

Cport3101-W

1x RS232/485 Wall-Mount Serial to Ethernet/Wi-Fi Converter



- 1 x RS485 + 1 x RS232, the two serial ports can't work simultaneously; 1 × 10/100 Mbps Ethernet port, with 2.4 GHz Wi-Fi (802.11 b/g/n) support
- Transparent data transmission between the serial port and Wi-Fi/Ethernet via MQTT/TCP/UDP/HTTP Protocol
- Support Modbus RTU to Modbus TCP protocol conversion, support Modbus Polling
- Built-in hardware and software watchdogs to prevent system crashes and ensure automatic recovery.
- Support DC 5~36V power input
- High-strength metal shell
- -40 °C ~ +85 °C working temperature range

Product Description

Cport3101-W is a wall-mount Serial to Wi-Fi/Ethernet Server designed to enable reliable and transparent data communication between serial devices and Ethernet/Wi-Fi networks. It supports both RS232 and RS485 interfaces (not available simultaneously) and integrates comprehensive networking capabilities for various industrial and commercial applications.

Equipped with 1 × 10/100 Mbps Ethernet port and 2.4 GHz Wi-Fi (802.11 b/g/n), it supports flexible networking modes, including AP, STA, AP+STA, Bridge, and Router. With built-in TCP/IP and Wi-Fi protocol stacks, it allows seamless connection between serial devices and network systems through TCP, UDP, HTTP, WebSocket, and MQTT protocols. The device also supports Modbus RTU to Modbus TCP conversion and multi-host Modbus polling, enabling easy integration with SCADA systems, PLCs, and cloud applications.

This serial to WiFi server supports both transparent transmission mode and serial command mode, allowing serial data to be transmitted transparently over Wi-Fi or Ethernet, or routed intelligently to different servers based on embedded commands. It offers multiple management and monitoring options through a web interface, configuration software, and AT commands, supporting remote configuration, firmware upgrade, and virtual serial communication.

At the hardware level, this industrial WiFi serial server adopts an industrial-grade design with strong ESD and EFT protection, and dual hardware/software watchdogs to prevent system failures. It supports a wide power input range of DC 5–36 V, features both DC jack and terminal block connections, and operates within a -40°C to +85°C industrial temperature range. Compact and robust, it can be wall-mounted for easy installation in various environments.

With its rich protocol support, secure SSL/TLS communication, and reliable design, Cport3101-W is ideal for remote data acquisition, monitoring, and control applications in fields such as industrial automation, smart agriculture, medical equipment networking, and IoT data collection.

Product Features

- Support 1 × RS232 and 1 × RS485 serial ports (not available simultaneously), with 15KV ESD protection
- Support baud rates from 300 bps to 460.8 Kbps, configurable data bits, parity, and stop bits
- Long-distance communication: two serial servers can transport for 280m
- Support dual network interfaces (Ethernet and Wi-Fi) for backup and flexible deployment
- Support 1 × 10/100 Mbps Ethernet port with auto MDI/MDIX and 1.5KV electromagnetic isolation
- Support Wi-Fi 2.4 GHz (IEEE 802.11 b/g/n) with AP, STA, and AP+STA modes
- Support TCP Client, TCP Server, UDP, HTTP, WebSocket, and MQTT communication
- Support Modbus RTU to Modbus TCP conversion and Modbus multi-host polling
- Support transparent transmission and serial command modes for flexible data routing
- Support configuration via web interface, configuration software, or AT commands
- Support firmware upgrade, virtual COM function, and remote parameter management
- Support DC 5–36V wide voltage input with DC jack and terminal block options
- Support -40°C to +85°C wide operating temperature range
- Support 2KV isolation protection for the Ethernet port and hardware watchdog for system reliability

