



GW-2139M

Modbus TCP to BACnet MS/TP gateway

Features

- Read/Write standard BACnet objects via modbus
- Configurable BACnet MS/TP master
- Configurable Modbus TCP server
- Simple data translation allows you to manipulate data
- SupGW-2139MGW-2139Mports BACne AI, AO, AV, BI, BO, BV, MSI, MSO, MSV Object Types
- Supports Modbus DI, DO, AO, AI Types
- BACnet object properties mapping configured via Modbus register
- Isolated COM : RS-485
- Built-in Watchdog
- 4KV ESD Protection



Introduction

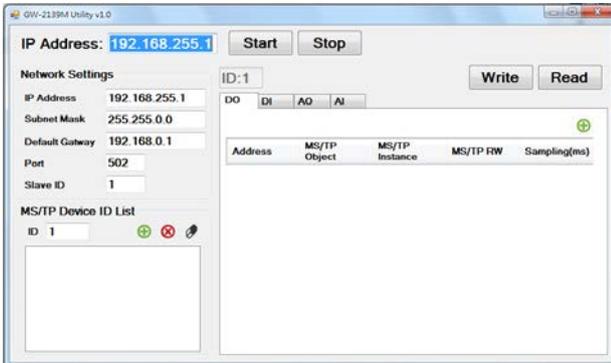
GW-2139M is a network gateway allowing Modbus TCP client devices to be accessed BACnet MS/TP network as a BACnet MS/TP master. The BACnet Master Slave Token Passing (MS/TP) protocol is used to relay and exchange information between building devices. GW-2139M contains a large number of BACnet objects (AI, AO, AV, BI, BO, BV, MSI, MSO, MSV) gives you flexibility in mapping Modbus TCP registers to any combination of BACnet objects. BACnet interoperability building blocks (DS-RP-A, DS-RPM-A, DS-WP-A, DS-WPM-A, DM-DDB-A, DM-DOB-A, DM-DCC-A, DM-RD-A) are Supported. All the data transfer is configurable using ICPDAS Utility.

Hardware Specifications

| Ethernet | |
|----------------------|--|
| Controller | 10/100Base-TX Ethernet Controller (Auto-negotiating, Auto_MDIX) |
| Connector | RJ-45 with Ethernet indicator |
| Protocol | Modbus TCP Server |
| Maximum Connections | 8 |
| RS-485 Interface | |
| Connector | terminal block (D+, D-) |
| Baud Rate (bps) | 9600, 19200, 38400, 76800 |
| Communication format | N, 8, 1 |
| Terminator Resistor | Built-in 120 ohm terminator resistor, enabled/disabled via Jump |
| Isolation | 3 kV VDC for DC to DC, 2500 Vrms for photo couple |
| Protocol | BACnet MS/TP Master |
| Maximum Connections | 32 |
| BACnet Objects | AI, AO, AV, BI, BO, BV, MSI, MSO, MSV |
| BIBBs | DS-RP-A, DS-RPM-A, DS-WP-A, DS-WPM-A, DM-DDB-A, DM-DOB-A, DM-D CC-A, DM-RD-A |
| Power | |
| Protection | Power reverse polarity protection |
| EMS Protection | ESD, Surge, EFT |
| Supply Voltage | +10 VDC ~ +30 VDC |
| Power Consumption | 5 W @ 24 VDC |
| LED Indicator | |
| LED (Round) | Power (1), BACnet MS/TP Status (1), BACnet MS/TP Net(1), Modbus TCP TxD / RxD / Link (3) |
| Ethernet LED | Ethernet LED Ethernet Status (RJ-45) (2) |
| Mechanism | |
| Installation | DIN-Rail |
| Casing | Metal |
| Dimensions | 33 x 120 x 116 mm (W x L x H) |
| Environment | |
| Operating Temp. | -25°C ~ +75°C |
| Storage Temp. | -30°C ~ +80°C |
| Humidity | 10 ~ 90% RH, non-condensing |

Utility

- Provide Modbus TCP network configuration interface
- Provide BACnet MS/TP configuration interface



BACnet MSTP Support

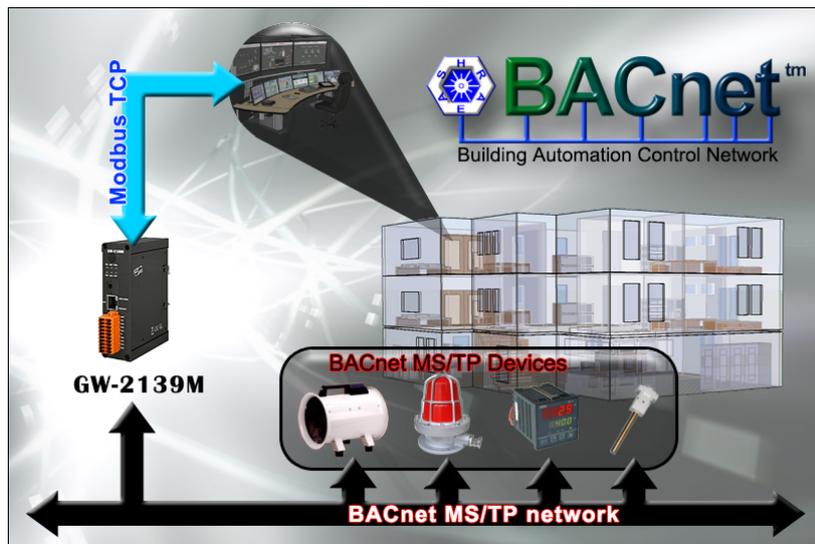
| | |
|----------------|--|
| Objects | Binary Input / Binary Output / Binary Value / Analog Input / Analog Output Analog Value / Multi-state Input Multi-state Output / Multi-state Value |
| BIBBs | DS-RP-A, DS-RPM-A, DS-WP-A, DS-WPM-A, DM-DDB-A, DM-DOB-A, DM-DCC-A, DM-RD-A |

Modbus TCP Support

| | |
|---------------|--|
| Function Code | 0x01, 0x02, 0x03, 0x04, 0x05, 0x06, 0x10, 0x0F |
|---------------|--|

Application

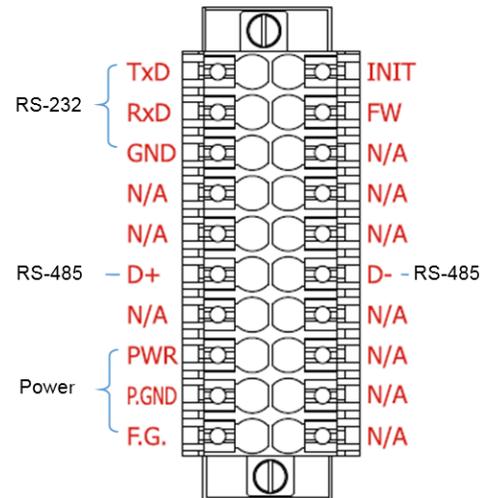
- Building Automation
- Heating, Ventilating, and Air-conditioning Control
- Lighting Control
- Access Control
- Fire Detection Systems



Ordering Information

| | |
|--------------------|---|
| GW-2139M CR | Modbus TCP to BACnet MS/TP gateway (RoHS) |
|--------------------|---|

Pin Assignments



Dimensions (Units: mm)

