Installation and operation manual

Central Controller Unit
U-Match Inverter Systems
MultiSplit Inverter Systems

TCONTCCMHCM04A

⚠WARNING
● This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
● Use this equipment only for its intended purpose as described in this manual.

TCONTCCMHCM04A Wiring & Operating Instructions

The core function of the protocol converter is to convert Modbus protocol into BACnet protocol, implement Modbus device integration into BACnet network. That is, the gateway acts as a Modbus Master (master station) and supports connection of 4 Modbus Slaver devices. TCONTCCMHCM04A is a standard BACnet network device in the BACnet network, and the user can map the device data points in the MODBUS network one by one to the data points in the BACnet network. The gateway provides the BACnet service interface, and the third-party BACnet Client software integrates the Modbus Slaver device into the system through the gateway.

Appearance
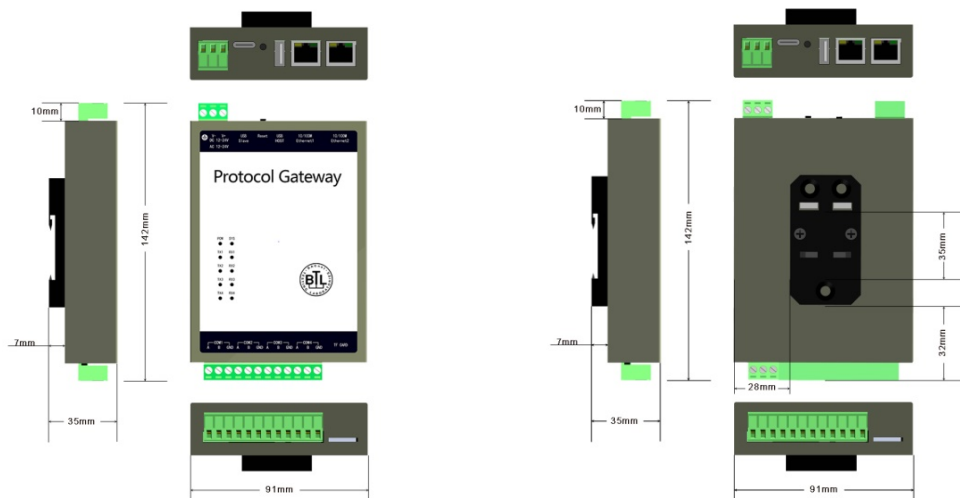
Specification

Function	Specification
Power supply	AC and DC rated voltage 24V, working range 12V to 24V.
ROM	256M Flash
RAM	64M DDR2
Working condition	-20°C -- 70°C，5--90%RH (non-condensing)
Storage Conditions	-40°C -- 85°C，5--95%RH (non-condensing)
Ethernet communication	
Specification	High-performance 100M/10M adaptive Industrial Network Card, support AUTO
Protocol	BACnet IP
RS-485 bus communication	
Bus quantity	2 way RS485 bus communication，Support 2 Modbus Slaver per way
485 communication parameters	9600 baud rate / 8 data bits /non parity /1 stop bit

Interface Features
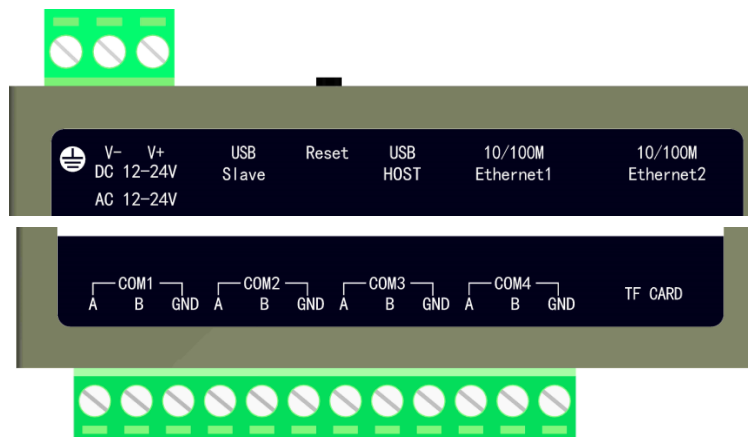
Category	Ports	Function
Power supply	V-	+12/24V
	V+	GND

