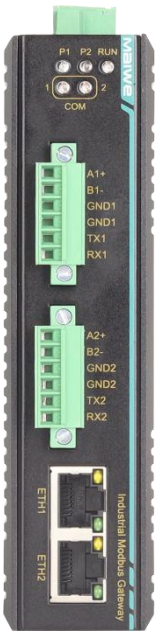
Mgate3202

2×RS232/485 To 2×Ethernet Modbus Industrial Intelligent Gateway



- Support 2×RS232/485 serial ports to 2x10/100Base-T(X) auto-sensing Ethernet port
- Support conversion between Modbus RTU/ASCII and Modbus TCP protocols, and support Modbus RTU/ASCII Over TCP transparent transmission
- Support Modbus slave pre-reading,single port automatically learns up to 256 RTU or 128 ASCII instructions, and pre-reads data to achieve fast response
- Support Modbus address mapping, mapping a single read/write instruction with read/write instructions of multiple addresses, realizing batch read/write with a single instruction
- Support serial port forwarding, realizes transparent transmission of data between the serial port and other serial ports, and provides one forwarding/receiving and two forwarding direction control
- Support JSON function, which can convert the collected Modbus slave device data into JSON format and send it to the server
- Support dual DC9~60V redundant power input, support no polarity
- High-strength aluminum alloy casing, IP40 protection, fanless casing for heat dissipation, the equipment can reliably work in harsh industrial environments of -40℃~+85℃

Product Description

Mgate3202 is a dual network port DIN-rail industrial Modbus gateway with 2 serial ports. It support serial port conversion to UDP, TCP, Modbus, HTTPD, WebSocket, MQTT and other protocols, and can realize conversion between Modbus RTU/ASCII and Modbus TCP protocols.This product provides 2x100M copper ports and 2 RS232/485 serial ports, support dual DC 9~60V redundant power input, the power supply connection has no polarity, and adopts standard DIN rail installation method to meet the needs of various network sites.

The product support WEB configuration of various network management functions, such as serial port/network working mode, serial port forwarding, network card mode, DNS, access control, IP/MAC filtering, log management, email alarms, SNMP alarms, system management, serial port restart, system management, etc. Support Modbus RTU Master/Slave, Modbus ASCII Master/Slave, UDP, TCP Client/Server, UDP Multicast, RealCOM_MCP/CCP/MW, Pair Connection Master/Slave, HTTPD Client, WebSocket Client, MQTT and other conversion modes to achieve serial port to Ethernet or Modbus TCP protocol. Support one-click restart or factory reset. The hardware adopts high-standard industrial protection design,with selected industrial-grade components and high-strength aluminum alloy casing, which is sturdy and durable; low power consumption, wide temperature and wide voltage design, fanless casing for heat dissipation, and support -40℃~+85℃ operating temperature, passed strict safety regulations and EMC tests to meet the application needs of harsh industrial environments. Products can be widely used in industrial automation, integrated energy, smart cities, smart transportation, smart mines, smart factories and other fields.

Features and Benefits

- High-performance CPU processing power, Cortex-A7 core, running frequency up to 800MHz
- Dual network ports can be configured as two independent network segments or cascade ports
- Serial port Support 300bps-460800bps baud rate optional
- Support UDP and UDP Multicast mode. Point-to-point, point-to-multipoint or multipoint-to-multipoint communication can be achieved through UDP protocol, which is fast and efficient
- Support TCP Client/Server mode, establishing session connections through TCP protocol. TCP Client supports up to 16 session connections, TCP Server Support up to 32 session connections, and support RFC2217 instructions to dynamically modify communication parameters such as serial port baud rate
- Support Pair Connection Master/Slave mode, devices can be used in pairs, easy to operate
- Support Modbus RTU/ASCII Master/Slave mode to realize Modbus TCP and Modbus RTU/ASCII protocol conversion
- Support RealCOM_MCP/CCP/MW mode, maps the network to local COM, and seamlessly connects
- Support HTTPD Client mode and can perform GET or POST operations with HTTPD server
- Support WebSocket Client mode, enabling two communication with the WebSocket server
- Support multiple sub-packaging mechanisms, converts serial port data into Ethernet data packets according to data length or time, to meet the real-time needs of different networks
- Support frame header and tail mode. The serial port can filter data frames based on the start byte and end byte of the frame
- Support registration package and heartbeat package to realize connection verification and connection status detection
- Support Modbus virtual ID, mapping the real ID of the Modbus slave to a virtual ID for data communication to avoid duplication of slave IDs
- Support DES/3DES/AES/RC2/RC4/RC5/BlowFish and other data encryption algorithms to ensure data security
- Support SSL (TLS1.0/1.1/1.2) connection encryption, one-way/two certificate verification, ensuring connection security
- Support JSON function, which can convert the collected Modbus slave device data into JSON format and send it to the server
- Support HTTP/ HTTPS/ SSH/ TELNET access control, and IP/ MAC address filtering
- Support event alarms such as device restart, login events, configuration changes, password changes, etc, and Support email and SNMP alarm methods
- Support serial port communication parameters, working mode, statistics of sent and received frames
- Support log local storage, network storage and serial port log output
- Support serial port/device restart, factory settings restoration, device upgrade and NTP client

