Cport3104-485

4×RS485 Ports to 1×100M Ethernet Port Wall Mount Serial Server



- 4 × RS485 ports to 1 × 10/100 Mbps RJ45 port
- Each serial port supports connecting to two different servers at the same time. Two sockets are mutually backed up.
- Support UDP, TCP, Modbus, HTTP, WebSocket, MQTT, and virtual serial port
- Modbus RTU to Modbus TCP protocol conversion
- Cloud support: MQTT via AWS IOT, Thingsboard, Alibaba Cloud, EMQX, Tuya, Cumulocity IoT
- Built-in hardware and software watchdogs to prevent system crashes and ensure automatic recovery.
- DC 9~36V power input, reverse polarity protection
- High-strength metal shell, IP30-rated housing protection
- -40 ℃ ~ +85 ℃ working temperature range

Product Description

Cport3104-485 is a wall-mounted Serial-to-Ethernet converter powered by an ST Cortex-M7 core processor running at up to 400 MHz. With hardware and software watchdogs and multiple keep-alive mechanisms, it ensures continuous online operation. The power supply, Ethernet port, and serial interfaces all feature high-level ESD, Surge, and EFT protection for strong anti-interference performance.

The device provides 4 × RS485 serial ports and 1 × 10/100 Mbps Ethernet port. The baud rates are selectable from 600 bps to 921600 bps. With an integrated TCP/IP protocol stack, Cport3104-485 enables traditional serial devices to connect to Ethernet easily.

This industrial-grade serial server from Come-Star supports web-based configuration and multiple network management functions. It also supports communication modes such as UDP, TCP Client, TCP Server, Modbus RTU to Modbus TCP conversion, HTTP Client, and WebSocket Server.

Cport3104-485 supports Modbus RTU Master for retrieving field data from serial meters, and can convert the collected serial data into MQTT JSON format for uploading to cloud platforms. This two-in-one design simplifies the system architecture, reduces installation space, and shortens deployment time. Additionally, the device provides MQTT gateway capabilities with edge computing features, supporting platforms such as Alibaba Cloud and AWS IoT.

Designed for harsh industrial environments, Cport3104-485 offers wide voltage and temperature tolerance, strong EMC protection, and high reliability. It is ideal for remote data acquisition, monitoring, and control in industrial automation, energy, and environmental applications.

Product Features

- Adopt an ST Cortex-M7 core processor running at up to 400 MHz
- Support 4 × RS485 ports, built-in 15KV ESD serial port protection
- Support baud rates from 600 bps to 921600 bps with flexible parity and flow control settings
- Support 1 × 10/100 Mbps Ethernet port with auto MDI/MDIX
- Support TCP Client, TCP Server, UDP, and UDP multicast modes for versatile communication
- Support dual socket connections per serial port for data redundancy
- Support Modbus gateway for bidirectional conversion between Modbus RTU and Modbus TCP, including multi-host polling
- Support Modbus RTU Master for retrieving field data from serial meters and converting collected data into MQTT JSON format, reducing system complexity and installation workload
- Support MQTT gateway and edge computing for data collection, processing, and reporting, up to 300 points, compatible with Alibaba Cloud, AWS, and other IoT platforms
- Support SSL/TLS encryption for secure TCP, HTTP, and MQTT communication
- Support SNMP v1/v2c for network management integration
- Support WebSocket Server mode for bidirectional web-to-serial data transmission and custom monitoring dashboards
- Support configuration via web interface, configuration software, or AT commands, with firmware upgrade and virtual COM port functionality
- Support flexible serial data framing for packet segmentation based on length or time to meet real-time network requirements
- Support heartbeat and keepalive mechanisms for automatic detection and reconnection of dead connections
- Support built-in hardware watchdog for automatic restart in case of system failure
- Support DC 9~36 V wide voltage input with reverse-polarity protection
- Support wide industrial operating temperature from –40°C to +85°C
- Support rugged metal housing with IP30 protection, ear mount for wall or panel mounting