Ethernet port	Ethernet2	BACnet IP interface / Debug Interface
Modbus interface 1 COM1	A	"A" of Modbus interface 1 (Access gateway device which address is 1,2)
	B	"B" of Modbus interface 1(Access gateway device which address is 1,2)
Modbus interface 2 COM2	A	"A" of Modbus interface 2(Access gateway device which address is 3,4)
	B	"B" of Modbus interface 2(Access gateway device which address is 3,4)
RESET	RESET	Press the button 8 S continuously to restart the factory settings.

Wiring Instructions

TCONTCCMHCM04A default network port parameters are as follows：
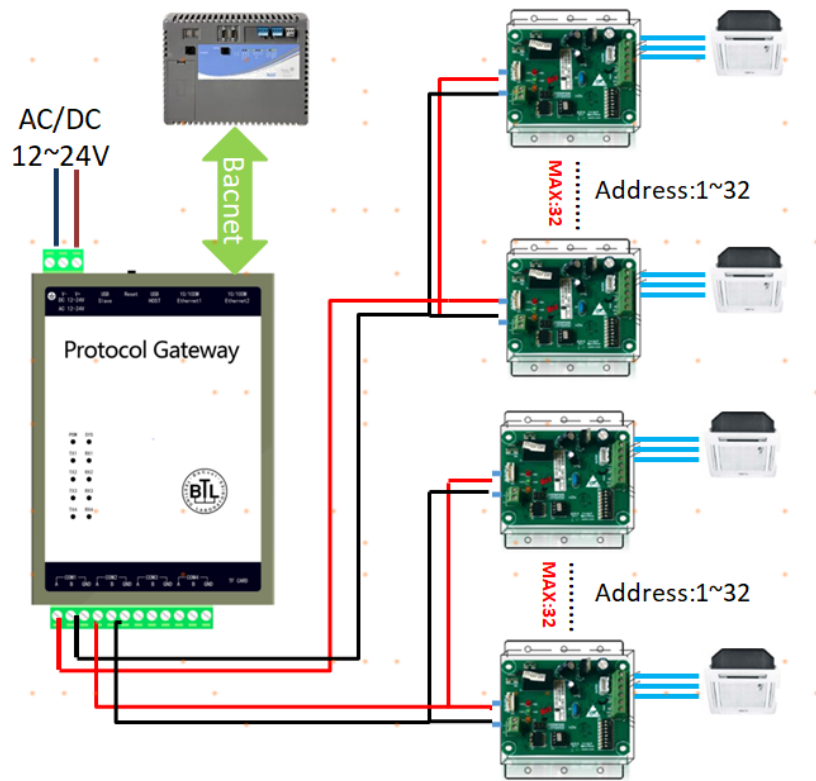
IP address192.168.1.88

Subnet mask 255.255.255.0

Default gateway 192.168.1.1

TCONTCCMHCM04A should be used with gateway TCONTADPYCJA2A.

The specific connection diagram is as follows：

Connect to TCONTADPYCJA2A:

Indoor Unit Dip Switch

The address cannot be duplicated between the gateways connected to the same TCONTCCMHCM04A. COM1 interface connect the gateway whose address is 1&2; COM2 interface connect the gateway whose address is 3&4.

The indoor unit addresses under the same gateway cannot be duplicated, and the address range is 1~32. The indoor units between different gateways do not affect each other.

