

4-channel RS-485 Serial Gateway



- 2*10/100BASE-T(X) RJ45 ports, double IP design, rate self-detection, full/half duplex mode, MDI/MDI-X self-adaption;
- 4*RS-485/422 ports, 300~460800bps line speed non-blocking communication;
- Support 4 serial ports' isolation function, isolated voltage 500V AC;
- Conform to ModbusTCP, ModbusRTU, ModbusASCII, IP and ARP protocols;
- Support RTU Slave、ASCII Slave mode, maximum support 16 TCP master connections in this mode;
- Support RTU Slave、ASCII Slave mode, maximum support 32 TCP slave connections in this mode;
- Support Slave ID mapping function, maximum support 32 mappings;
- Support wide voltage 12~48VDC power input;
- High strength IP40 housing and industrial grade EMC design;
- Support DIN rail Mounting or Wall Mounting installation;
- Working temperature range: -40~85 °C, to meet the requirements of various industrial sites.

Product Overview

The 4-channel RS-485/422 Serial Gateway adopts high-strength IP40 protective housing, industrial grade EMC design, supports Auto-Negotiation adaptive technology, provides a comprehensive LED status indicator, supports wide voltage 12~48V DC power input to increase the reliability of the communication network. It is a serial gateway independently developed by Shenzhen Comark Technology Co.,Ltd. Double IP design, provides 2*10/100Base-T (x) RJ45 ports and 4-channel RS-485/422 serial ports. It is easy and convenient to centralize the management of decentralized serial devices and hosts through the network., the communication rate supports 300~460800bps optional. Built-in Modbus TCP, Modbus RTU and Modbus ASCII protocol make it easy for users to connect Modbus Ethernet devices to Modbus serial devices. Base on industrial installation requirements, DIN35 rail or Wall Mounting installation mode provided. The product adopts excellent network scheme in the industry, -40~85°C working temperature range, can satisfy all kinds of industrial site requirements, provide convenient serial port communication solutions.

Features

- Conform to IEEE802.3/802.3u standard, store and forward Exchange Mode;
- Provide 2*10/100Base-T (x) RJ45 Ethernet ports, support Auto-Negotiation technology, automatic negotiation work rate (10M/100M) and duplex mode (half duplex/ full duplex), MDI/MDI-X self-adaption;
- Provide 4-channel RS-485/422 serial ports, provide TCP server, TCP client, UDP, ModbusTCP (RTU_MASTER)、ModbusTCP (RTU_SLAVE)、ModbusTCP (ASCII_MASTER) and ModbusTCP (ASCII_SLAVE) seven serial transmission modes, 300~460800bps line speed non-blocking communication;
- Support Slave ID mapping function, maximum support 32 mappings;
- Support 4 serial ports' isolation function, isolated voltage 500V AC;
- Conform to TCP、IP、UDP、ModbusTCP、ModbusRTU、ModbusASCII、ARP、ICMP、HTTP and TFTP Client protocols;
- Support RTU Master、ASCII Master mode, maximum support 16 TCP master connections in this mode;
- Support RTU Slave、ASCII Slave mode, maximum support 32 TCP slave connections in this mode;
- Support Web management;
- Support serial port settings, can connect two serial devices through network for serial data transmission;
- Support through gateway, cross-routing communication;
- Low-power consumption design;
- Metal housing with IP40 and high level EMC protection;
- Support wide voltage 12~48V DC power input;
- -40~85°C Working temperature range.

Specification

Technical Standard

- Protocol: IEEE802.3, IEEE802.3u

Interfaces

- RJ45 port: 10/100BASE-T(X) Auto-Negotiation speed, full/half duplex mode and MDI/MDI-X self-adaption;
- Serial port: RS-422 supports R-, R+, T-, and T+ full-duplex modes, RS-485 supports A and B half-duplex working mode; RS-485/422 communication rate support 300~460800bps optional, isolated voltage 500V AC; Built-in ModbusTCP, ModbusRTU and ModbusASCII protocols, support RTU Master, ASCII Master mode, maximum support 16 TCP master connections in this mode; support RTU Slave, ASCII Slave mode, maximum support 32 TCP slave connections in this mode; support Slave ID mapping function, maximum support 32 mappings;

Serial Port Attribute

- Standard: RS-485/422;
- RS-422 signal: T+, T-, R+, R-, GND;
- RS-485 signal: D+, D-, GND;
- Check bits: None, Even, ODD;
- Data bits: 5bit, 6bit, 7bit, 8bit;
- Stop bits: 1bit, 2bit;
- Baud rate: 300~460800bps;
- Directional control: RS-485 adopts data flow auto control technology;
- Load capacity: RS-485/422 port supports 32 points polling

environment (128 points customizable);

- Interface form: RS-485/422 port adopts 5-bit 3.84mm spacing terminal;
- Interface protection: 4000V surge protection.

Indicator Lamp

- Power indicator: PWR;
- System running indicator: SYS;
- Serial port data status indicator: S1/S2/S3/S4.

Power Supply

- Input: Wide voltage 12~48V DC power input, typical working voltage 12V/24V/48V, using 2-cores 7.62mm industrial power terminal;
- Idle running power: 0.717W@24VDC;
- Full-load power: 0.968W@24VDC.

Mechanical Properties

- Dimension(W×H×D): 40mm×128mm×103mm;
- Net weight: 430g;
- Housing: Metal, IP40 protection;
- Installation: Wall mounting or DIN rail mounting.