Technical Specifications

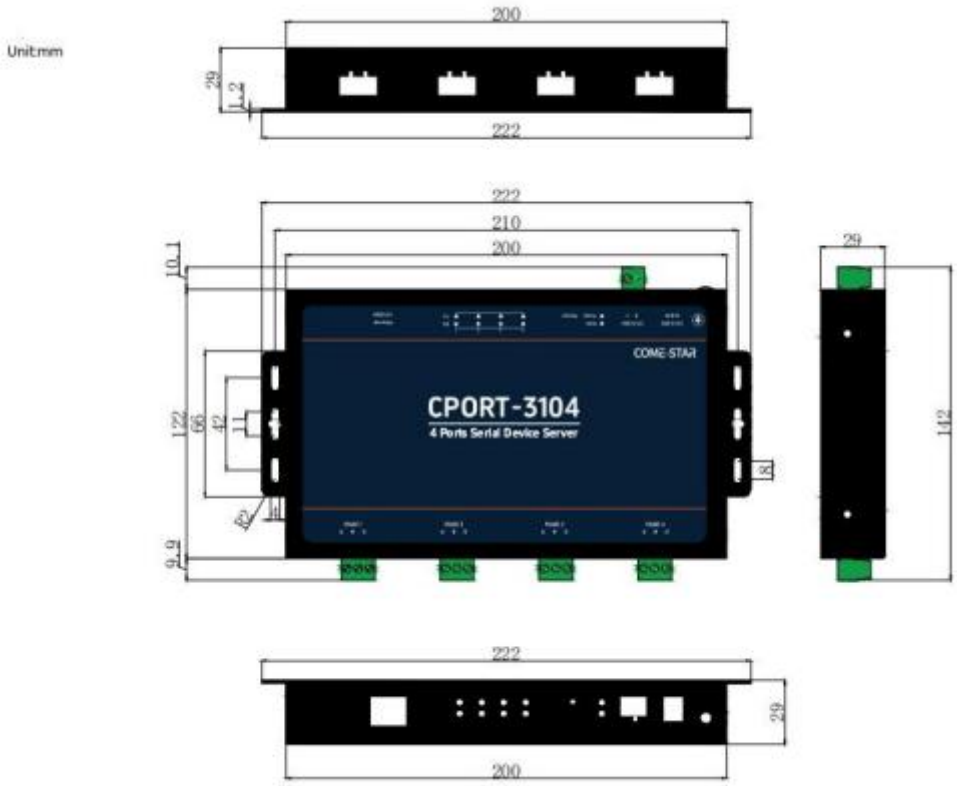
System	
Processor	ST Cortex-M7
Frequency	400MHz
Flash	128K+4M byte
Software	
Network Protocol	TCP, UDP, IPv4, ARP, ICMP, DHCP, NTP, DNS, HTTP, TLS/SSL v3, IGMP, SNMP v1/v2c, MQTT
IP Obtaining Method	Static IP/DHCP
DNS	Support
User Configuration	Built-in webpage, computer set-up software, serial command
Simple Transparent Transmission	TCP Client, TCP Server, UDP Client, UDP Server, and HTTPD Client
Modbus	Modbus RTU to Modbus TCP
Serial Port Packaging Mechanism	Support flexible serial data framing, adjustable by packet length or time interval, with a maximum packet length of 1460 bytes
TCP Server Connection	Support dual socket connections per serial port for TCP Server mode
Heartbeat Package	Support TCP Keep-alive mechanism, customize heartbeat packet content
Registration Package	Support customizable registration packet content.
HTTPD Client	Support
WebSocket	Support
UDP	Support
Virtual Serial	Support

Interface	
100M Copper Port	1 × 10/100 Base-T(X) auto-sensing RJ45 port, auto MDI/MDI-X
Ethernet Protection	2KV electromagnetism isolation, shell insulation blocking
Ethernet Receive Buffer	Max 16k bytes buffer
Serial Port	Port type: 4×RS485 Baud rate: 600~921600 bps Data Bit: 7,8 Stop Bit: 1,2 Parity Bit: Even, Odd Flow Control: XON/XOFF
Serial Connection	3-pin terminal block
Serial Signal	RS-485: A+, B-, GND
Serial Protection	anti-static 2KV,lightning protection
Serial Resistor	RS-485 Pull-up and Pull-down Resistor: 2.2KΩ
Serial Packets Cache	Dynamic packet cache. For example: When the packet length is 10 byte, the serial port can cache 450 packets (4.5KB). When the packet length is 1460 bytes, the serial port can cache 10 packets (14.6KB).
Power Supply	
Input Voltage	DC 9~36V
Input Current	Mean: 53mA @12V
Connection	AC-DC adapter (DC Jack) or DC direct (Terminal Block)
Physical Characteristic	
Dimensions	222×142×29 mm (including terminals and mounting brackets)

Installations	Wall or panel mount
IP Code	IP30
Ground Screw	1
Working Environment	
Operating Temp	-40℃~+85℃
Storage Temp	-40℃~+105℃
Relative Humidity	5%~95% (non-condensing)
Industrial Standard	
EMC	ESD (IEC 61000-4-2): Level 4, Air ±15 kV, Contact ±8 kV Surge (IEC 61000-4-5): Level 3, ±2 kV EFT (IEC 61000-4-4): Level 3, ±2 kV
Certification	CE, FCC, RoHS

Dimensions

Unit: mm



Ordering Information

Standard Model	100M Copper Port	RS485	Input Voltage
Cport3104-485	1	4	DC 9~36V

Contact Us

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