Indoor Unit Dip Switch

The address dip switch of the indoor unit is SW03, ON is 1, OFF is 0;

The address dip switch range is 1~32, dip switch setting as follows:

| SW03								Address
1	2	3	4	5	6	7	8	
1	0	0	0	0	0	0	0	1
1	0	0	0	0	0	0	1	2
1	0	0	0	0	0	1	0	3
1	0	0	0	0	0	1	1	4
1	0	0	0	0	1	0	0	5
1	0	0	0	0	1	0	1	6
1	0	0	0	0	1	1	0	7
1	0	0	0	0	1	1	1	8
1	0	0	0	1	0	0	0	9
1	0	0	0	1	0	0	1	10
1	0	0	0	1	0	1	0	11
…..	…..	…..	…..	…..	…..	…..	…..	…..
…..	…..	…..	…..	…..	…..	…..	…..	…..
…..	…..	…..	…..	…..	…..	…..	…..	…..
1	0	0	1	0	0	1	1	20
1	0	0	1	0	1	0	0	21
1	0	0	1	0	1	0	1	22
1	0	0	1	0	1	1	0	23
1	0	0	1	0	1	1	1	24
1	0	0	1	1	0	0	0	25
1	0	0	1	1	0	0	1	26
1	0	0	1	1	0	1	0	27
1	0	0	1	1	0	1	1	28
1	0	0	1	1	1	0	0	29
1	0	0	1	1	1	0	1	30
1	0	0	1	1	1	1	0	31
1	0	0	1	1	1	1	1	32

TCONTCCMHCM04A Configuration File Replacement Instructions

1. The default IP of TCONTCCMHCM04A is 192.168.1.88 .

2. First, set the IP of the computer to the same network segment as TCONTCCMHCM04A. Then "ping" the IP "192.168.1.88" to see if it can work; if it works, then you can do the next setting.

3. If "192.168.1.88" cannot be pinged, press the RESET button for 8 seconds. After HCM-04 restarts, ping 192.168.1.88. After pinging, you can start setting HCM-04.

4. File configuration
   First double click to open "X2BACnet.exe" debugging software.
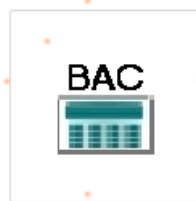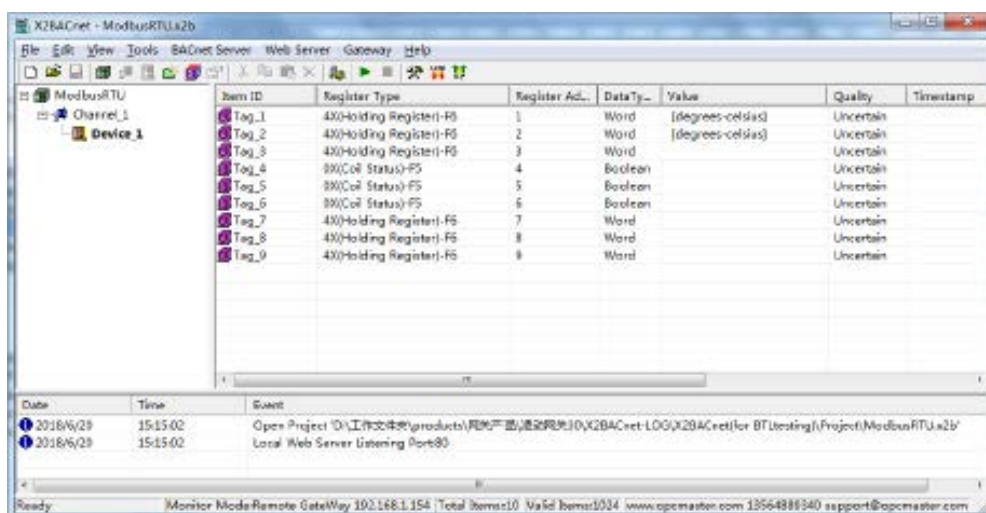
X2BACnet.exe

