

GT200-BM-RS Modbus/BACnet IP Gateway

Product Overview

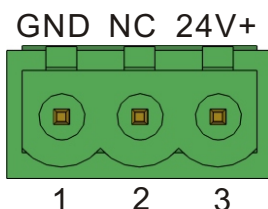
GT200-BM-RS is a gateway which can exchange data between Modbus serial protocol and BACnet IP protocol. The gateway acts as the slave at the BACnet IP side and the master at the Modbus side.

Technical specifications

- [1] The gateway can achieve the communication between BACnet and Modbus;
- [2] Supports up to 500 BACnet BIs, 300 BOs, 300 BVs, 500 AIs, 300AOs, 300 AVs, 500 MSIs and 100MSOs;
- [3] Supports the following BACnet IP services: Who Is, I Am, Who Has, I Have, Read Property, Write Property, Read Property Multiple;
- [4] Each serial port can support up to 100 Modbus commands;
- [5] Every serial interface is RS-485 or RS-232, half-duplex, and baud rate support: 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200 and 230400bps optional; parity: none, odd and even optional; 1 or 2 stop bits;
- [6] One independent RS-485 interface or RS-232 interface with 1KV optical isolation;
- [7] Power supply: 24VDC (11V ~ 30V), 90mA (24VDC);
- [8] Working temperature: -4°F~140°F(-20°C~60°C), relative humidity: 5% ~ 95% (non-condensing);
- [9] External Dimensions (W*H*D): 1.57 in*4.92 in*4.33 in (40mm*125mm*110mm);
- [10] Installation: 35mm DIN rail;
- [11] Protection class: IP20;
- [12] Test standard: EMC test standards.

Power interface

Power interface is shown as below:



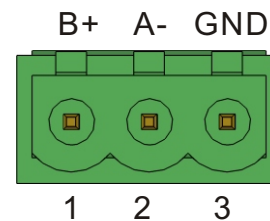
Pin	Function
1	GND
2	NC (Not Connected)
3	24V+, DC



Features

- Redundant power supply;
- One independent RS-485 interfaces or RS-232 interfaces with 1KV optical isolation;
- Ethernet 10/100M self-adaptive;
- Network security settings;
- Provides online scanning and configuration;
- Modbus command has auto demotion function and error handling functions;
- Provide easy to use configuration software SST-BM-CFG;

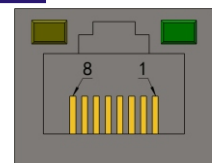
RS-485 interface



Pin	Function
1	B+, RS485
2	A-, RS485
3	GND

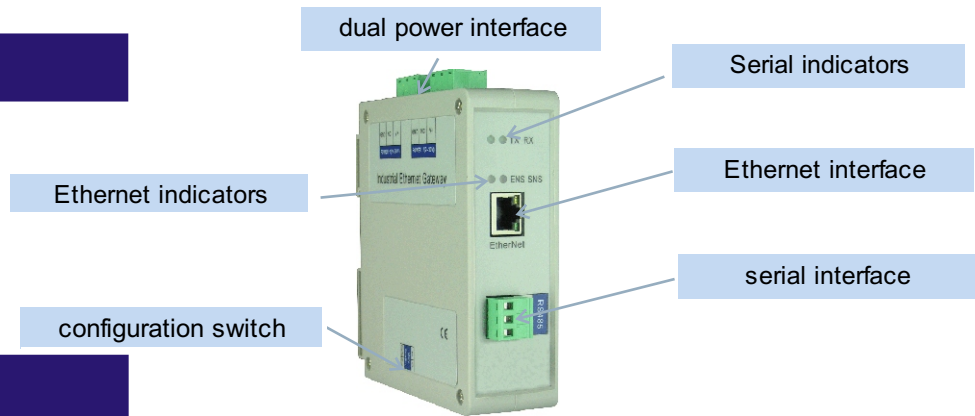
Ethernet interface

Ethernet interface uses RJ-45 connector; its pin (standard Ethernet signal) is defined as below:



Pin	Description
S1	TXD+, Tranceive Data+, Output
S2	TXD-, Tranceive Data-, Output
S3	RXD+, Receive Data+, Input
S4	Bi-Directional Data+
S5	Bi-Directional Data-
S6	RXD-, Receive Data-, Input
S7	Bi-Directional Data+
S8	Bi-Directional Data-

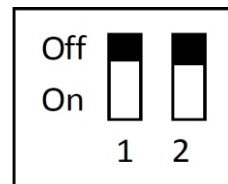
Appearance



Indicators

Indicators	State	Description
ENS	Green On	IP address with no conflict
	Red On	IP address with conflict
	Red Blinking	DHCP, BOOTP, IP address conflict detection
SNS	Green On	BACnet IP interface data is received or transmitted
	Green Blinking	BACnet IP interface data is not received or transmitted
ENS (Orange) and SNS (Orange) (Orange: Red and green on at the same time)	Simultaneously On	At the power-on moment
	Blink Alternately	Configuration Mode
	Blink Alternately (for 3 seconds)	Use locating function
Serial TX	Green Blinking	Serial data sending
	OFF	No serial data is sending
Serial RX	Green Blinking	Serial data receiving
	OFF	No serial data is receiving

Configuration switch



The DIP switch is located at the bottom of the gateway, bit 1 is mode bit and bit 2 is function bit.

Mode (Bit 1)	Function (Bit 2)	Mode	Description
Off	Off	Run mode	BACnet IP and Modbus RTU data can be exchanged; Allow reading and writing configuration data.
Off	On	Run mode	BACnet IP and Modbus RTU data can be exchanged, prohibit reading and writing configuration data.
On	On/Off	Configuration Mode	IP address is fixed at 192.168.0.188; this mode can only read and write configuration data but cannot communicate between BACnetIP and Modbus RTU.

Notes:

Restart GT200-BM-RS (power off and power on) after resetting the configuration to make the configuration take effect!