



GW-2439M

BACnet/IP Client to Modbus TCP Server/RTU Slave Gateway

Features

- Read/write BACnet object values via Modbus registers
- Configurable for up to 10 BACnet/IP Server devices
- Supports both Modbus TCP Server and Modbus RTU Slave simultaneously
- Supports BACnet object types: AI, AO, AV, BI, BO, BV, MSI, MSO, MSV
- Software tool supports scanning BACnet/IP servers and their objects
- Supports conversion of up to 9,000 BACnet objects' present_value to Modbus registers
- Software tool allows configuration of BACnet/IP objects and automatically generates the Modbus mapping table



Introduction

The GW-2439M is a powerful network gateway that supports three communication roles: BACnet/IP Client, Modbus TCP Server, and Modbus RTU Slave. It acts as a bridge between BACnet and Modbus systems, allowing a host system to read and write data from remote BACnet/IP Servers via either a Modbus TCP Client or Modbus RTU Master. The GW-2439M can communicate with multiple BACnet/IP Servers in real-time, enabling data integration and centralized monitoring. As a BACnet/IP Client, the GW-2439M actively initiates communication requests to access various types of objects from BACnet Servers. The present_value of these BACnet objects can be mapped and converted into Modbus registers, allowing Modbus-based host systems to access BACnet data through standard Modbus communication protocols. This significantly enhances flexibility and efficiency in system integration.

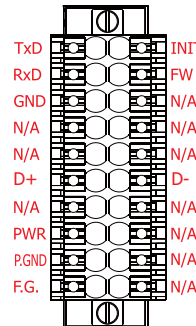
BACnet/IP Support

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/RTU Support

Function Code	0x01, 0x02, 0x03, 0x04, 0x05, 0x06, 0x10, 0x0F
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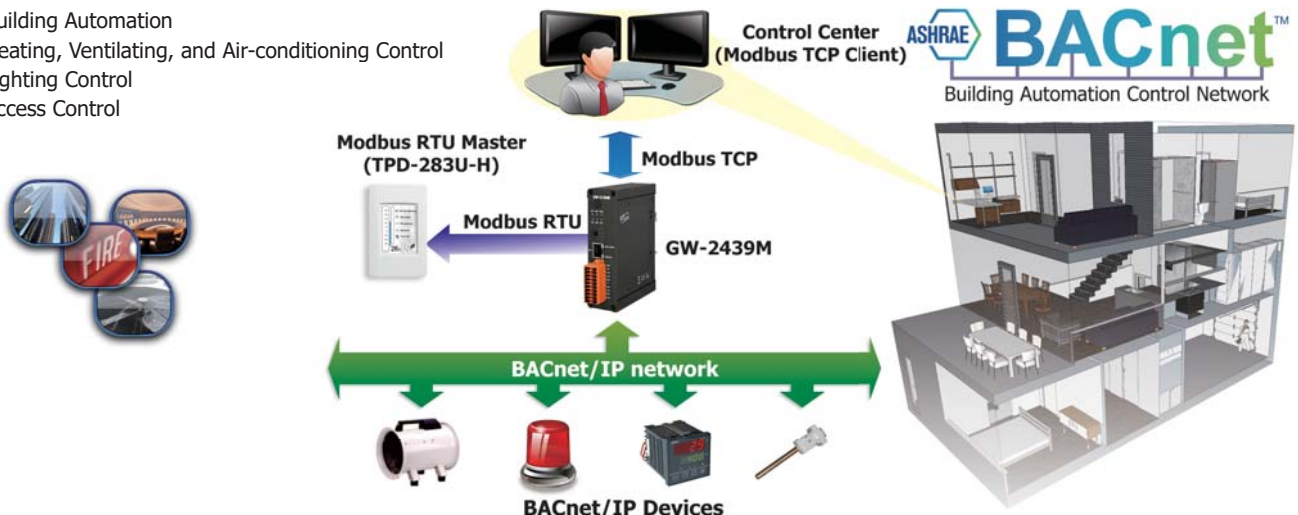
Pin Assignments



Pin Name	Description
F.G.	Power +10 ~ +30 VDC
GND	
PWR	
D+	RS-485 Modbus RTU
D-	
GND	RS-232 (Reserve)
RxD	
TxD	
INIT	Connect to GND, Change to Initial Mode
FW	Connect to GND, Change to Bootloader Mode

Applications

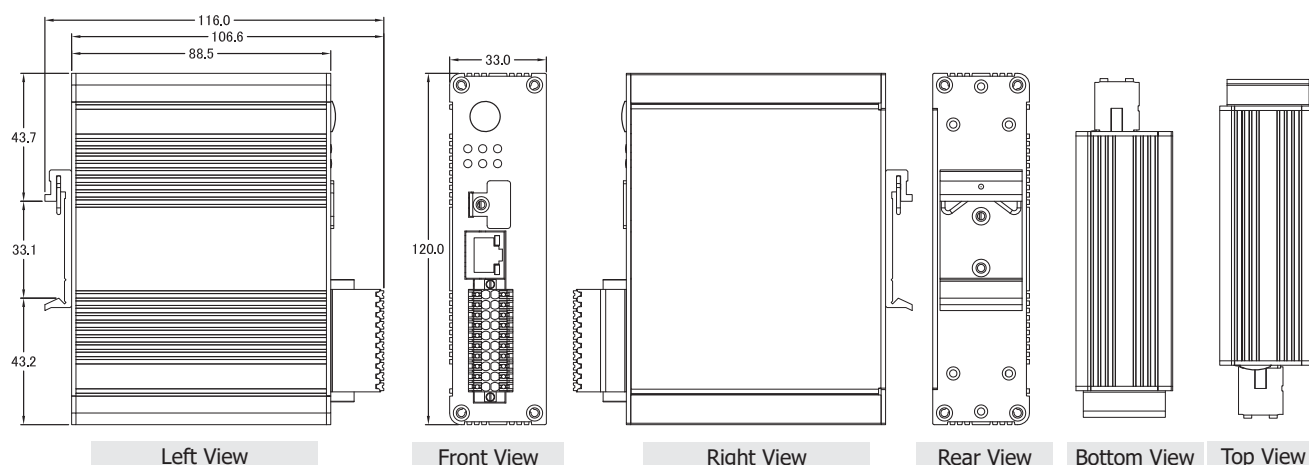
- Building Automation
- Heating, Ventilating, and Air-conditioning Control
- Lighting Control
- Access Control



Specifications

Ethernet	
Controller	10/100Base-TX Ethernet Controller (Auto-negotiating, Auto_MDIX)
Connector	RJ-45 with Ethernet indicator
Protocol	
Modbus	Modbus TCP Server and Modbus RTU Slave(up to 2 TCP connections)
Modbus Function Code	0x01, 0x02, 0x03, 0x04, 0x05, 0x06, 0x10, 0x0F
BACnet	BACnet/IP Client (Support up to 10 BACnet/IP Servers)
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/IP Status (1), BACnet/IP 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

Dimensions (Units: mm)



Ordering Information

GW-2439M	BACnet/IP Client to Modbus TCP Server/RTU Slave Gateway (RoHS)
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