



GW1108 Series

Wall or Desktop Mounting

8 RS-232/485/422 Modbus Gateway

- Support 8 RS-232, RS-485/422 or 3IN1 serial port to 1 10/100Base-T(X) self-adaptive Ethernet interface
- Support conversion between Modbus RTU/ASCII and Modbus TCP protocol
- Support RTU Master, RTU Slave, ASCII Master, ASCII Slave and other operating modes
- Support virtual and real ID mapping to achieve flexible access between Master and Slave devices
- Support wide voltage input



Introduction

GW1108 series of Modbus gateway are designed for integrating Modbus RTU/ASCII and Modbus TCP; they can achieve the conversion between Modbus RTU/ASCII and Modbus TCP protocol. This series provide 3 types of products and support 8 RS-232, RS-485/422 or 3IN1 serial port and 1 100M Ethernet copper port. They adopt wall or desktop mounting to meet the requirements of different application scenes.

Modbus gateway supports multiple network protocols, such as Modbus, TCP, IP, UDP, TELNET, ARP, ICMP, HTTP, DNS and DHCP protocols. It possesses complete management function, and supports access control, rapid configuration, online upgrading, etc. RTU Master, RTU Slave, ASCII Master, ASCII Slave and other operating modes are supported; it supports up to 32 TCP Slave requests under Master mode and 16 TCP Master connections under Slave mode. TELNET, WEB and other access modes are also supported. It can provide you with good user experience via friendly design of network management system interface, simple and convenient operation.

DIP switch or RST button can achieve the device restore factory defaults. Hardware adopts fanless, low power consumption, wide temperature and voltage design and has passed rigorous industrial standard tests, which can suit for the industrial scene environment with harsh requirements for EMC. It can be widely used in PLC control and management, Building Automation System, Health Care Automation System, measuring instrument and environmental forces monitoring system.

Features and Benefits

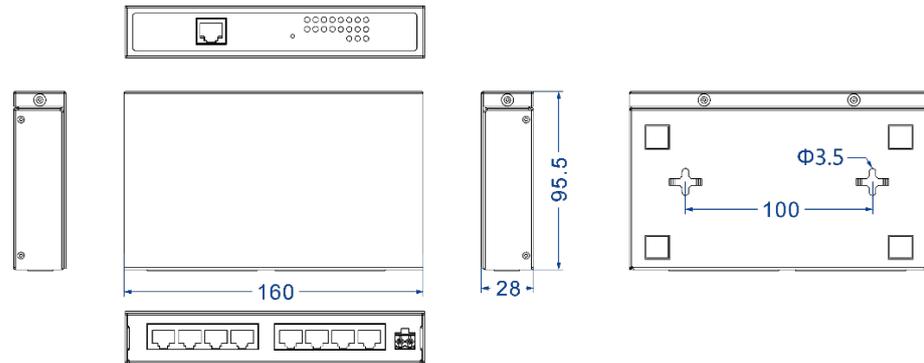
- ⊙ Support 10/100Base-T(X) self-adaptive Ethernet interface
- ⊙ Support 300bps-115200bps line speed and non-blocking communication
- ⊙ Support RTS/CTS, DTR/DSR and XON/XOFF flow control
- ⊙ Support response timeout setting of characters
- ⊙ Support RTU Master, RTU Slave, ASCII Master, ASCII Slave and other operating modes
- ⊙ Support up to 32 TCP Slave requests under Master mode
- ⊙ Support up to 16 TCP Master connections under Slave mode
- ⊙ Support virtual and real ID mapping to achieve flexible access between Master and Slave devices
- ⊙ Support IP address and MAC address filtering, which is easy to achieve accurate access control
- ⊙ Support classification of user management to achieve humanized permission management
- ⊙ Support monitoring for serial port status and parameters, so the communication status will be clear at a glance
- ⊙ Support Windows configuration tool, TELNET, WEB configuration forms and access control

- File management is convenient for the device rapid configuration and online upgrading