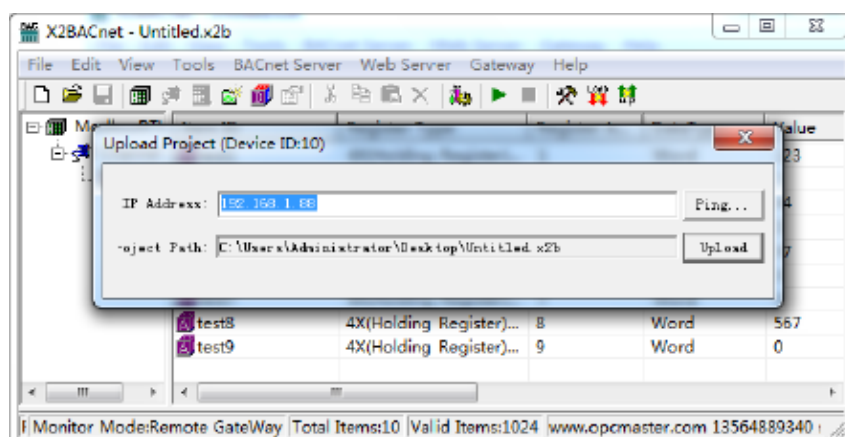Click "File" on the menu bar to choose "Open… " or click on the toolbar to Open the project.
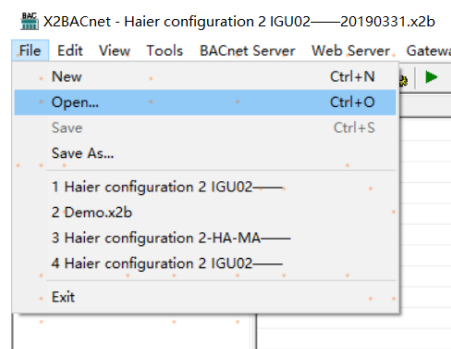
In the dialog box, select the project file that you want to burn
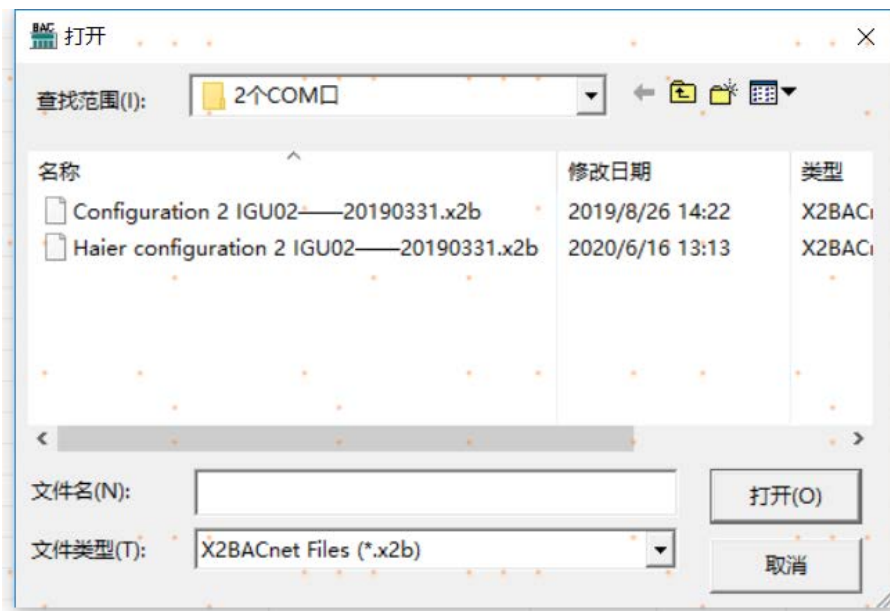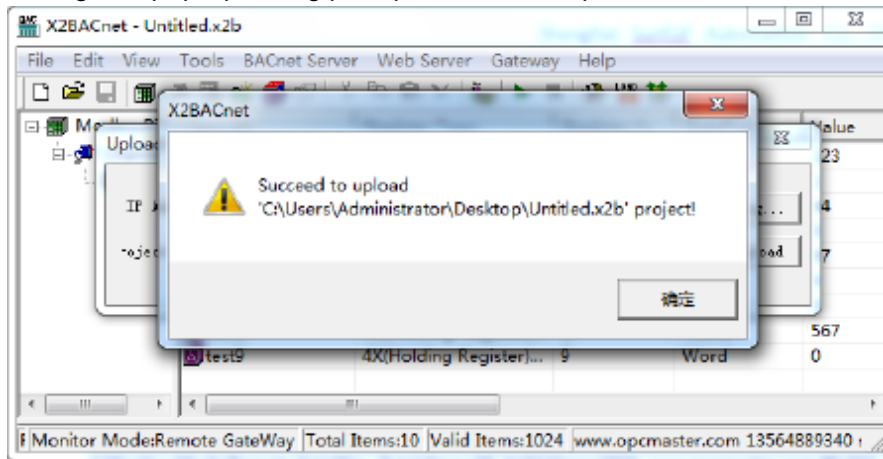

