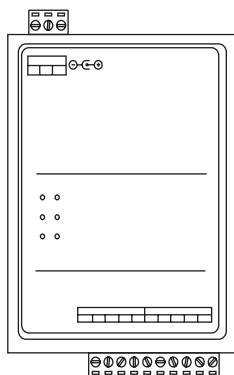




RVF

S E R I E S

BACNET



INSTALLATION & USER MANUAL

MODEL:
RVF-BACNET

RVF-BACNET MODULE

User manual

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PRECAUTIONS



WARNING

Only qualified personnel should install and service the equipment. The installation, starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the literature and on the tags, stickers, and labels that are attached to the equipment.

Read the following if you use the device in European countries:

The device can not be operated by children over 7 years old, disabled people and people without experience and knowledge. Instructions should include a description of the correct and safe handling of the device and information about possible dangers. Children should not play with the device. Cleaning and servicing should be carried out by authorized persons.

UTILIZATION:

Do not dispose of this product together with unsorted municipal waste.

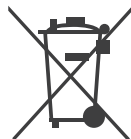
It's necessary to transfer this type of waste for special processing.

It's illegal to throw the device together with other household waste.

There are several ways to get rid of this type of equipment:

- A. The city organizes electronic waste collection, you can pass the device without the cost.
- B. When you buy a new device the seller will accept the old device without any fees.
- C. Manufacturer will take the product from buyer product without charging it with costs.
- D. Products of this type, contains valuable elements, it can be sold on purchase of metals.

Throwing the device „on wild“ exposes you to the risk of losing your health. Dangerous substances from the device can penetrate to groundwater creating a danger of getting through to people's food chain.



INSTALLATION & USER MANUAL

1. BRIEF INTRODUCTION

The BACnet gateway uses the BACnet IP protocol. By converting the MODBUS protocol to BACnet IP protocol, the computer can be accessed via Ethernet.

Default IP: 192.168.1.233

Port: 47808

Device ID:

Device name:

Object description:

Manufacturer name:

Manufacturer ID:

Location:

☒ Enable BACnet IP service

Port:

Bind network port:

2. CONNECTION

Power supply output: DC 9-36V.

The network cable connects to port Eth0.



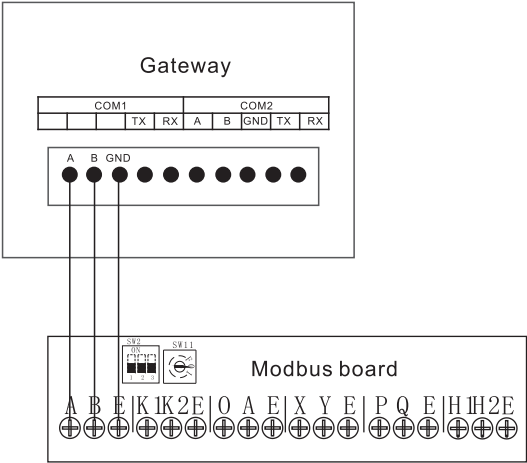
After power on successfully, POWER/RUN indicator is ON. Connect the network cable, the network cable port light is ON.

2.1. Connect the Modbus board

A, B, GND on gateway COM1 connect to A, B, E on the Modbus board.

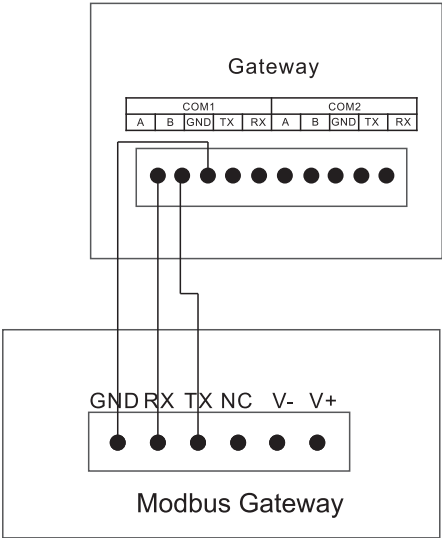
Successfully connect the devices and the system operates normally, two lights on the COM1 port on the gateway flash.