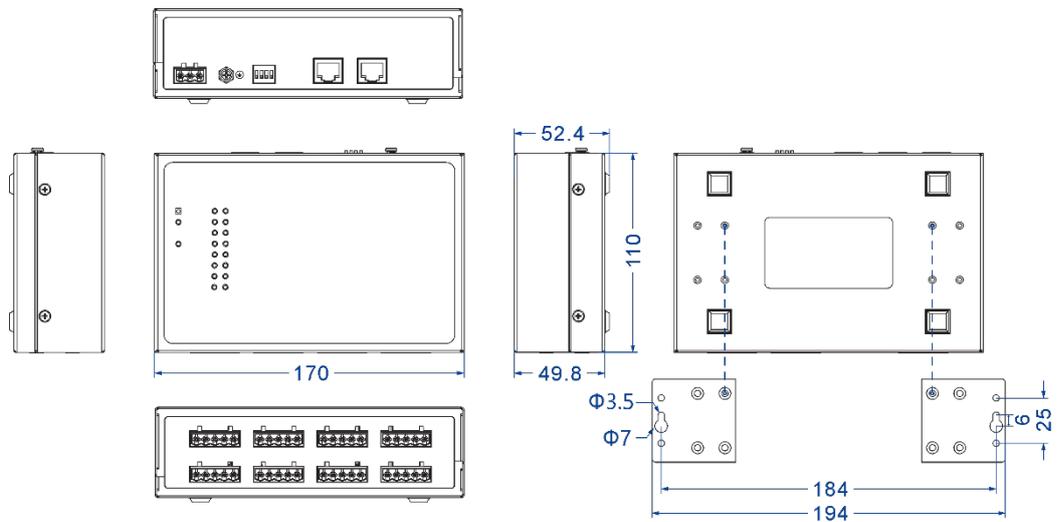
Dimension

Unit:mm

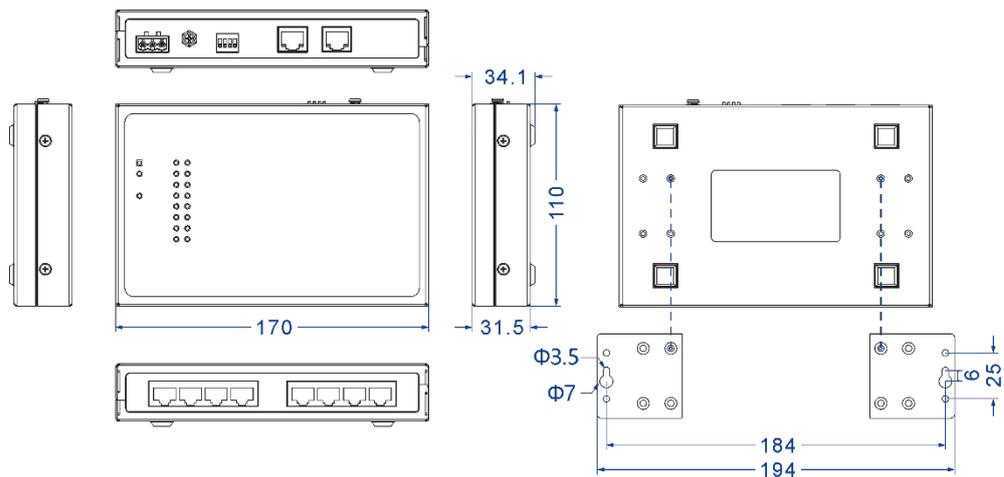
- GW1108-8D(RS-232)



- GW1108-8DI(RS-485)



- GW1108-8D(3IN1)-RJ45



Specification

Ethernet

Standard: 10Base-T, 100Base-TX
 Protocol: Modbus TCP, TCP, IP, UDP, ARP, HTTP, TELNET, SNMP, ICMP, DHCP, DNS
 Rate: 10/100M automatic flow control, MDI/MDI-X autotuning
 Interface quantity: 1
 Interface form: RJ45
 Duplex mode: full/half duplex mode self-adaption