Click "Gateway" on the menu bar to choose "Upload " or click on the toolbar 🔧 to
upload the project.

In the pop up dialog box enter the gateway IP address, click the "Upload".

After uploading, the pop-up dialog prompt succeed to upload.

Note: the IP address of the gateway must be correct. the default gateway IP address is 192.168.1.88, the IP address of PC to set up to he same network segment, the project can be uploaded after successfully Ping.
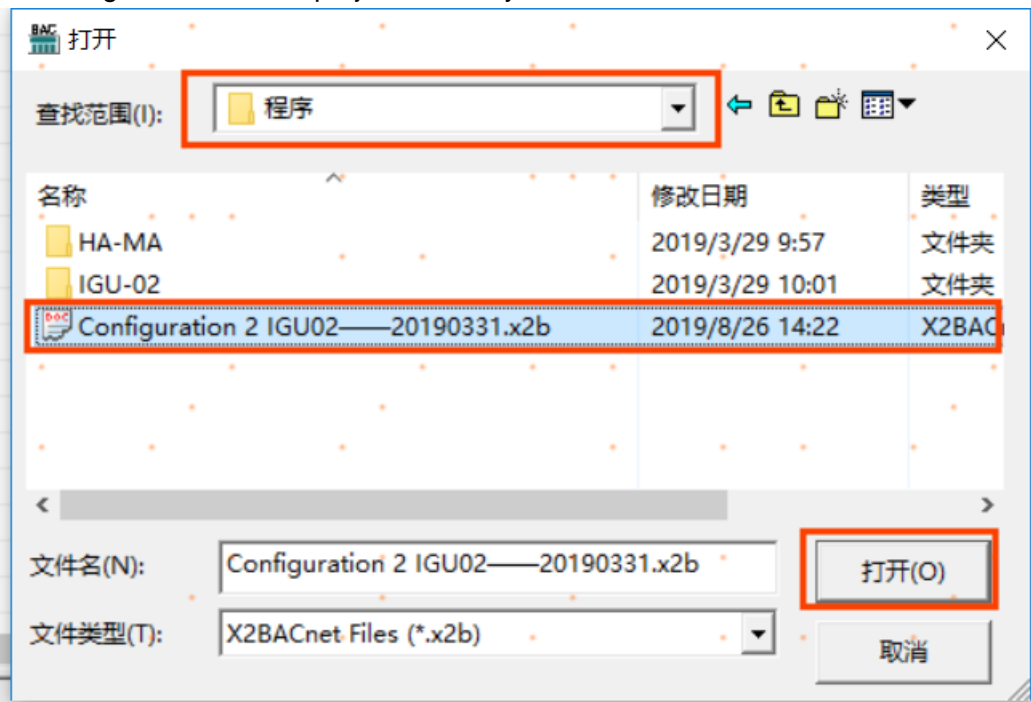
TCONTCCMHCM04A IP Modifying Instructions

