



GW1118-8DI(RS-485)-TB-P(12-48VDC)

Desktop/Wall Mounting

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

- Support 8 RS-485 serial ports to 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 wide voltage input range
- Support -40~75°C wide operating temperature range



Introduction

GW1118-8DI(RS-485)-TB-P(12-48VDC) is Modbus gateway designed for integrating Modbus RTU/ASCII and Modbus TCP networks; it can achieve the conversion between Modbus RTU/ASCII and Modbus TCP protocols. This product supports 8 RS-485 serial ports to 2 10/100Base-T(X) self-adaptive Ethernet port. It adopts desktop/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, 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.

RESET button can achieve the restore factory defaults function. Each RS-485 serial port of the device is equipped with an exclusive isolation component, which can effectively avoid the impact of electromagnetic interference. 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 and provide dual IP and MAC addresses to meet the requirements of multi-network management or network backup.
- ⦿ Support 110bps-115200bps (customizable 921600bps) 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

- # Dimension

Specification

Serial Port	Standard: EIA RS-485
	Quantity of serial port: 8 RS-485 serial ports
	RS-485 signal: D+, D-, GND
	Baud rate: 110bps-15200bps (customizable110bps-921600bps)

Data bit: 7bit, 8bit
 Parity bit: None, Even, Odd, Space, Mark
 Stop bit: 1bit, 2bit
 Interface form: 6-pin 5.08mm pitch terminal blocks
 Direction control: RS-485 direction adopts Automatic Data Direction Control (ADDC)
 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.

Console port	CLI command line management port (RS-232), RJ45
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, Ethernet port indicator, serial port indicator, running indicator
Power supply	This device provides 12~48VDC power supply which is 3-pin 5.08mm pitch terminal block, the power supply supports non-polarity connection.
Power Consumption	No-load: 3.6W@12VDC (high temperature) Full-load: 4.1W@12VDC (high temperature)
Working Environment	Operating temperature: -40~75°C Storage temperature: -40~85°C Relative humidity: 5%~95%(no condensation)
Physical Characteristic	Housing: IP40 protection, metal Installation: Desktop and Wall Mounting Dimension (W x H x D): 170mm×30mm×110mm (lugs are not included) Weight: 0.54kg
Industrial Standard	IEC 61000-4-2 (ESD, electrostatic discharge), Level 3 <ul style="list-style-type: none"> Air discharge: ±8kV Contact discharge: ±6kV

	<p>IEC 61000-4-4 (EFT, electrical fast transient pulses), Level 3</p> <ul style="list-style-type: none">● Power supply: $\pm 2\text{kV}$● Signal: $\pm 1\text{kV}$ <p>IEC 61000-4-5 (Surge), Level 3</p> <ul style="list-style-type: none">● Power supply: common mode $\pm 2\text{kV}$, differential mode $\pm 1\text{kV}$● Signal: common mode $\pm 1\text{kV}$, differential mode $\pm 1\text{kV}$ <p>Shock: IEC 60068-2-27 Free fall: IEC 60068-2-32 Vibration: IEC 60068-2-6</p>
Authentication	CE, FCC, RoHS
Warranty	3 years



Ordering Information

Available Models	100M copper port	RS-485	Power supply
GW1118-8DI(RS-485)-TB-P(12-48VDC)	2	8	12~48VDC



Address: 3/B, Zone 1, Baiwangxin High Technology Industrial Park, Song Bai Road,
Nanshan District, Shenzhen, 518108, China
TEL.: +86-755-26702668 ext 835 FAX: +86-755-26703485
E-mail: ics@3onedata.com
Website: www.3onedata.com
◀ Please scan our QR code for more details

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