

### **Modbus Gateway**

MW1028G

### 8-Port RS485/422 + 2-port 10/100BASE-T(X), Modbus Gateway, Din-Rail, DC12-48V

#### > Features

- Support 2-port 10/100BASE-T(X) + 8-port RS-485/422 Modbus Gateway;
- Support IEEE802.3/802.3u standard, store and forward Exchange Mode;
- Support TCP server, TCP client, UDP, ModbusTCP (RTU\_MASTER), ModbusTCP
  (RTU\_SLAVE, ModbusTCP (ASCII\_MASTER) and ModbusTCP (ASCII\_SLAVE) transmission modes;
- Support 300~460800bps line speed non-blocking communication;
- Support Slave ID mapping function, maximum support 32 mappings;
- Support TCP, IP, UDP, Modbus TCP, Modbus RTU, ModbusASCII, ARP, ICMP, HTTP and TFTP Client protocols;
- Support RTU 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 via Ethernet;
- Supports gateway, cross-routing communication;
- Low-power consumption design;
- Support 8 serial ports isolation function, Power Isolation 3KV, Signal Isolation 2.5KV, ESD Protection 15KV;
- Metal housing with IP40 and high level EMC protection;
- Support wide voltage 12-48V DC power input;
- Support DIN-Rail Mounting or Wall Mounting installation;
- Working temperature range:-40~85°C;
- Warranty:5years

### Introduction

UPCOM MW1028G Din-Rail Serial Gateway support 8-channel RS422/485 + 2-port 10/100Base-T(X), adopts high-strength IP40 protective shell, industrial-grade EMC design, supports Auto-Negotiation adaptive technology, provides LED status indication, and supports voltage 12~48V DC power input to increase the reliability of the communication network.

MW1028G can easily and conveniently centralize the management of scattered 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. Based on industrial installation requirements, DIN35 rail or Wall Mounting installation mode provided. This product adopts the industry excellent network solution, and the operating temperature range is -40~85°C, which can meet the requirements of various industrial serial communication solutions.



# > Application Industries

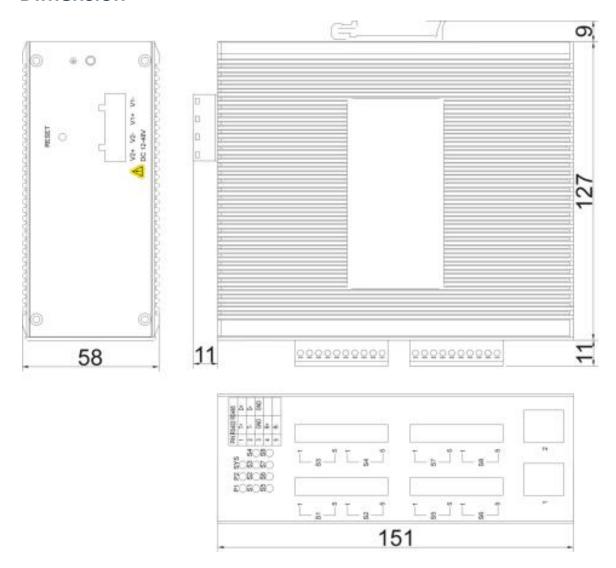
- Industrial Automation
- Intelligent transportation supervisory system (ITS)
- High-speed Way supervisory/Tele-Communication System
- New Energy and Utilities
- Rail transportation industry

# > Specification

Interface	
RJ45 port	10/100BASE-T(X) auto-Negotiation speed, auto duplex mode and MDI/MDI-X connection
Serial port	RS-422 supports R-, R+, T-, 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 Modbus TCP, Modbus RTU and Modbus ASCII 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
Ethernet Attribute	
Standard	10Base-T, 100Base-TX
Protocol	IEEE802.3/802.3u standard, store and forward Exchange Mode
Rate	10M/100Mbps
Duplex mode	Full duplex or Half duplex
Interface connector	RJ45
Serial Port Attribute	
Standard	RS-485/422
RS-422 signal	T+, T-, R+, R-, GND
RS-485 signal	D+, D-, GND
Check digit	None, Even, ODD
Data bits	5bit, 6bit, 7bit, 8bit;
Stop bits	1bit, 2bit
Baud rate	300~460800bps
Directional control	RS485 adopts data flow control technology
Load capacity	RS-485/422 port supports 32 points polling environment, can up to 128
Interface connector	RS-485/422 port adopts 5-bit 3.84mm spacing terminal
Interface protection	4000V surge protection
LED Indicator	

Power indicator	P1/P2	
System running indicator	SYS	
Serial port data status indicator	\$1/\$2/\$3/\$4/\$5/\$6/\$7/\$8	
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	0.957W@24VDC	
Full-load power	1.199W@24VDC	
Physical Characteristics		
Shell	Metal, IP40 protection	
Installation	Wall mounting or DIN rail mounting	
Dimension	151mm×58mm×127mm (W*H*D)	
Net weight	800g	
Environment Limits		
Working Temp	-40~85°C	
Storage Temp	-40~85°C	
Relative Humidity	5%~95% (no-condensation)	
Industry standard		
IEC61000-4-2	ESD: ±8KV Contact Discharge, ±15KV Air Discharge	
IEC61000-4-3	RS: 10V/m (80-1000MHZ)	
IEC61000-4-4	EFT: Power ±4KV, Ethernet & Serial Data Cable ±2KV	
IEC61000-4-5	Surge, Power ±4KV CM/ ±1KV DM, Ethernet Data Cable±4KV CM, Serial Data Cable±1KV CM	
IEC61000-4-6	Radio Frequency Conduction: 3V(10KHZ-150KHZ),10V(150KHZ-80MHZ)	
IEC61000-4-16	Common Mode Conduction: 30V COUNT 300V, 1S	
IEC60068-2-6	Vibration	
IEC60068-2-27	Shock	
IEC60068-2-32	Free Fall	
IEC61000-6-2	General Industrial Standard	
Warranty		
Warranty	5 Years	
Certification	CE, FCC, RoHS (pending)	

### **Dimension**



## Ordering Information

Model NO	Description
MW1011G	1-channel RS232/RS-485/422 + 1-port 10/100Base-T(X) RJ45, Modbus Gateway, DC12-48V
MW1012G	2-channel RS-485+ 1-port 10/100Base-T(X) RJ45, Modbus Gateway, DC12-48V
MW1024G	4-channel RS-485/422 + 2-port 10/100Base-T(X) RJ45, Modbus Gateway, DC12-48V
MW1028G	8-channel RS-485/422 + 2-port 10/100Base-T(X) RJ45, Modbus Gateway, DC12-48V

## Packing List

- Modbus Gateway \*1
- User manual \* 1
- Certificate of quality \* 1
- Warranty card \* 1