CIAP335-2A25-D

RS232/485 2.4&5GHz Dual Band WiFi 5 Industrial Wireless Client



- 1×RS232/485 serial port
- 3×100M Ethernet Ports, 1×WAN/LAN, 2×LAN
- 2×2.4GHz/5GHz SMA-K antenna interface
- Support client mode, allowing wired devices to access Wi-Fi networks through WDS, universal repeater, or wireless NAT
- Support enhanced roaming for seamless and fast handover
- Support AP mode for wireless access from phones, computers, and other terminals for maintenance
- Support serial device networking with protocol conversion for UDP, TCP, Modbus, HTTPD, WebSocket, MQTT, OPC UA, IEC104, and support virtual COM
- DC 9~36V power input, non-polarity
- High-strength aluminum alloy enclosure, IP40-rated housing protection, level 3 EMS protection
- -40°C~+75°C working temperature

Product Description

CIAP335-2A25-D is a dual-band Wi-Fi 5 industrial wireless client. It features a 32-bit MIPS 24Kc processor with a clock speed of up to 650 MHz.

This wireless client supports 2.4 GHz and 5 GHz Wi-Fi, with speeds of up to 867 Mbps on the 5 GHz band. It also supports Router, AP, Repeater, Bridge, and Client modes, as well as 802.11k/v/r fast roaming for flexible and stable wireless networking.

Equipped with 3×100M Ethernet ports, and 1×RS232/RS485 serial port, CIAP335-2A25-D supports serial-to-network conversion for TCP, UDP, Modbus, MQTT, OPC UA, IEC 104, and other protocols. It also supports virtual serial ports.

Built with an industrial-grade design, CIAP335-2A25-D features a high-strength metal housing with IP40 protection, DC 9~36 V wide-voltage input, and -40°C to +75°C operating temperature. It also provides Level 3 EMS protection for reliable operation in complex electromagnetic environments and supports DIN-rail mounting.

CIAP335-2A25-D is suitable for industrial automation, integrated energy systems, smart cities, intelligent transportation, smart mining, and smart factory applications.

Product Features

- 1 × 100M WAN/LAN port and 2 × 100M LAN ports
- 1 × RS232/RS485 serial port
- 2 × 2.4 GHz/5 GHz dual-band antenna interfaces
- Support IEEE 802.11a/b/g/n/ac with 2 × 2 spatial streams and wireless speeds of up to 867 Mbps on the 5 GHz band
- Support Router, AP, Repeater, Bridge, and Client modes
- Support Client, WDS, and Client-Router connections
- Support enhanced client roaming for fast and seamless roaming
- Support 802.11k/v/r fast roaming for quick switching, low latency, and smooth transitions
- Support PROFINET real-time protocol transmission and Layer 2 Tunnel technology
- Support DHCP, static IP, and PPPoE for WAN connectivity
- Support static routing for network route selection
- Support AC-based management, fast roaming, fast device discovery, batch management, and firmware upgrades
- Support country code settings, transmit power adjustment, client number limits, SSID hiding, client isolation, WDS, blacklist/whitelist, and multicast enhancement
- Support port forwarding, IP/MAC/domain filtering, NAT, DMZ, UPnP, DDNS, VPN, SNMP, LLDP, and other firewall and network service functions
- Support serial-to-network conversion for UDP, TCP, Modbus, HTTPD, WebSocket, MQTT, OPC UA, IEC 104, and other protocols, with virtual serial port support
- Provide high-level EMS protection for stable operation in complex electromagnetic environments
- Provide DC 9~36 V wide-voltage input with non-polarity protection
- Provide -40°C to +75°C operating temperature and IP40 protection with a high-strength metal housing

