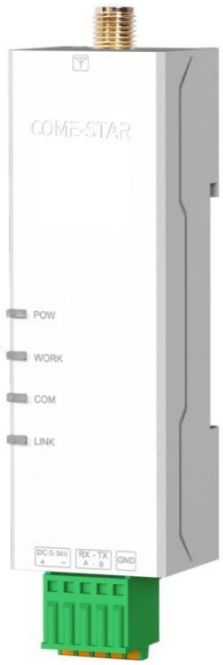
CIAP315R-1A25-485

1×RS485 2.4+5.8 GHz Dual Band WiFi 4 Industrial Wireless Client



- 1 × RS485 to WiFi network
- Dual band WiFi 2.4G & 5.8G, support IEEE 802.11 a/b/g/n
- Support AP/STA/AP+STA mode
- Rich communication protocol MQTT/TCP/UDP/HTTP
- Support Modbus TCP/RTU conversion and Modbus polling
- Multiple configuration methods: AT commands, built-in webpage, and mobile app
- Long transmission distance up to 200 meters
- Hardware & software dual watchdog to ensure stable operation
- Tiny size with DIN rail mount design, EMC level 2
- Wide Power Input: DC 5~36V, -40℃ ~ 85℃ working temperature

Product Description

CIAP315R-1A25-485 is an ultra-small size dual-band WiFi serial server device with one serial port. It can realize transparent transmission between RS485 and WiFi device.

It supports 2.4G & 5.8G WiFi, compatible with IEEE 802.11 a/b/g/n standard. With 2.4 G WiFi, it has a longer range signal while with 5.8G WiFi, it has fast speed and better resistance to signal interference.

In software, it supports multiple networking methods AP/STA/AP+STA mode, which is convenient for users to conduct wireless networking. And supports multiple communication protocols like TCP/UDP/HTTP/MQTT, and supports Modbus TCP/RTU conversion, so this device can establish a data communication bridge between the serial device and the server of different protocols, which is convenient for users to monitor the device remotely.

Product Features

- Dual band WiFi 2.4G & 5.8G, support IEEE 802.11 a/b/g/n
- Ultra small size, save your space
- Wide Operating Temp -40℃ ~ 85℃, industrial grade design, stable operation in harsh environments
- V0 flame retardant rating
- Wide power input designed DC 5-36V, EMC level 2
- Hardware and software watchdogs to ensure stable operation
- DIN rail mounting, easy for installation
- Support AP/STA/AP+STA mode
- Rich communication protocol MQTT/TCP/UDP/HTTP
- Support Modbus TCP/RTU conversion, heartbeat packet, and registration packet
- Support SmartAPLink app to set up network parameters
- Multiple configuration methods: AT command, browser, serial AT command, network AT command
- Rich indicators: Power, Work, COM, Link
- Long transmission distance up to 200 meters (2.4G WiFi, open environment)