Technical Specifications

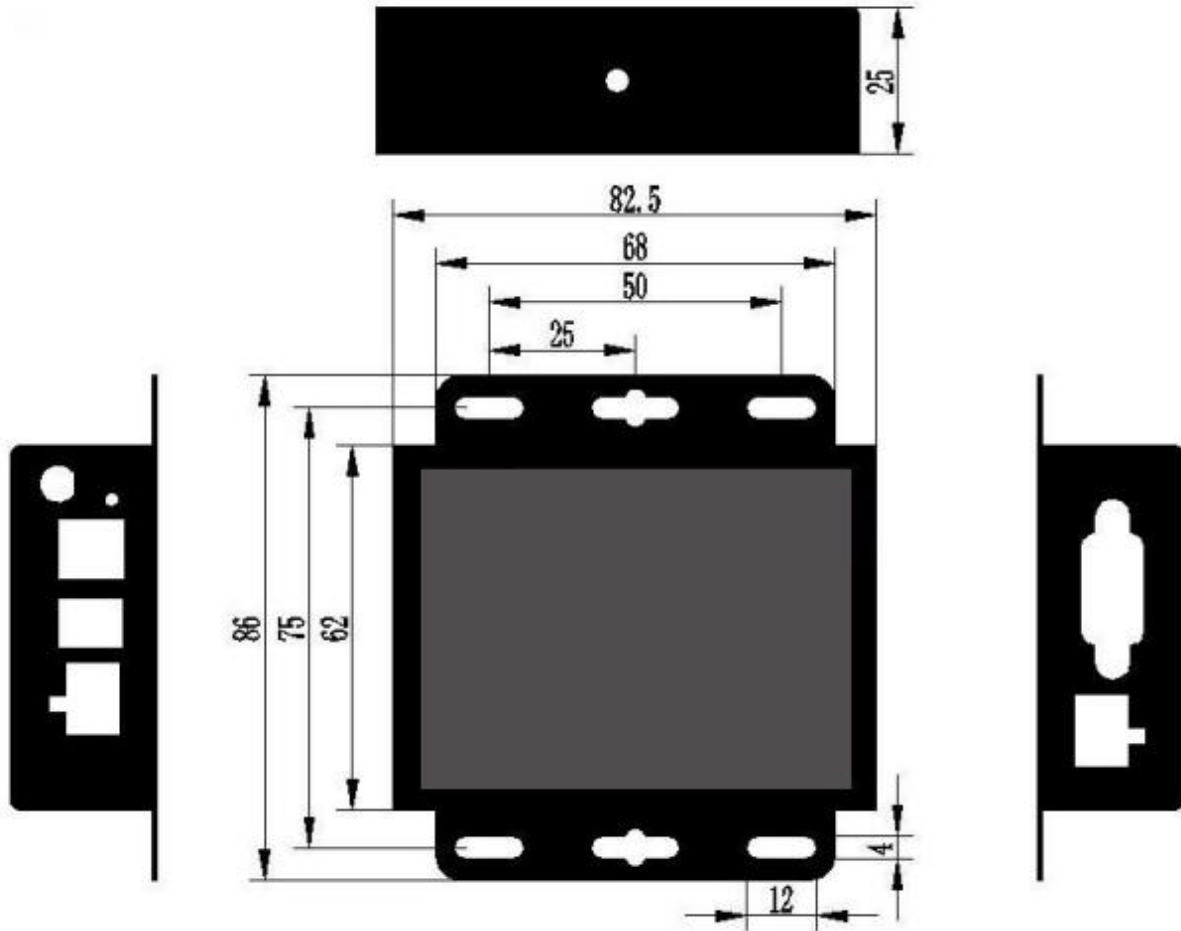
Software	
Network Protocol	IP, TCP, UDP, ARP, ICMP, DHCP, DNS, HTTP, WebSocket, HTTP Client
IP Obtaining Method	Static IP/DHCP
DNS	Support
User Configuration	Web server, AT command
Setting Command	AT + command
Simple Transparent Transmission	TCP Client, TCP Server, UDP Client, UDP Server, and HTTPD Client
Modbus	Modbus RTU to Modbus TCP
Max. Client Number in TCP Server Mode	24
Ethernet Packets Buffer	Max 16K bytes
Heartbeat Package	Support TCP Keep-alive mechanism, customize heartbeat packet content
Registration Package	Support customizable registration packet content.
HTTPD Client	Support
WebSocket	Support
Network Mode	Station / AP / AP+Station
Security	WEP/WPA-PSK/WPA2-PSK
Encryption	WEP64/WEP128/TKIP/AES
Work Mode	Transparent transmission, serial AT command, HTTP Client, Modbus TCP<=>Modbus RTU
Interface	

Copper Port	1 x 10/100 Base-T(X) RJ45 port, auto MDI/MDI-X, WAN/LAN configurable, 2 KV Electromagnetic isolation
Serial Port	1 × RS485 + 1 × RS232
	Connector RS485: 2-pin 3.81 mm terminal block, 2 A (A/B line) RS232: DB9 male connector
	Baud Rate RS485: 300~230,400bps RS232: 300~460,800bps
	Distance: up to 280 m
Indicator LEDs	Power, Work status, Network link, Data receive (RXD), Data transmit (TXD)
Antenna	1 × SMA-Female
Button	Long press to restore the factory settings.
Wi-Fi	
Certificate	FCC/CE
Frequency Range	802.11 b/g/n 2.412GHz-2.484GHz
Transmit Power	802.11b: +19 dBm(Max) 802.11g: +18 dBm(Max) 802.11n:+17 dBm(Max)
Receive Sensitivity	802.11b: -89 dBm 802.11g: -81 dBm 802.11n: -73 dBm
Power Supply	
Input Voltage	DC 5~36V

Input Current	170~350 mA @5V
Connection	5.5 × 2.1 mm DC jack or 2-pin terminal block
Physical Characteristic	
Dimensions	86×82.5×25 mm
Installations	Wall mount
Working Environment	
Operating Temp	-40℃~+85℃
Storage Temp	-40℃~+125℃
Relative Humidity	5%~95% (non-condensing)
Industrial Standard	
EMC	<p>Designed to meet industrial EMC requirements</p> <p>2 kV electromagnetic isolation for Ethernet port</p> <p>Integrated ESD protection on serial and Ethernet interfaces</p> <p>Built-in surge and EFT suppression for reliable performance</p>
Certification	CE/FCC/RoHs/WEEE

Dimensions

Unit: mm



Ordering Information

Standard Model	100M Copper Port	RS485	RS232	Input Voltage
Cport3101-W	1	1	1	DC 5~36V



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