# Mport3208

## 8-Port RS232/485 Rack Mount Serial Server

- 8×RS232/485 ports to 2×10/100M Ethernet ports, meeting various industrial bus or network field needs
- Support serial port terminal device networking, support UDP, TCP, Modbus, HTTPD, WebSocket, MQTT and virtual serial port
- Support serial port forwarding, realizing transparent data transmission between serial port and other serial ports
- Support protocol conversion between Modbus-RTU/ASCII and Modbus-TCP, support Modbus RTU/ASCII over TCP transparent transmission
- Support MQTT protocol, realizing connectivity between cloud and clients via multiple cloud platforms
- Support AC85~264V/DC110~370V power input
- High-strength metal shell, IP40 protection level, fanless chassis for heat dissipation, operating temperature -40°C to +85°C

## Product Description

Mport3208 is a dual-network 8*RS232/485 rack mount Ethernet serial server. It adopts 32-bit dual-core Arm Cortex-M7 core with a main frequency of up to 528MHz and an external hardware watchdog design. The power supply, network port, and serial port all have high-level ESD, Surge, and EFT protection and strong anti-interference capabilities. It is designed to provide data transmission between multiple serial ports and Ethernet for industrial users. This product supports 8*RS232/485 serial ports. Each serial port can work independently at the same time without affecting each other. It can be configured to different working modes and baud rates (600bps~460800bps); it supports 2*100M copper ports, and can be configured with each a working mode. The serial server integrates TCP/IP protocol stack, so that RS232/485 serial devices can be easily, flexibly and quickly connected to Ethernet, making industrial communication more smooth, more reliable, faster, and meet the needs of customers to improve value-added applications.

The Ethernet serial server supports WEB configuration of various network management functions, such as serial port/network working mode, serial port forwarding, network card mode, DNS, log management, system management, serial port restart, system management, etc.; supports UDP/UDP Multicast, TCP Client/Server, Modbus RTU Master/Slave, Modbus ASCII Master/Slave, RealCOM, MCP/CCP/MW, Pair Connection Master/Slave, HTTPD Client, WebSocket Client, MQTT and other conversion modes to realize serial port to Ethernet or Modbus TCP protocol. It is designed with industrial-grade components, featuring wide temperature and wide pressure range, lightning resistance, anti-electromagnetic interference, high reliability, high performance, suitable for operation in harsh field environment like industrial monitoring, traffic management, meteorology, water treatment, environmental monitoring, coal mine, oil, chemical, new energy industries, to help user conduct field data collection, remote monitoring, field control, etc.. It is an essential industrial communication product for the development of industrial Internet of things.

## Features and Benefits

- Adopt 32-bit ARM Cortex-M7 core, running frequency up to 528MHz
- Dual network ports can be configured as two independent network segments or cascade ports
- 600bps~460800bps baud rate range
- Support UDP/UDP Multicast mode, achieving point-to-point, point-to-multipoint or multipoint-to-multipoint communication thru the UDP protocol
- Supports TCP Client/Server mode, establishing session connection through TCP protocol, TCP Client/Server supports up to 8 session connections, and support dynamically modify serial rate and other communication parameters thru RFC2217 instructions
- Support Pair Connection Master/Slave mode, devices can be used in pairs, easy to operate
- Support Modbus RTU/ASCII Master/Slave mode, realizing Modbus TCP and Modbus RTU/ASCII protocol conversion
- Support Modbus Salve pre-read, single port automatic learning up to 128 RTU or 64 ASCII instructions, to achieve quick response
- Support RealCOM MCP/CCP/MW mode, mapping network for local COM, seamless connection
- Support HTTPD Client mode and perform GET or POST operation with HTTPD server
- Support WebSocket Client mode for two-way communication WebSocket server
- Supports multiple sub-packaging mechanisms, converting serial port data into Ethernet data packets according to data length or time, to meet the real-time needs of different networks
- Support package registration and heartbeat packages to realize connection verification and connection status detection
- Support Modbus virtual ID, mapping Modbus slave real ID to virtual ID for data communication, to avoid slave ID duplication
- Support serial communication parameters, operating modes, sending and receiving frame counts
- Support local log storage, network storage, USB flash drive storage and serial port log output