Specifications

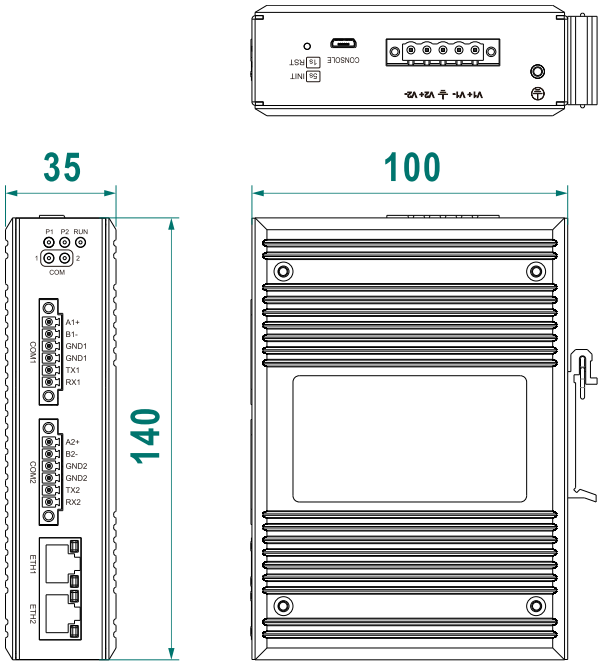
Software	
Network Protocol	IP, TCP, UDP, DNS, ARP, SNMP Trap, SSH, ICMP, HTTP, HTTPS, DHCP Client, RFC2217, NTP, SMTP, TELENT
IP Acquisition Method	Static IP/DHCP
DNS	support
Configuration	Web page configuration/CONSOLE port simple network parameter configuration
Transparent Transmission	UDP/ UDP Multicast/ TCP Client/ TCP Server/ RealCOM/ Pair Connection
Modbus	Modbus RTU /ASCII to Modbus TCP
Serial Port Package	The time and length can be set; the maximum packaging length is 1460 bytes
Data Encryption	DES/3DES/AES/RC2/RC4/RC5/BlowFish
SSL Encryption	TLS1.0/TLS1.1/TLS1.2
TCP Server Connection	Single serial port Support up to 32 TCP Client connections
TCP Client Connection	A single serial port Support up to 16 TCP Server connections
Network Cache	Send: 16Kbyte; receive: 16Kbyte
Serial Cache	Send: 16Kbyte; receive: 16Kbyte
Heartbeat Package	Support TCP Keep-alive mechanism and customize heartbeat packet content
Registration Package	Customized registration package content
RFC2217	support
Serial Port Forwarding	Users can select data forwarding rules between the current serial port and other serial ports.
Modbus Address Mapping	This function only takes effect in Modbus RTU Slave and Modbus ASCII Slave modes, and is mutually exclusive with Modbus slave pre-reading and Modbus slave address mapping functions.
HTTPD Client	support
WebSocket Client	support
MQTT	support

JSON	Support JSON function in HTTPD Client, WebSocket Client, and MQTT modes
RealCOM	Support Maiwe, Moxa, Kanghai and other working modes
Average Transmission Delay	<10ms
Software Supporting	Network management configuration tools, virtual serial port software, MixView, MaxView
Interface	
100M Ethernet	2×10/100Base-T(X) adaptive RJ45 ports, supporting full/half duplex, auto MDI/MDI-X, and 1.5kV electromagnetic isolation protection
Serial Port	Serial port type: 2 RS232/485 Connection method: 3.81mm pitch 6 PIN terminal block Baud rate: 300bps-460800bps Data bits: 7bit, 8bit Stop bit: 1bit, 2bit Check digit: None, Odd, Even Serial port isolation: 2kVAC/3kVDC isolation protection
CONSOLE	1 CONSOLE port, compliant with USB2.0 specification, using Micro-B USB2.0 socket
Button	Support one-click restart and factory settings restoration
Status LED	Power indicator, operation indicator, Ethernet interface SPEED/LINK indicator, serial port indicator
Power Supply	
Power Input	DC 9~60V, dual power supply redundancy
Power Consumption	<1.8W@DC24V (full load)
Connection	5.08mm pitch 5 PIN terminal block
Protection	No polarity
Physical Characteristics	
Dimension	140×35×100 (mm) (DIN rail mounting clip excluded)
Installation	DIN rail Installation
IP Code	IP40
Weight	About 0.45kg
Working Environment	

Operating Temp	-40℃~+85℃
Storage Temp	-40℃~+85℃
Relative Humidity	5%~95% (non-condensing)
Industry Standard	
EMC	IEC 61000-4-2 (ESD): Level 3 (contact discharge ±8kV, air discharge ±8kV) IEC 61000-4-5 (Surge): Level 4 (Power supply, serial port: common mode ±4kV, differential mode ±2kV; Network port: common mode ±6kV, differential mode ±2kV) IEC 61000-4-4 (EFT): Level 4 (power supply: ±4kV; network port, serial port: ±2kV)
Certification	CE, FC, RoHS

Installation Dimensions

unit: mm



Ordering Information

Standard Model	100M Copper Port	RS232/485	Input Voltage
Mgate3202	2	2	Dual DC 9~60V

Contact Us

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