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2.1. Connect the Modbus Gateway

A, B, GND on gateway COM1 connect to RX, TX, GD on the Modbus gateway.



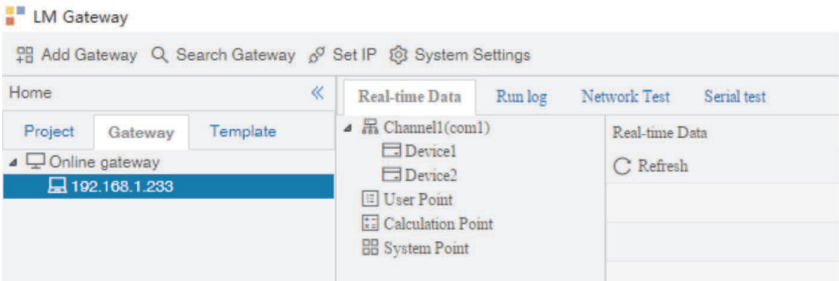
INSTALLATION & USER MANUAL

3. CONNECT TO COMPUTER

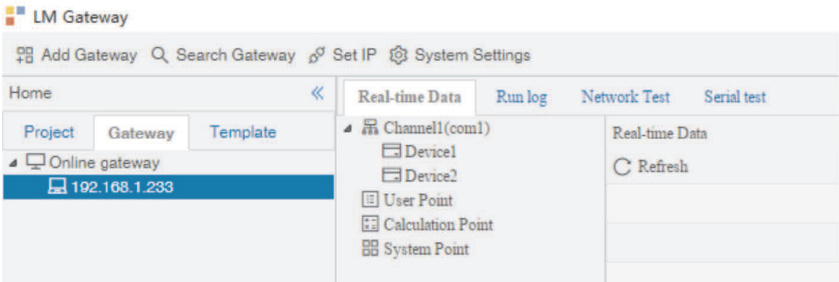
To establish the connect ion between computer and the BACnet gateway, it needs to add an address of the 192.168.1.X network segment in the IPv4 settings.

IP Setting:

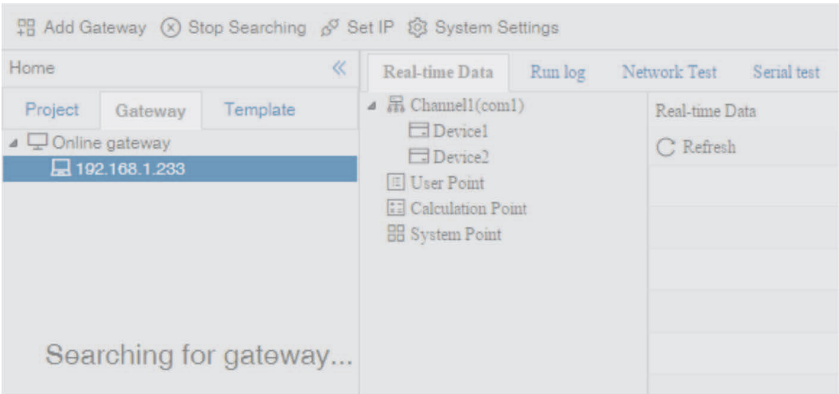
- a. Open the software



- b. Click “Gateway” - click “Search Gateway”



- c. Click the currently connected gateway - click “System settings”



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d. Set IP address - Enter the IP address to be set and apply to the gateway.

