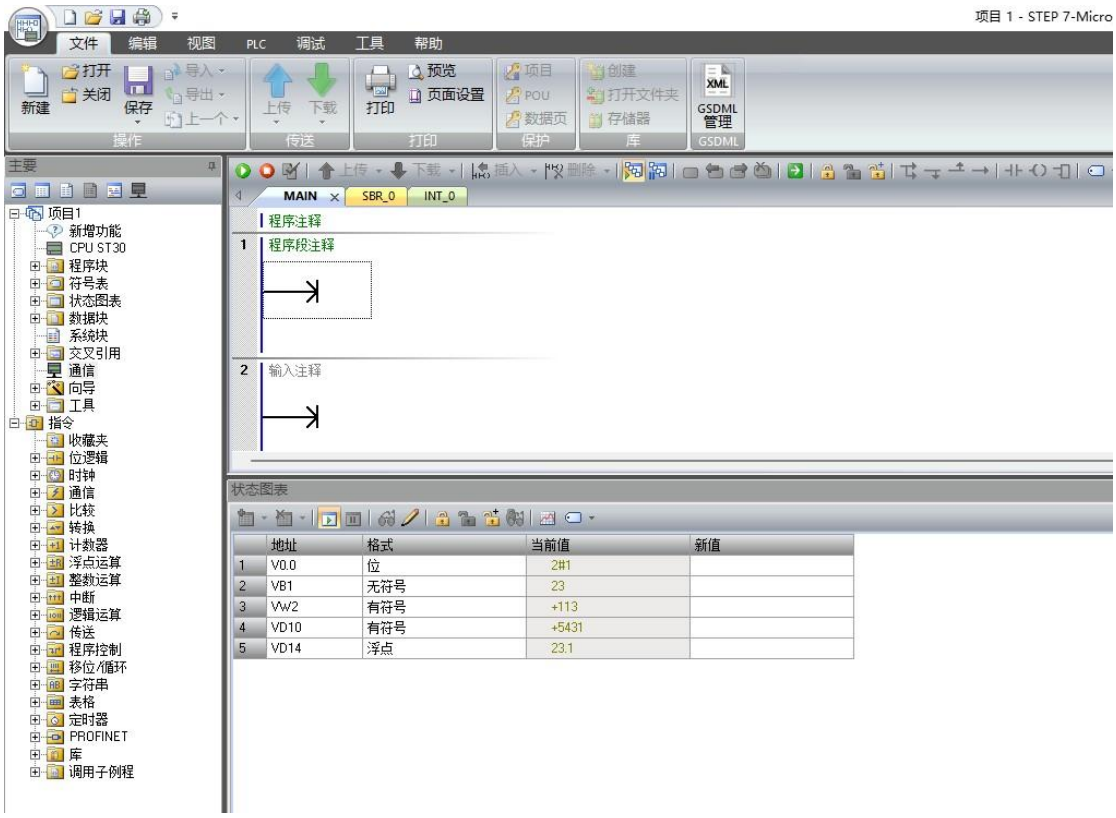


Open the SMART programming software and select the virtual network adapter TAP-Windows Adapter V9 as the communication interface.

Search for or add the PLC IP address as usual, and click “OK” to connect to the PLC.



Monitor the program


项目 1 - STEP 7-Micro
文件
编辑
视图
PLC
调试
工具
帮助
新建
打开
关闭
保存
导入
导出
上一个
操作
上传
下载
传送
打印
预览
页面设置
打印
项目
POU
数据页
保护
创建
打开文件夹
存储器
库
XML
GSDML
管理
GSDML
主要
项目1
新增功能
CPU ST30
程序块
符号表
状态图表
数据块
系统块
交叉引用
通信
向导
工具
指令
收藏夹
位逻辑
时钟
通信
比较
转换
计数器
浮点运算
整数运算
中断
逻辑运算
传送
程序控制
移位/循环
字符串
表格
定时器
PROFINET
库
调用子例程
MAIN
SBR_0
INT_0
程序注释
1
程序段注释
2
输入注释
状态图表
地址
格式
当前值
新值
1 V0.0 位 2#1
2 VB1 无符号 23
3 VW2 有符号 +113
4 VD10 有符号 +5431
5 VD14 浮点 23.1