GW1102 Series

Wall Mounting
2 RS-232 or RS-485/422 Modbus Gateway

- Support 2 RS-232 or RS-485/422 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 -40~75℃ wide temperature operation

Introduction

GW1102 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 2 types of products and support 2 RS-232 or RS-485/422 and 1 100M Ethernet copper port. They adopt wall 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 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.
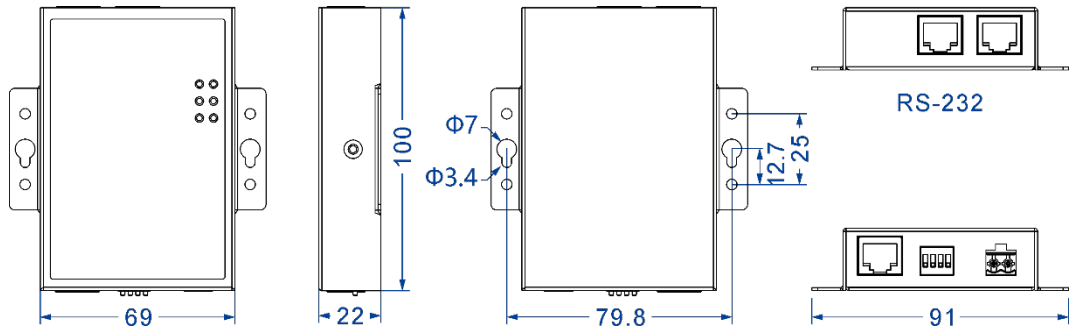
Features and Benefits

- ⊙ 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
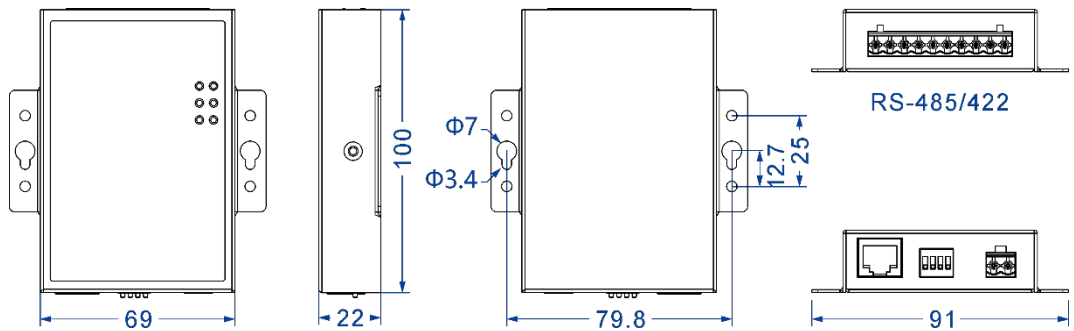
Dimension

Unit:mm

● GW1102-2D(RS-232)

● GW1102-2D(RS-485)

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 autotunning 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: 2 RS-232 or RS-485/422 serial port
	 RS-232 signal: RXD, TXD, DTR, GND, DSR, RTS, CTS, DCD
	 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, adopt RJ45;
	                 RS-485/422, adopt 10-pin 5.08mm pitch terminal blocks
	 Flow control: RTS/CTS, DTR/DSR, XON/XOFF
	 Pull high/low resistor for RS-485: 4.7kΩ
	 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, Ethernet port indicator, serial port indicator
Power Requirement	9~48VDC, 2 pins 5.08mm pitch terminal blocks

Power Consumption

Model	No-load (@24VDC)	Full-load (@24VDC)
GW1102-2D(RS-232)	0.86W	0.94W
GW1102-2D(RS-485)	1.00W	1.32W

Environmental Limit	Operating temperature range: -40~75℃ Storage temperature range: -40~85℃ Relative humidity: 5%～95%（no condensation）
Physical Characteristic	Housing: IP40 protection, metal Installation: wall mounting Dimension (W x H x D): 69mm×22mm×100mm Weight: 230g (RS-232), 250g (RS-485)

Industrial Standard	IEC 61000-4-2 (ESD, Electro-static Discharge), Level 3
	● Air discharge: ±8kV
	● Contact discharge: ±6kV
	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	Power Supply Range
GW1102-2D(RS-232)	1	2	—	9~48VDC
GW1102-2D(RS-485)	1	—	2	

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