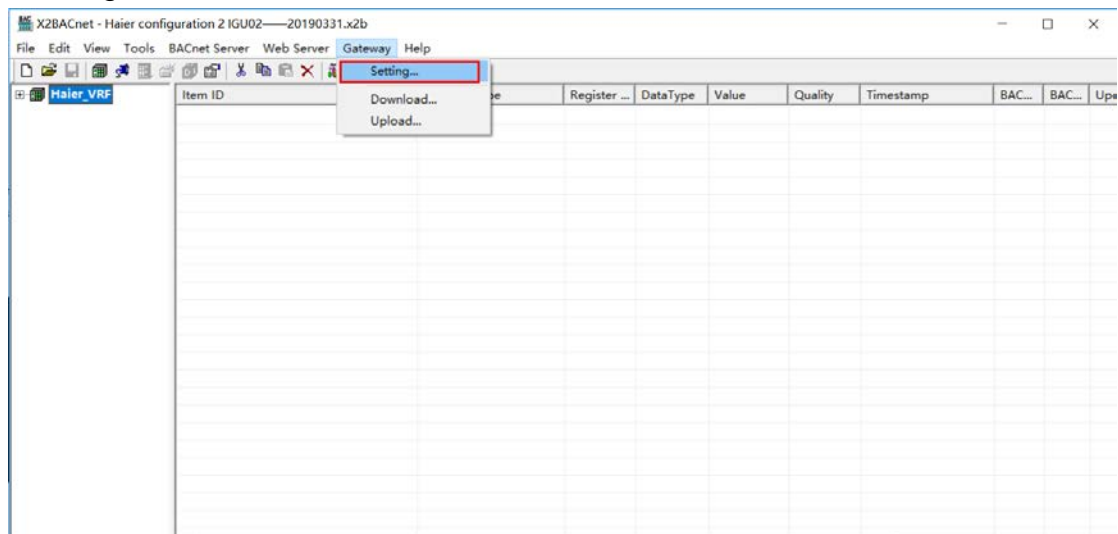First double click to open "X2BACnet.exe" debugging software.
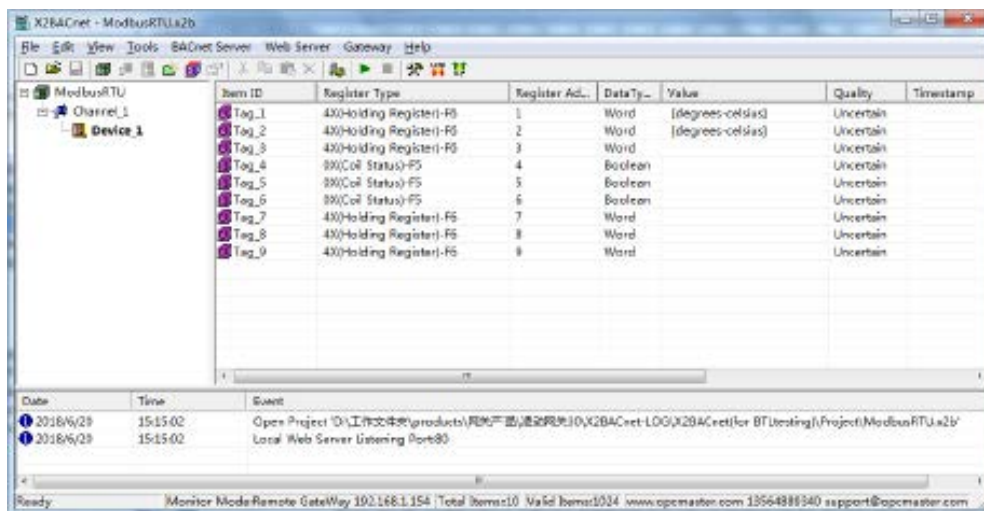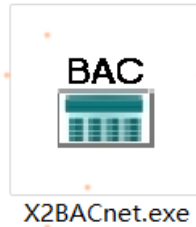
X2BACnet.exe