## Specification

| Software | |
|---|---|
| Network Protocol | IP, TCP/UDP, ARP, ICMP, DHCP, DNS, HTTP, RFC2217, NTP |
| IP Obtaining Method | Static IP/DHCP |
| DNS | Support |
| Configuration | Web page configuration |
| Simple Transparent Transmission | UDP/UDP Multicast/TCP Client/ TCP Server/RealCOM/ Pair Connection |
| Modbus | Modbus RTU /ASCII to Modbus TCP |
| Serial Port Packaging Mechanism | Time and length can be set, the maximum packing length is 1460 bytes |
| TCP Server | Each serial port can connect up to 8 TCP Client |
| Network Buffer | Send: 16Kbyte; Receive: 16Kbyte |
| Serial Buffer | Send:1.5Kbyte;Receive:1.5Kbyte |
| Heartbeat Package | Support TCP Keep alive mechanism, customize heartbeat package content |
| Registration Package | Customize the content heartbeat package content |
| RFC2217 | Support |
| HTTPD Client | Support |
| WebSocket Client | Support |
| RealCOM | Support Maiwe/Moxa working mode |
| MQTT | Support Alibaba MQTT Cloud Platform as well as other standard MQTT cloud platforms |
| Serial to Serial Data Forwarding | Support (prohibit, bidirectional forwarding, unidirectional forwarding, unidirectional receiving) |
| Transmission Delay | <10ms |
| Supported Software | NMS configuration tool, Vitualcom software, MixView, MaxView |
| **Interface** | |

## Specification

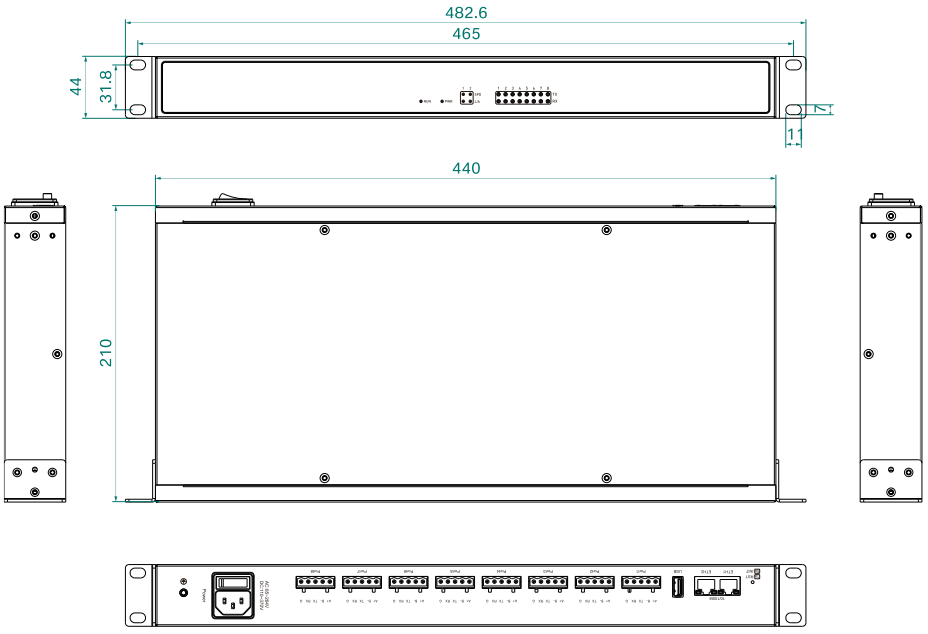
| | |
|---|---|
| 100M Copper Port | 2*10/100 Base-T(X) auto-sensing RJ45 ports, support full/half duplex and auto MDI/ MDI-X |
| Serial port | Port type: 8×RS232/485<br>Connector: 5-position 5.08mm pitch terminal block<br>Baud rate: 600bps~460800bps<br>Data bit:7bit, 8bit<br>Stop bit:1bit, 2bit<br>Parity bit: None, Odd, Even, Mark, Space |
| USB | 1 Type-A USB 2.0 interface, can be used to store logs |
| Button | One-click restart, factory reset |
| Status LED | Power supply indicator, running indicator, Ethernet port indicator, serial port indicator |
| **Power Supply** | |
| Input Voltage | AC85~264V/DC110~370V |
| Power Consumption | ＜2.5W@AC220V |
| Connection | AC socket with switch |
| **Physical Characteristic** | |
| Dimensions | 482.6×44×210 mm (include mounting clips) |
| Installations | 19 inn 1U rack mount installation |
| IP Code | IP40 |
| **Working Environment** | |
| Operating Temp | -40℃~+85℃ |
| Storage Temp | -40℃~+85℃ |
| Relative Humidity | 5%~95% (non-condensing) |
| **Industrial Standard** | |

## Specification

| | |
|---|---|
| EMC | IEC 61000-4-2 (ESD): Level 4<br>(contact discharge ±8kV, air discharge ±15kV)<br>IEC 61000-4-5 (Surge): Level 3<br>(power supply: common mode ±2kV, differential mode ±2kV;<br>RS485: common mode ±4kV, differential mode ±4kV;<br>Network port: common mode ±6kV, differential mode ±2kV)<br>IEC 61000-4-4 (EFT): Level 4<br>(power supply: ±4kV; network port, serial port: ±2kV) |
| Certification | CE, FCC, RoHS |

## Dimensions

Unit: mm



## Ordering Information

| Standard Model | 10/100M Copper Port | RS232/485 Port | Input Voltage |
|---|---|---|---|
| Mport3208 | 2 | 8 | Single AC85~264V/DC110~370V power supply |

## Contact Us

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