3onedata
Reliable Connections



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℃ wide operating temperature range

Industrial Grade

CONNECTING FOR A BETTER FUTURE

3onedata Co.,Ltd.

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

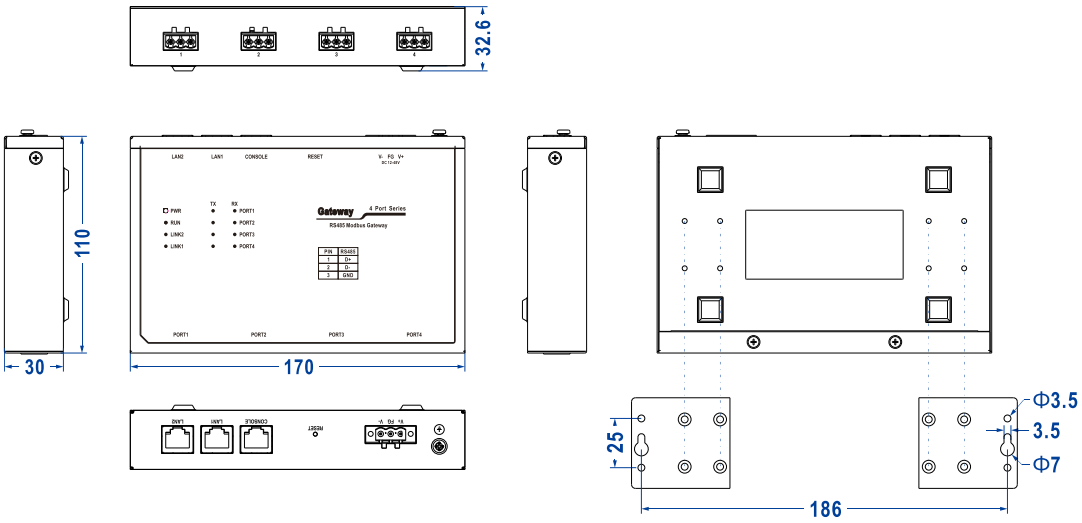
- Support 2 10/100Base-T(X) self-adaptive Ethernet interfaces and provide dual IP and MAC addresses to meet the requirements of multi-network management or network backups
- Support 110bps-115200bps (customizable 921600bps) line speed and non-blocking communication
- Support RTS/CTS, DTR/DSR and XON/XOFF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

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-485

	Quantity of serial port: 4 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: 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.
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: 1.7W@12VDC Full-load: 1.9W@12VDC (high temperature)
Working Environment	Operating temperature: -40~75℃ Storage temperature:-40~85℃ Relative humidity: 5%~5% (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: 0.52kg
Industrial Standard	IEC 61000-4-2 (ESD, electrostatic discharge), Level 3 ● Air discharge:± 8kV ● Contact discharge: ±6kV IEC 61000-4-4 (EFT, electrical fast transient pulses), 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
Authentication	CE, FCC, RoHS
Warranty	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

Address: 3/B, Zone 1, Baiwangxin High Technology Industrial Park, Song Bai Road, Nanshan District, Shenzhen, 518108, China
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