

2-channel Serial Gateway



- 1*10/100BASE-T(X) RJ45 ports, rate self-detection, full/half duplex mode, MDI/MDI-X self-adaption;
- MG5011 support 1*RS-485/422 port,1*RS-232 port; MG5012 support 2*RS-485 ports; 2400~115200bps line speed non-blocking communication;
- Support serial ports' isolation function, isolated voltage 500V AC;
- Conform to ModbusTCP, ModbusRTU, IP and ARP protocols;
- Support RTU Master mode, maximum support 4 TCP master connections in this mode;
- 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℃, to meet the requirements of various industrial sites.

Product Overview

The 2-channel 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. Provides 1*10/100Base-T (x) RJ45 ports, MG5011 support 1*RS-485/422 port,1*RS-232 port, MG5012 support 2*RS-485 ports. It is easy and convenient to centralize the management of decentralized serial devices and hosts through the network., the communication rate supports 2400~115200bps optional. Built-in Modbus TCP, Modbus RTU 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℃ 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 1*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;
- MG5011 support 1*RS-485/422 port,1*RS-232 port, MG5012 support 2*RS-485 ports, provide TCP server, TCP client, UDP , ModbusTCP (RTU_MASTER) four serial transmission modes, 2400~115200bps line speed non-blocking communication;
- Support serial ports' isolation function, isolated voltage 500V AC;
- Conform to TCP、IP、UDP、ModbusTCP、ModbusRTU、ARP、ICMP、HTTP and TFTP Client protocols;
- Support RTU Master mode, maximum support 4 TCP master 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℃ 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-232 supports RXD, TXD, and GND full-duplex modes,; RS-485/422 /232 communication rate support 2400~115200bps optional; Built-in ModbusTCP and ModbusRTU protocols, support RTU Master mode, maximum support 4 TCP master connections in this mode;

Serial Port Attribute

- Standard: RS-485/422/232;
- RS-422 signal: T+, T-, R+, R-, GND;
- RS-485 signal: D+, D-, GND;
- RS-232 signal: TXD、RXD、 GND;
- Check bits: None, Even, ODD;
- Data bits: 8bit;
- Stop bits: 1bit;
- Baud rate:2400~115200bps;
- 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: 1*RS-485/422 port adopts 5-bit 3.84mm spacing terminal; 2*RS-485 port adopts 6-bit 3.84mm spacing terminal; RS-232 port adopts DB9-M interfaces.

- Interface protection: 4000V surge protection.

Indicator Lamp

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

Power Supply

- Input: Wide voltage 12~48V DC power input, typical working voltage 12V/24V/48V, using 3-cores 7.62mm industrial power terminal;
- Idle running power:0.24W@24VDC;
- Full-load power:0.364W@24VDC.

Mechanical Properties

- Dimension(W×H×D): 103mm×32mm×83mm;
- Net weight:300g;
- Housing: Metal, IP40 protection;
- Installation: Wall mounting or DIN rail mounting.

Operating Environment

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

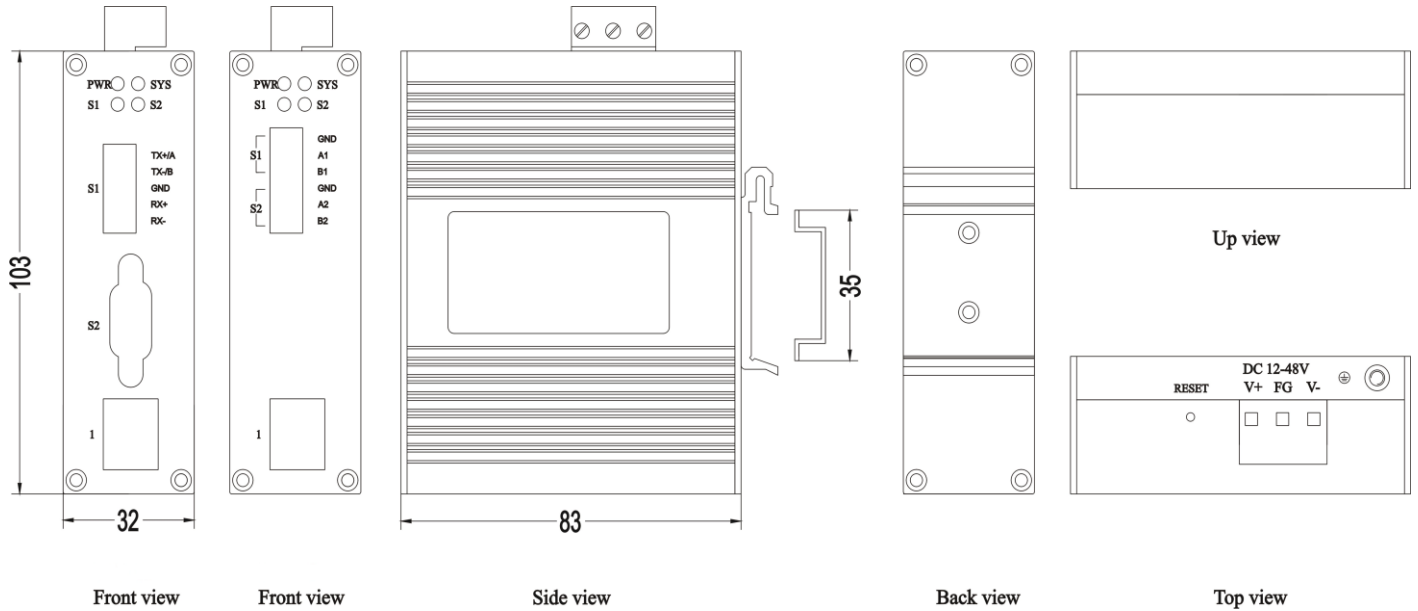
Warranty

- 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)



Front view

Front view

Side view

Back view

Top view

Models

Model	Description
MG5011	2-channel serial port gateway, 1*10/100Base-T(X) RJ45 ports, 1-channel RS-485/422 serial ports, 1-channel RS-232 serial ports -40°C~85°C.
MG5012	2-channel serial port gateway, 1*10/100Base-T(X) RJ45 ports, 2-channel RS-485 serial ports, -40°C~85°C.

Package List

- 2-channel Serial Gateway 1 pcs (with industrial terminals for power supply)
- Product Manual 1 pcs
- Warranty card 1 pcs