3onedata

Make network communication more reliable

GW1118 Series

Wall or Desktop Mounting

8 RS-232/485/422 + 2 100M Ethernet Ports Modbus Gateway

- Support 8 RS-485/422 or 3IN1 serial port and 2 10/100Base-T(X) self-adaptive Ethernet interfaces
- 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 12~48VDC wide voltage input

Introduction

GW1118 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 8 RS-485/422 or 3IN1 serial port and 2 100M Ethernet copper ports. 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 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 2 10/100Base-T(X) self-adaptive Ethernet interfaces, provide dual IP and MAC addresses to meet the requirements of multiple network management or backups
- 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

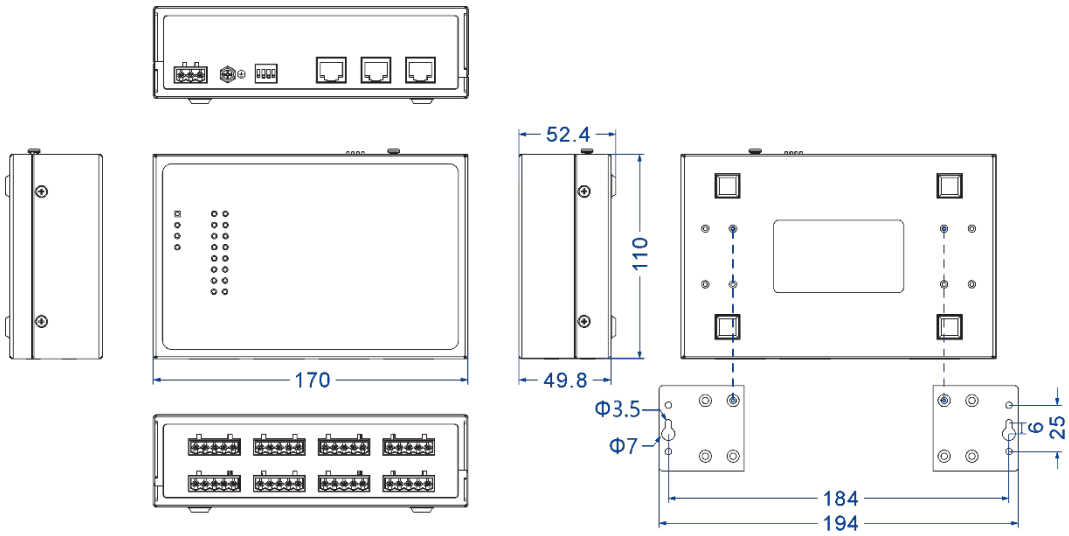
control

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

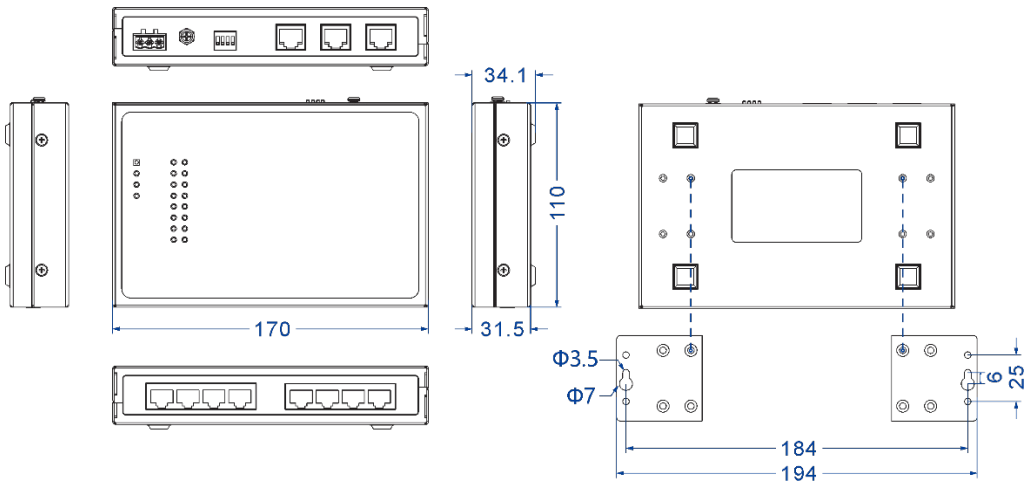
Dimension

Unit:mm

- GW1118-8DI (RS-485)



- GW1118-8D (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 autotunning Interface quantity: 2 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-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-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	12~48VDC, 3-pin 5.08mm pitch terminal blocks Power supply nonpolarity
Power Consumption	

Model	No-load (@12VDC)	Full-load (@12VDC)
GW1118-8DI(RS-485)	3.16W	3.72W

	GW1118-8D(3IN1)-RJ45	1.80W	3.90W
Environmental Limit	GW1118-8DI(RS-485) ● Operating temperature: -40~70℃ ● Storage temperature: -40~70℃ ● Relative humidity: 5%～95%（no condensation） GW1118-8D(3IN1)-RJ45 ● Operating temperature: -40~75℃ ● Storage temperature: -40~85℃ ● Relative humidity: 5%～95%（no condensation）		
Physical Characteristic	Housing: IP30 protection, metal Installation: wall or desktop mounting Dimension (W x H x D): 170mm×49.8mm×110mm (RS-485/422) 170mm×31.5mm×110mm (3IN1) Weight: 740g (RS-485/422), 590g (3IN1)		
Industrial Standard	IEC 61000-4-2 (ESD, Electro-static Discharge), Level 4 ● Air discharge: ±15kV ● Contact discharge: ±8kV IEC 61000-4-4 (EFT/B, Electrical Fast Transient/Burst), Level 3 ● Power supply: ±2kV ● Signal: ±1kV IEC 61000-4-5 (Surge), Level 3 ● Power supply: common mode ±2kV, differential mode ±1kV ● Signal: common mode ±2kV, differential mode ±1kV 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-485/422 (with isolation)	3IN1 (RS-232/485/422)	Power Supply Range
GW1118-8DI(RS-485)	2	8	—	12~48VDC
GW1118-8D(3IN1)-RJ45	2	—	8	

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