Click "File" on the menu bar to choose "Open… " or click on the toolbar to Open the project.
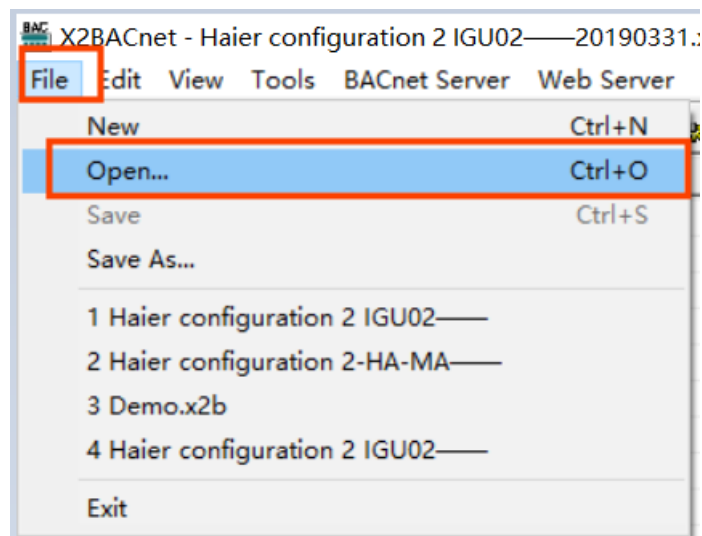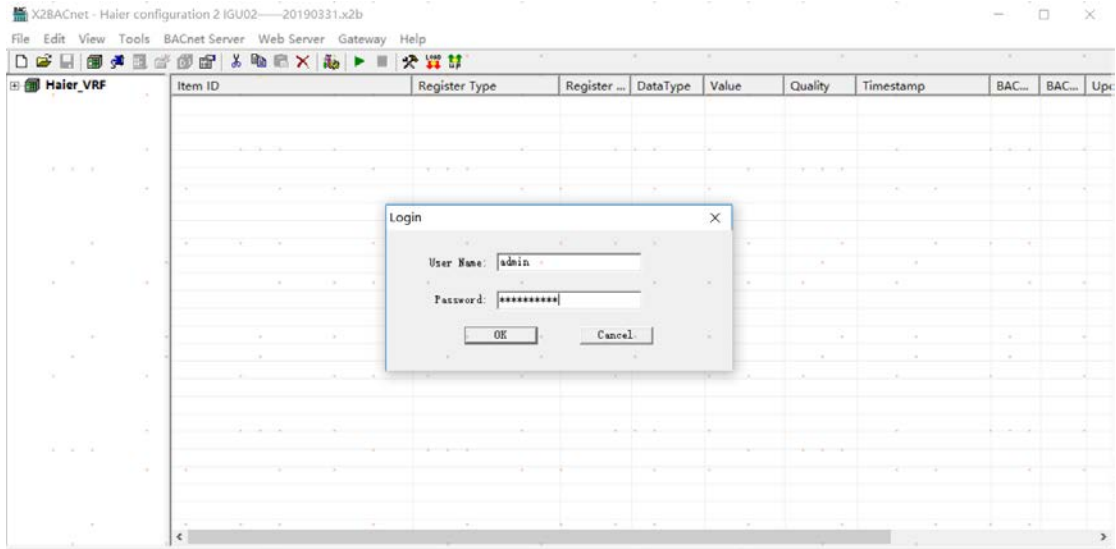
In the dialog box, select the project file that you want to burn

In the gateway monitoring mode, click on the menu bar "Gateway" and select "Settings".


In the dialog box that pops up, enter the user name and password. The user name is fixed to "admin" and the password is fixed to "admin123456". After the input is successful, the system parameters related to the gateway can be set.

Network port setting: You can change the IP address of the hardware gateway. The default IP address of the gateway is 192.168.1.88, the default subnet mask is 255.255.255.0, and the default gateway is 192.168.1.1. Click OK after setting. The "Ping" function tests whether the current IP address is successful. The "Login Page Function" can be logged in to the WEB server where the gateway is located.

Attached document

1. Debugging Software "X2BACnet.exe"

X2BACnet.exe
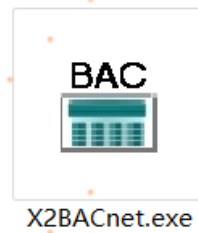
2. Standard Configuration File Connected to TCONTADPYCJA2A
   Configuration 32+32 TCONTADPYCJA2A——20201210

Configuration
32+32 YCJ-A002—

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