



## GW1114-4DI(RS-485)-TB-P(12-48VDC)

Desktop/Wall Mounting

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

- Support 4 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

GW1114-4DI(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 4 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. Network management system could bring you great user experience through its friendly interface design and easy 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

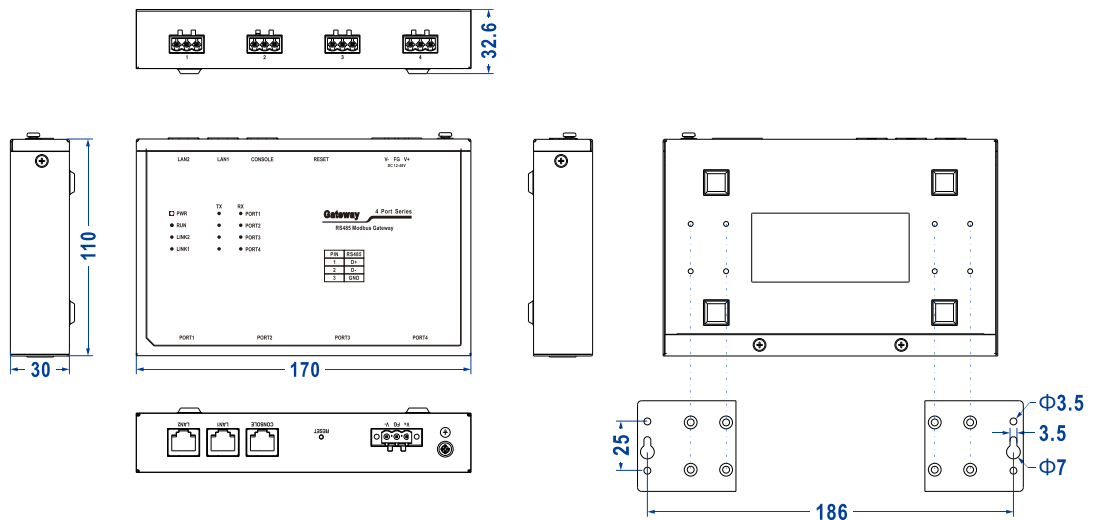
- ⦿ Support 2 10/100Base-T(X) self-adaptive Ethernet interfaces and provide dual IP and MAC addresses to meet the requirements of multi-network management or network backups
- ⦿ Support 110bps-115200bps (customizable 921600bps) line speed and non-blocking communication
- ⦿ Support RTS/CTS, DTR/DSR and 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

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

<b>Ethernet</b>	<p>Standard: 10Base-T, 100Base-TX</p> <p>Protocol: Modbus TCP, TCP, IP, UDP, ARP, HTTP, TELNET, SNMP, ICMP, DHCP, DNS</p> <p>Rate: 10/100M Automatic Flow Control, MDI/MDI-X Autotuning</p> <p>Interface quantity: 2</p> <p>Interface form: RJ45</p> <p>Duplex mode: Full/Half Duplex Mode Self-adaption</p>
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**Serial Port**

Standard: EIA RS-485

Quantity of serial port: 4 RS-485 serial ports  
 RS-485 signal: D+, D-, GND  
 Baud rate: 110bps-15200bps (customizable 110bps-921600bps)  
 Data bit: 7bit, 8bit  
 Parity bit: None, Even, Odd, Space, Mark  
 Stop bit: 1bit, 2bit  
 Interface form: 3-pin 5.08mm pitch terminal blocks  
 Direction control: RS-485 direction adopts Automatic Data Direction Control (ADDC)  
 Load capacity: RS-485 supports 32 points polling (customizable 256 points)  
 Transmission distance: RS-485, 1200m  
 Pull up/down 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.

<b>Console Port</b>	CLI command line management port (RS-232), RJ45
<b>Configuration Method</b>	WEB configuration management, TELNET configuration, Windows configuration tool, SSHD configuration
<b>Security</b>	User right classification, IP address filtering, MAC address filtering, SNMP/ Mail /System Log alarm, HTTP/HTTPS/SSHD/TELNET access control
<b>Indicator</b>	Power supply indicator, Ethernet port indicator, serial port indicator, running indicator
<b>Power Supply</b>	This device provides 12~48VDC power supply which is 3-pin 5.08mm pitch terminal block, the power supply supports non-polarity connection.
<b>Power Consumption</b>	No-load: 1.7W@12VDC Full-load: 1.9W@12VDC (high temperature)
<b>Working Environment</b>	Operating temperature: -40~75°C Storage temperature:-40~85°C Relative humidity: 5%~95%(no condensation)
<b>Physical Characteristic</b>	Housing: IP40 protection, metal Installation: Desktop and Wall Mounting

Dimension (W x H x D): 170mm×30mm×110mm (lugs are not included)  
Weight: 0.52kg

<b>Industrial Standard</b>	IEC 61000-4-2 (ESD, electrostatic discharge), Level 3 <ul style="list-style-type: none"><li>● Air discharge:± 8kV</li><li>● Contact discharge: ±6kV</li></ul> IEC 61000-4-4 (EFT, electrical fast transient pulses), Level 3 <ul style="list-style-type: none"><li>● Power supply: ±2kV</li><li>● Signal: ±1kV</li></ul> IEC 61000-4-5 (Surge), Level 3 <ul style="list-style-type: none"><li>● Power supply: common mode±2kV, differential mode±1kV</li><li>● Signal: common mode ±2kV, differential mode ±1kV</li></ul> Shock: IEC 60068-2-27 Free fall: IEC 60068-2-32 Vibration: IEC 60068-2-6
<b>Authentication</b>	CE, FCC, RoHS
<b>Warranty</b>	3 years

## Ordering Information

Available Models	100M Copper Port	RS-485	Power Supply
GW1114-4DI(RS-485)-TB-P(12-48VDC)	2	4	12~48VDC



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