Serial Port

Standard: EIA RS-232C, RS-485, RS-422
 Protocol: Modbus RTU/ASCII
 Quantity of serial port: 8 RS-232, RS-485/422 or 3IN1 serial port
 RS-232 signal: DSR, RTS, GND, TXD, RXD, DCD, CTS, DTR
 RS-485 signal: D+, D-, GND
 RS-422 signal: T+, T-, GND, R+, R-
 Baud rate: 300-115200bps
 Data bit: 5bit, 6bit, 7bit, 8bit
 Parity bit: None, Even, Odd, Space, Mark
 Stop bit: 1bit, 2bit
 Interface form: RS-232 serial port, adopt RJ45;
 RS-485/422 serial port with isolation, adopt 5-pin 5.08mm pitch terminal blocks;
 3IN1 serial port, adopt RJ45
 Flow control: RTS/CTS, DTR/DSR, XON/XOFF
 Directional control: RS-485 direction adopts Automatic Data Direction Control technology
 Pull high/low resistor for RS-485: 4.7kΩ
 Intensity of electromagnetic isolation: RS-485/422 serial port (terminal block), 3KVDC/2KVrms
 Operating mode: RTU Master, RTU Slave, ASCII Master and ASCII Slave

Connection quantity: up to 32 TCP Slave requests are supported under Master mode
up to 16 TCP Master connections are supported under Slave mode

Configuration	WEB configuration management, TELNET configuration, Windows configuration tool
Security	Classification of User Permissions, IP address filtering, MAC address filtering, WEB Console, TELNET Console
Indicator	Power supply indicator, running indicator, Ethernet port indicator, serial port indicator
Power Requirement	<p>GW1108-8D(RS-232)</p> <ul style="list-style-type: none"> ● Power supply range: 9~48VDC ● Connection mode: 2-pin 5.08mm pitch terminal blocks <p>GW1108-8DI(RS-485), GW1108-8D(3IN1)-RJ45</p> <ul style="list-style-type: none"> ● Power supply range: 12~48VDC ● Connection mode: 3-pin 5.08mm pitch terminal blocks ● Power supply protection: nonpolarity connection
Power Consumption	<p>No-load: ≤3.16W@12VDC</p> <p>Full-load: ≤3.90W@12VDC</p>
Environmental Limit	<p>GW1108-8D(RS-232), GW1108-8D(3IN1)-RJ45</p> <ul style="list-style-type: none"> ● Operating temperature: -40~75°C ● Storage temperature: -40~85°C ● Relative humidity: 5% ~ 95% (no condensation) <p>GW1108-8DI(RS-485)</p> <ul style="list-style-type: none"> ● Operating temperature: -40~70°C ● Storage temperature: -40~70°C ● Relative humidity: 5% ~ 95% (no condensation)
Physical Characteristic	<p>Housing: IP30 protection, metal</p> <p>Installation: wall or desktop mounting</p> <p>Dimension (W x H x D): 160mm×28mm×95.5mm (RS-232) 170mm×49.8mm×110mm (RS-485/422) 170mm×31.5mm×110mm (3IN1)</p> <p>Weight: 524g (RS-232), 740g (RS-485/422), 590g (3IN1)</p>

Industrial Standard

IEC 61000-4-2 (ESD, Electro-static Discharge), Level 4

- Air discharge: $\pm 15\text{kV}$
- Contact discharge: $\pm 8\text{kV}$

IEC 61000-4-4 (EFT/B, Electrical Fast Transient/Burst), Level 3 (except RS-232)

- Power supply: $\pm 2\text{kV}$
- Signal: $\pm 1\text{kV}$

IEC 61000-4-5 (Surge), Level 3 (except RS-232)

- Power supply: common mode $\pm 2\text{kV}$, differential mode $\pm 1\text{kV}$
- Signal: common mode $\pm 2\text{kV}$, differential mode $\pm 1\text{kV}$

Shock: IEC 60068-2-27

Free fall: IEC 60068-2-32

Vibration: IEC 60068-2-6

Certification	CE, FCC, RoHS
Warranty	3 years

Ordering Information

Available Models	100M Copper Port	RS-232	RS-485/422 (with isolation)	3IN1 (RS-232/485 /422)	Power Supply Range
GW1108-8D(RS-232)	1	8	—	—	9~48VDC
GW1108-8DI(RS-485)	1	—	8	—	12~48VDC
GW1108-8D(3IN1)-RJ45	1	—	—	8	



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