

Cport3208-I-AD220

8×RS485/422 Isolated Ports Rack Mount Serial to Ethernet Converter



- 8 × RS485/422 isolated ports to 2 × 10/100 Mbps Ethernet ports
- Support UDP, TCP, Modbus, HTTPD, WebSocket, MQTT, and virtual serial port
- Support serial forwarding and transparent data transmission between serial ports
- Support protocol conversion between ModbusRTU/ASCII and Modbus TCP, support Modbus RTU/ASCII over TCP transparent transmission
- Support standard MQTT protocols, including Alibaba Cloud, OneNet, Tencent Cloud, and Huawei Cloud
- Support AC85~264V/DC110~370V power input
- High-strength metal shell with IP40-rated housing protection
- Fanless heat dissipation design, -40 °C ~ +85 °C working temperature range

Product Description

The Cport3208-I-AD220 is an 8×RS485/422 isolated serial ports to 2×100 Mbps RJ45 ports rack-mounted Ethernet serial server. It is powered by a 32-bit ARM Cortex-M7 core with a main frequency of up to 528 MHz and an external hardware watchdog design. The power supply, Ethernet ports, and serial ports all feature high-level ESD, surge, and EFT protection, providing strong anti-interference performance. It is specifically designed for industrial users to enable multi-channel data transmission between serial interfaces and Ethernet networks.

This Ethernet Serial Server supports 8×RS485/422 serial ports and 2×100 Mbps Ethernet ports. Each serial port can operate independently without interference and can be configured for different operation modes and baud rates (600bps–460800bps). The Ethernet ports also support multiple configurable working modes. With a built-in TCP/IP protocol stack, it allows RS485/422 serial devices to connect to Ethernet networks easily, flexibly, and efficiently.

This Come-Star's industrial-grade Ethernet serial server supports multiple web-based management and configuration functions, including serial/network operation modes, serial forwarding, network card mode, log management, serial port restart, and system management. It supports a variety of communication and conversion modes such as 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, and MQTT, enabling serial-to-Ethernet or Modbus

TCP protocol conversion.

The product adopts an industrial-grade design with wide temperature and voltage tolerance, lightning protection, strong electromagnetic interference resistance, and high reliability and performance, making it suitable for harsh environments. It can be used in industries such as industrial automation, traffic management, meteorology, water treatment, environmental monitoring, mining, petroleum, chemical processing, and new energy. It enables remote data acquisition, remote monitoring, and field control, serving as an essential communication product for the development of the IIoT.

Product Features

- Adopt a 32-bit ARM Cortex-M7 processor running at up to 528 MHz
- 2 × Ethernet ports can be configured as two independent network segments or cascading ports
- Support selectable baud rates from 600bps to 460800bps
- Support UDP/UDP Multicast mode, achieving point-to-point, point-to-multipoint or multipoint-to-multipoint communication through the UDP protocol
- Support TCP Client and Server modes to establish session connections via the TCP protocol. Each supports up to 8 simultaneous connections, and dynamic modification of serial port baud rate and other communication parameters via RFC2217 commands
- Support Pair Connection Master/Slave mode, devices can be used in pairs, easy to operate
- Support Modbus RTU/ASCII Master/Slave mode and Modbus TCP, and Modbus RTU/ASCII protocol conversion
- Support Modbus Slave host readahead, 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 the HTTPD server
- Support WebSocket Client mode for two-way communication with the WebSocket server
- Support multiple packet segmentation mechanisms to convert serial data into Ethernet packets based on data length or time intervals, meeting various network real-time requirements
- 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

