



GW1118-8DI(3IN1)-RJ-P(12-48VDC)

Wall or Desktop Mounting

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

- Support 8 3IN1 RJ45 serial ports 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 network modes such as redundant mode, switching mode and dual IP mode to meet the needs of various network environments
- Support 12~48VDC power supply input
- Support -40~75°C wide operating temperature range



Introduction

GW1118-8DI(3IN1)-DB-P(12-48VDC) is Modbus gateway designed for integrating Modbus RTU/ASCII and Modbus TCP networks; they can achieve the conversion between Modbus RTU/ASCII and Modbus TCP protocols. This product supports 8 3IN1 RJ45 serial ports and 2 100M Ethernet copper ports. It adopts wall mounting 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, HTTPS, SNMP, SSH, SMTP, SNTP, 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 256 Modbus TCP client (master) accesses and connects up to 128 Modbus TCP server (slave) devices. TELNET, WEB, SSHD and other access modes are also supported. It can provide users with good experience with friendly design of network management system interface, simple and convenient operation.

DIP switch can achieve restore factory defaults of the device. 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, etc.

Features and Benefits

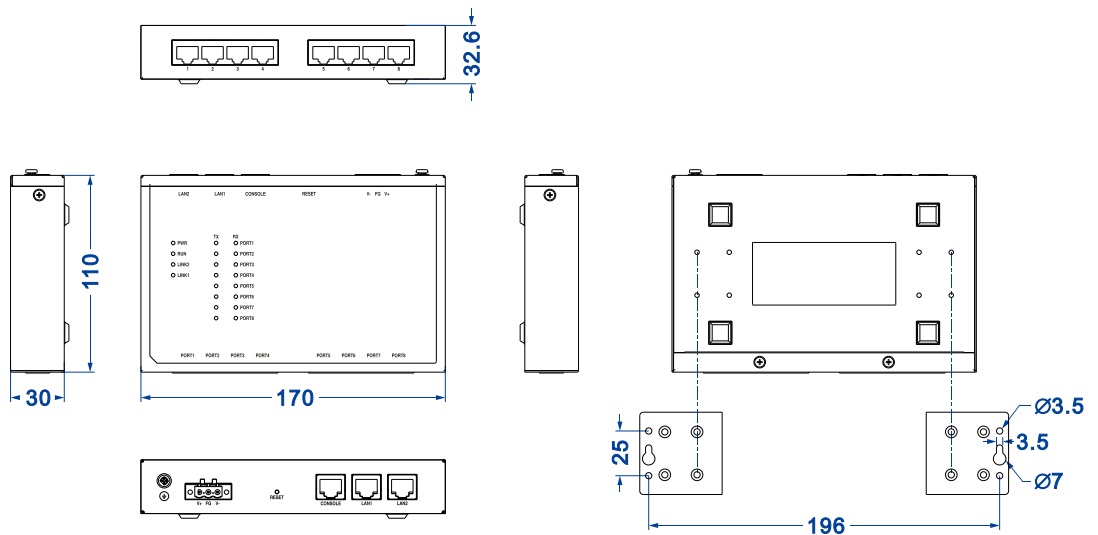
- ⊙ Support 2 10/100Base-T(X) self-adaptive Ethernet interfaces and provide dual IP and MAC addresses to meet the requirements of multi-network management or network backups
- ⊙ Support 110bps-115200bps line speed and non-blocking communication
- ⊙ Support RTS/CTS, DTR/DSR and XON/XOFF flow control
- ⊙ Support response timeout setting of characters
- ⊙ Support RTU Master, RTU Slave, ASCII Master, ASCII Slave and other operating modes
- ⊙ Support up to 256 Modbus TCP client (master) accesses and connect up to 128 Modbus TCP server (slave) devices
- ⊙ Support virtual and real ID mapping to achieve flexible access between Master and Slave devices
- ⊙ Support IP address and MAC address filtering, which can achieve accurate access control easily
- ⊙ Support graded user management to implement humanized authority management
- ⊙ Support serial port status and parameters monitoring, ensuring the communication

status is easy to read

- ⦿ Support multiple configuration forms and access controls like Windows configuration tool, TELNET, SSHD and WEB
- ⦿ File management is convenient for the device rapid configuration and online upgrading
- ⦿ SSHD and HTTPS can guarantee the access security of data
- ⦿ Conduct network diagnosis and troubleshooting via Ping and Traceroute
- ⦿ Support multiple alarm methods, including e-mail alarm, log alarm and SNMP Trap alarm

Dimension

Unit: mm



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: 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 3IN1 serial ports

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: 110-115200bps
 Data bit: 7bit, 8bit
 Parity bit: None, Even, Odd, Space, Mark
 Stop bit: 1bit, 2bit
 Interface form: 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
 Electromagnetic isolation strength: 3KVDC/2KVrms
 Operating mode: RTU Master, RTU Slave, ASCII Master and ASCII
 Slave
 Connection quantity: support up to 256 Modbus TCP client (master)
 accesses and connect up to 128 Modbus TCP
 server (slave) devices

Configuration Method	WEB configuration management, TELNET configuration, Windows configuration tool, SSHD configuration
Security	User right classification, IP address filtering, MAC address filtering, SNMP/ Mail /System Log alarm, HTTP/HTTPS/SSHD/TELNET access control
Indicator	Power supply indicator, running indicator, Ethernet port indicator, serial port indicator
Power Supply	12~48VDC, 3-pin 5.08mm pitch terminal blocks Power supply nonpolarity
Power Consumption	No-load: 3.4W@12VDC Full-load: 4.1W@12VDC
Working Environment	Operating temperature: -40~75°C Storage temperature: -40~85°C Relative humidity: 5%~95% (no condensation)
Physical Characteristic	Housing: IP30 protection, metal Installation: wall or desktop mounting Dimension (W x H x D): 170mm×32.6mm×110mm Weight: ≤ 590g
Industrial Standard	IEC 61000-4-2 (ESD, electrostatic discharge), Level 3 <ul style="list-style-type: none"> ● Air discharge: ±8kV ● Contact discharge: ±6kV

IEC 61000-4-4 (EFT, electrical fast transient pulses), Level 3

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

IEC 61000-4-5 (Surge), Level 3

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

Shock: IEC 60068-2-27

Free fall: IEC 60068-2-32

Vibration: IEC 60068-2-6

Authentication

CE, FCC, RoHS

Warranty

3 years



Ordering Information

Available Models	100M copper port	3IN1 (RS-232/485/422)	Power supply
GW1118-8DI(3IN1)-RJ-P(12-48VDC)	2	8	12~48VDC



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