Operating Environment

- Working temperature: -40°C~85°C;
- Storage temperature: -40°C~85°C;
- Relative humidity: 5%~95% (no condensing).

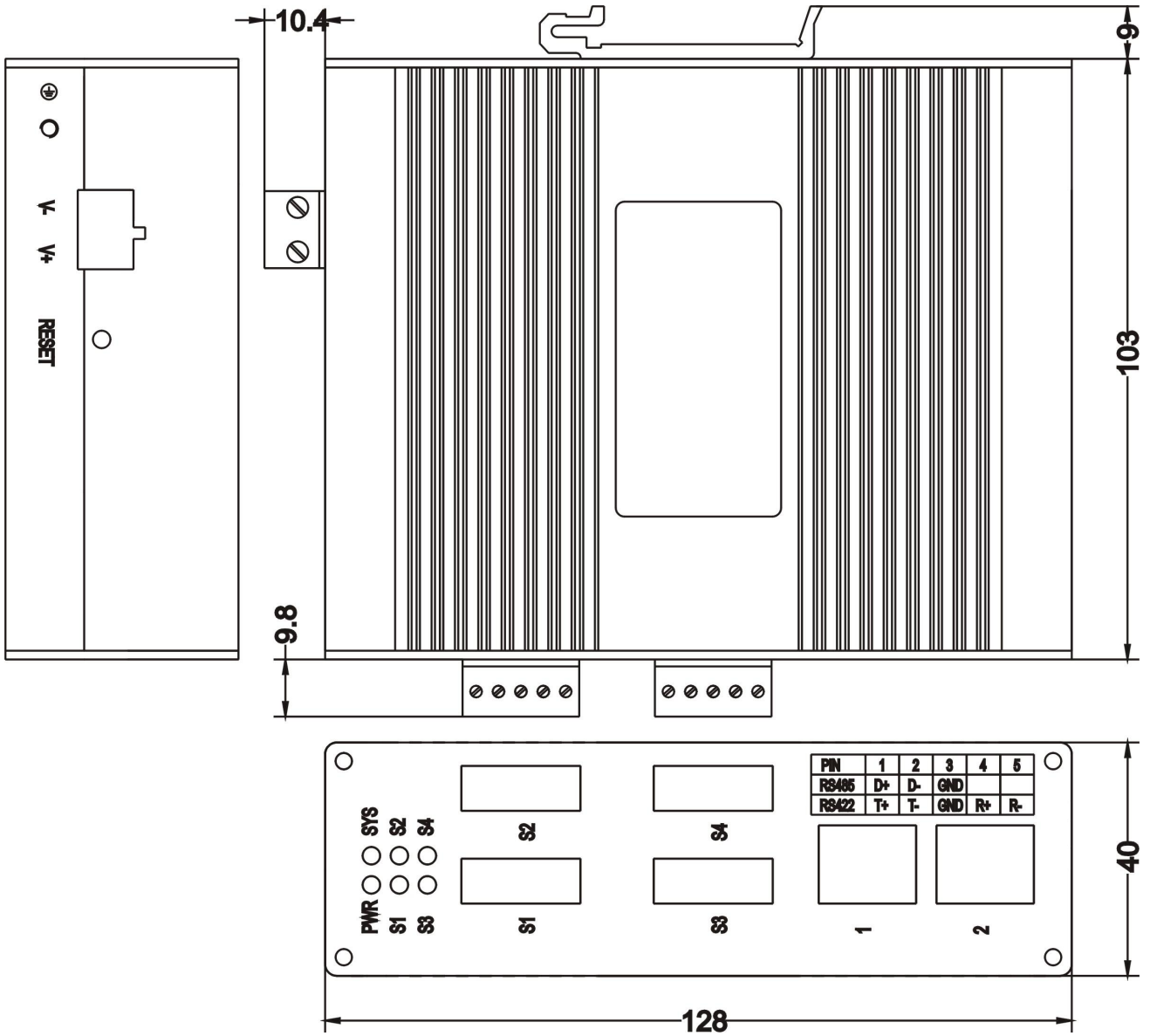
Warranty

- Warranty: 5 years.

Standards and Certifications

- IEC61000-4-2(ESD): ±8KV Contact, ±15KV Air
- IEC61000-4-3(RS): 10V/M(80-1000MHZ)
- IEC61000-4-4(EFT): Power ±4KV, Ethernet&Serial Data Cable ±4KV
- IEC61000-4-5(Surge): Power ±4KV CM/ ±2KV DM, Ethernet&Serial Data Cable ±4KV CM
- IEC61000-4-6(CS): 3V (10KHZ-150KHZ), 10V (150KHZ-80MHZ)
- IEC61000-4-16(MS): 30V COUNT 300V, 1S
- IEC60068-2-6(Vibration)
- IEC60068-2-27(Shock)
- IEC60068-2-32(Free Fall)
- IEC61000-6-2(General Industrial Standard)

Dimensions(mm)



Models

| Model | Description |
|--------|--|
| MG5024 | 4-channel RS-485/422 serial port gateway, 2*10/100Base-T(X) RJ45 ports, double IP design, 4-channel RS-485/422 serial ports, -40°C~85°C. |

Package List

- 4-channel RS-485/422 Serial Gateway 1 pcs (with industrial terminals for power supply)
- Product Manual 1 pcs
- Warranty card 1 pcs