Technical Specifications

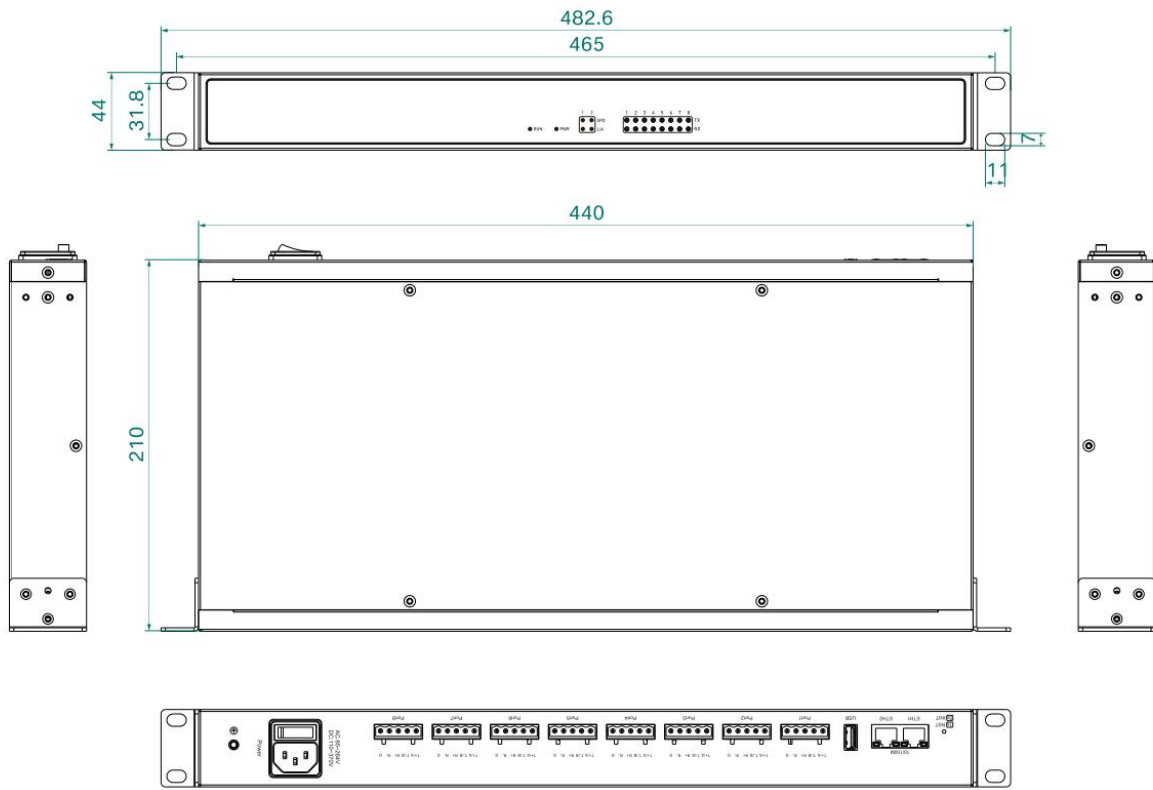
Software	
Network Protocol	IP, TCP/UDP, ARP, ICMP, DHCP, DNS, HTTP, RFC2217, NTP
IP Obtaining Method	Static IP/DHCP
DNS	Support
User Configuration	Web page configuration
Simple Transparent Transmission	UDP, UDP Multicast, TCP Client, TCP Server, RealCOM, Pair Connection, MQTT
Modbus	Modbus RTU/ASCII to Modbus TCP
Serial Port Packaging Mechanism	Time and length adjustable; default value varies with baud rate; max. packet length 1460 bytes.
TCP Server Connection	Each serial port can connect up to 8 TCP clients
Network Buffer	Send:16Kbyte; Receive: 16Kbyte
Serial Buffer	Send:1.5Kbyte; Receive:1.5Kbyte
Heartbeat Package	Support TCP Keep-alive mechanism, customize heartbeat packet content
Registration Package	Support customizable registration packet content.
RFC2217	Support
HTTPD Client	Support
WebSocket Client	Support
RealCOM	Support COME-STAR, Moxa and Kanghai working mode
MQTT	Support standard MQTT cloud platforms, including Alibaba Cloud, OneNet, Tencent Cloud, and Huawei Cloud
Serial Port Forwarding	Support (Disabled, Bidirectional Forwarding, Unidirectional Forwarding, Receive Only)

Transmission Delay	<10ms
Supported Software	NMS configuration tool, Virtual COM software, MixView, MaxView
Interface	
100M Copper Port	2 × 10/100 Base-T(X) auto-sensing RJ45 ports, full/half duplex, auto MDI/ MDI-X
Serial Port	<p>Port type: 8× RS485/422</p> <p>Connector: 5-position 5.08mm pitch terminal block</p> <p>Baud rate:600bps~460800bps</p> <p>Data bit: 7bit, 8bit</p> <p>Stop bit: 1bit, 2bit</p> <p>Parity bit: None, Odd, Even</p> <p>Isolation voltage: 2kVAC/3kVDC</p>
USB	1 × Type-A USB 2.0 interface for log storage.
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	<4.5W @ AC220V
Connection	AC socket with switch
Physical Characteristic	
Dimensions	482.6×44×210 mm (including mounting brackets, excluding connectors)
Installations	Standard 19-inch 1U rack-mounted installation
IP Code	IP40

Working Environment	
Operating Temp	-40°C~+85°C
Storage Temp	-40°C~+85°C
Relative Humidity	5%~95% (non-condensing)
Industrial Standard	
EMC	<p>IEC 61000-4-2 (ESD): Level 4 (contact discharge $\pm 8\text{kV}$, air discharge $\pm 15\text{kV}$)</p> <p>IEC 61000-4-5 (Surge): Level 3 (Power supply: common mode $\pm 2\text{kV}$, differential mode $\pm 2\text{kV}$; RS485/422: common mode $\pm 4\text{kV}$, differential mode $\pm 4\text{kV}$; network port: common mode $\pm 6\text{kV}$, differential mode $\pm 2\text{kV}$)</p> <p>IEC 61000-4-4 (EFT): Level 4 (power supply: $\pm 4\text{kV}$; network port, serial port: $\pm 2\text{kV}$)</p>
Certification	CE, FCC, RoHS

Dimensions

Unit: mm



Ordering Information

Standard Model	100M Copper Port	RS485/422	Input Voltage
Cport3208-I-AD220	2	8	AC85~264V/DC110~370V



Contact Us

COME-STAR COMMUNICATION(WUHAN) CO., LTD.

Address: Puneng Industrial Park, Fenghuang Garden 1st Road, East Lake High-Tech Development Zone, Wuhan, China.

Tel: +86-027-59257958

Mail: sales@come-star.com

Official site: www.come-star.com

Copyright © Come-Star All rights reserved