IP address configuration

Wired Network

WIFI

DHCP:

☐ No

Network port:

ETH0

IP address:

192.168.1.233

Subnet mask:

255.255.255.0

Default gateway:

192.168.1.1

Preferred DNS:

114.114.114.114

Alternate DNS:

114.114.115.115

MAC address:

C6:99:A1:3C:8E:3C

Copy

Apply to the gateway

4. VARIABLE TABLE

Variable table of connecting Modbus board

AI variable				
Index number	Description	Unit	Modbus function code	Modbus address
#00 IDU Input register				
0	Indoor air return temperature	0.1℃	0x04	0
1	Inlet temperature of evaporator	0.1℃	0x04	1
2	Middle temperature of evaporator	0.1℃	0x04	2
3	N/A	N/A	0x04	3
4	Indoor capacity demand	N/A	0x04	4
5	Fan speed	N/A	0x04	5
6	IDU error code	N/ A	0x04	6
7	Model information	N/A	0x04	7

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AI variable				
Index number	Description	Unit	Modbus function code	Modbus address
#01 IDU Input register				
8	Indoor air return temperature	0.1°C	0x04	8
9	Inlet temperature of evaporator	0.1°C	0x04	9
10	Middle temperature of evaporator	0.1°C	0x04	10
11	N/A	N/A	0x04	11
12	Indoor capacity demand	N/A	0x04	12
13	Fan speed	N/A	0x04	13
14	IDU error code	N/A	0x04	14
15	Model information	N/A	0x04	15
#n IDU Input register				
n*8+0	Indoor air return temperature	0.1°C	0x04	n*8+0
n*B+ 1	Inlet temperature of evaporator	0.1°C	0x04	n*B+ 1
n*8+2	Middle temperature of evaporator	0.1°C	0x04	n*8+2
n*8+3	N/A	N/A	0x04	n*8+3
#63 IDU Input register				
504	Indoor air return temperature	0.1°C	0x04	504
505	Inlet temperature of evaporator	0.1°C	0x04	505
506	Middle temperature of evaporator	0.1°C	0x04	506
507	N/A	N/A	0x04	507
508	Indoor capacity demand	N/A	0x04	508
509	Fan speed	N/A	0x04	509
510	IDU error code	N/A	0x04	510
511	Model information	N/A	0x04	511

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AI variable					
Index number	Description		Modbus function code		Modbus address
# 00 IDU					
0	#0 IDU control register		0x03, 0x6		0
	B0	Temperature setting	B9	Mode setting	Refer to Modbus table
	B1		B10		
	B2		B11		
	B3		B12		
	B4		B13		
	B5	Fan speed setting	B14	ON/OFF	Refer to Modbus table
	B6		B15		
	B7				
	B8				
1	#0 DU lock register		0x03, 0x6		
	B0	N/A	B8	N/A	Refer to Modbus table
	B1		B9	Remote lock	
	B2		B10	N/A	
	B3		B11	Mode lock	
	B4		B12		
	B5		B13	N/A	
	B6		B14		
	B7		B15		
	# 01 IDU				
2	#1 IDU control register		0x03, 0x6		2
3	#1 IDU lock register		0x03, 0x6		3
# 02 IDU					
4	#2 IDU control register		0x03, 0x6		4
5	#2 IDU lock register		0x03, 0x6		5

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AI variable					
Index number	Description		Modbus function code		Modbus address
# n IDU					
n*2	#n IDU control register		0x03, 0x6		n*2
n*2+1	#n IDU lock register		0x03, 0x6		n*2+1
# 63 IDU					
126	#63 IDU control register		0x03, 0x6		126
127	#63 IDU lock register		0x03, 0x6		127
Group control IDU					
128	Group control register		0x03, 0x6		3840
	B0	Temperature setting	B9	Mode setting	Refer to Modbus table
	B1		B10		
	B2		B11		
	B3		B12		
	B4		B13		
	B5	Fan speed setting	B14	ON/OFF	Refer to Modbus table
	B6		B15		
	B7				
	B8				
Group lock IDU					
129	Group lock		0x03, 0x 6		3841
	B0	N/A	B8	N/A	Refer to Modbus table
	B1		B9		
	B2		B10	Remote lock	
	B3		B11	N/A	
	B4		B12		
	B5		B13	Mode lock	
	B6		B14		
	B7		B15	N/A	

NOTES

[illegible]

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PIECZEĆ INSTALATORA

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