Technical Specifications

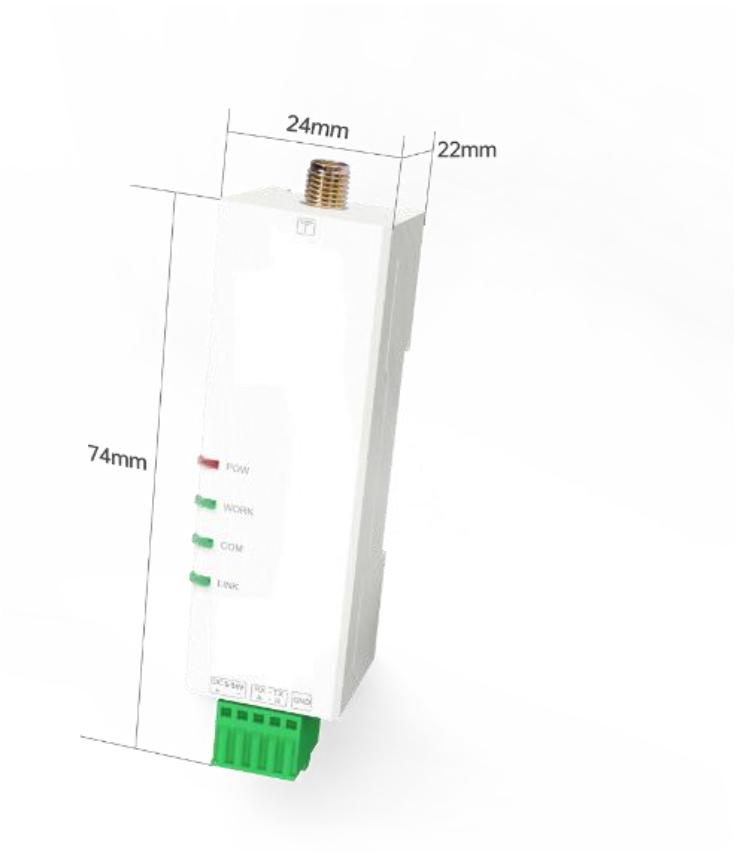
Power	
Power Supply	DC 5~36V
Connection	2-pin push-type connector
Working Current	170-350mA @5V
Serial Port	
Type	1 × RS485
Connection	3-pin push-type connector
Baud rates	1200~460800 bps
Data bits	5, 6, 7, 8
Stop bits	1, 2
Parity	NONE, ODD, EVEN, Mark, Space
Packaging Interval	Range: 10 ~ 1000ms, default: 20ms
Packaging Length	Range: 32 ~ 1400 bytes, default: 1400 bytes
Pull-up Resistor	2.2 KΩ
Protection	ESD, EFT, over-voltage protection
Wi-Fi	
Standards & Frequency	IEEE 802.11a/b/g/n 2.4G: 2.412GHz-2.484GHz 5.8G: 5.17GHz-5.25GHz, 5.725GHz-5.835GHz
Working Mode	AP/STA/AP+STA

Tx power	2.4G: 802.11b: +17±1.5dBm(@11Mbps) 802.11g: +14±1.5dBm(@54Mbps) 802.11n: +14±1.5dBm(@HT20， MCS7) 5.8G: 15±1.5dBm (OFDM 6Mbps) 13±1.5dBm (OFDM 54Mbps) 12±1.5dBm (HT20 MCS7) 12±1.5dBm (HT40 MCS7)
Receive sensitivity	2.4G: 802.11b: -95 dBm (@1 Mbps, CCK) 802.11b: -85 dBm (@11 Mbps, CCK) 802.11g: -72 dBm (@54Mbps, OFDM) 802.11n: -70dBm (@HT20, MCS7) 802.11n: -67dBm (@HT40, MCS7) 5.8G: -90dBm (@6 Mbps, OFDM) -73dBm (@54 Mbps, OFDM) -70 dBm (HT20, MCS7) -67 dBm (HT40, MCS7)
Antenna	SMA female connector
Physical	
Casing material	ABS, V0 rating
Dimensions	92 × 24 × 22 mm (including terminal block connector)
Installation	DIN rail mounting
Operating temperature	-40℃ ~ +85℃
Storage temperature	-40℃ ~ +125℃

Operating humidity	5% ~ 95% RH, non-condensing
Storage humidity	1% ~ 95% RH, non-condensing
Software	
Work mode	TCP Client, TCP server, UDP client, UDP server, HTTP client, MQTT client, IGMP
Modbus Gateway	Modbus RTU/TCP protocol conversion
IP	DHCP/StaticIP
Registration packet	Support
Heartbeat packet	Support
WiFi Encryption	WEP/WPA-PSK/WPA2-PSK
Encryption Methods	WEP64/WEP128/TKIP/AES
User Configuring	Web console (HTTP), AT command, SmartAPLink
Others	
Reset	Reset button Press and hold for 4~15 seconds to reset to factory settings 2>Quickly double-tap to enter SmartAPLink for networking
Indicators	Power, Work, COM, LINK
Certification	
Regulatory	CE/RED, RoHS, WEEE, FCC

Dimensions

Unit: mm



Ordering Information

Standard Model	RS485	WiFi	WiFi Antenna	Input Voltage
CIAP315R-1A25-485	1	2.4 + 5.8 GHz	1	DC 5~36V

Contact Us

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