Technical Specifications

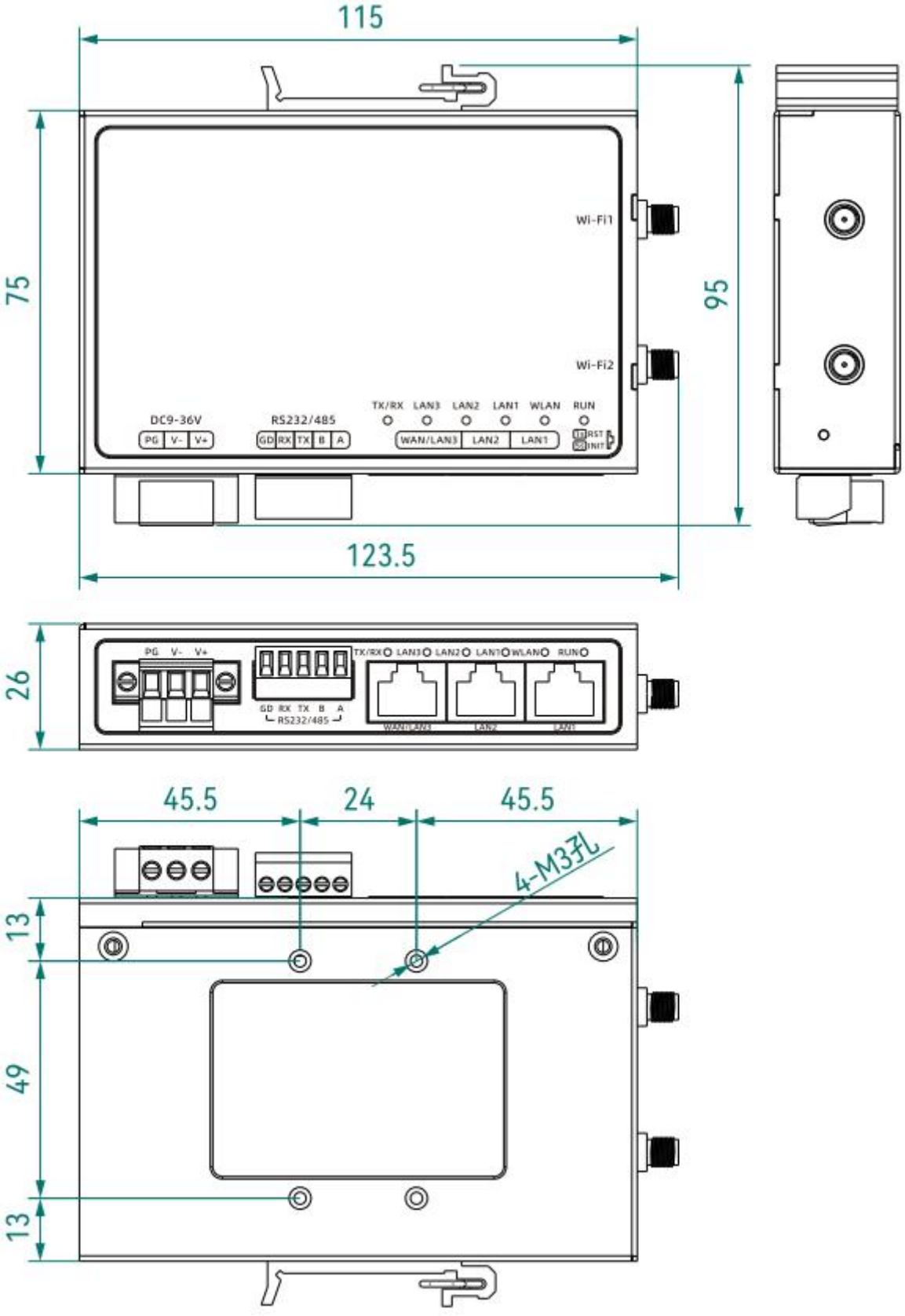
Protocol	
IEEE Standards	IEEE 802.3, IEEE 802.3u, IEEE 802.11a/b/g/n/ac, IEEE 802.11k/v/r
Interface	
100M WAN	1 × 10/100Base-T(X) adaptive 100M WAN/LAN combo port, RJ45, with auto-negotiation for full/half duplex and MDI/MDI-X
100M LAN	2 × 10/100Base-T(X) adaptive 100M LAN ports, RJ45, with auto-negotiation for full/half duplex and MDI/MDI-X
Serial Port	Type: 1 × RS232/RS485 serial port Connection: 5-pin 3.81 mm-pitch terminal block Baud Rate: 300 bps–460800 bps Data Bits: 7, 8 bits Stop Bits: 1, 2 bits Parity: None, Odd, Even Nodes: Up to 128 RS485 nodes Termination Resistor: Built-in 120 Ω termination resistor for RS485, switchable via internal jumper
Antenna Interface	2 × 2.4 GHz/5 GHz dual-band Wi-Fi antenna interfaces, RP-SMA-K (external thread, internal pin)
Button	Restart or factory reset button
Indicators	RUN, WLAN, Ethernet port, and serial port TX/RX indicators
Wi-Fi 5 RF	
Wireless Standards	IEEE 802.11b/g/n (2.4 GHz), IEEE 802.11a/n/ac (5 GHz)
Operating Frequency	2.412–2.484 GHz (2.4 GHz ISM band) 5.18–5.825 GHz (5 GHz ISM band)
Modulation	DBPSK, DQPSK, CCK, OFDM, 16-QAM, 64-QAM, 256-QAM

Channel Bandwidth	20 MHz / 40 MHz / 80 MHz
Maximum Transmit Power	2.4 GHz: IEEE 802.11b: 20 dBm @ 1 Mbps, 20 dBm @ 11 Mbps IEEE 802.11g: 20 dBm @ 6 Mbps, 14 dBm @ 54 Mbps IEEE 802.11n (HT20): 20 dBm @ MCS0, 13 dBm @ MCS7 IEEE 802.11n (HT40): 19 dBm @ MCS0, 12 dBm @ MCS7 5 GHz: IEEE 802.11a: 20 dBm @ 6 Mbps, 15 dBm @ 54 Mbps IEEE 802.11n (HT20): 20 dBm @ MCS0, 15 dBm @ MCS7 IEEE 802.11n (HT40): 18 dBm @ MCS0, 15 dBm @ MCS7 IEEE 802.11ac (VHT20): 19 dBm @ MCS0, 13 dBm @ MCS8 IEEE 802.11ac (VHT40): 18 dBm @ MCS0, 12 dBm @ MCS9 IEEE 802.11ac (VHT80): 15 dBm @ MCS0, 11 dBm @ MCS9
Receive Sensitivity	2.4 GHz: -90 dBm (HT20/MCS0/1SS) -88 dBm (HT40/MCS0/1SS) 5 GHz: -87 dBm (HT20/MCS0/1SS) -83 dBm (HT40/MCS0/1SS) -87 dBm (VHT20/MCS0/1SS) -83 dBm (VHT40/MCS0/1SS) -80 dBm (VHT80/MCS0/1SS)
Maximum Transmission Rate (Theoretical)	2.4 GHz: Up to 300 Mbps with 2T2R at 40 MHz channel bandwidth 5 GHz: Up to 867 Mbps with 2T2R at 80 MHz channel bandwidth Total wireless rate: 1167 Mbps
Operating Modes	Router, AP, Repeater, Bridge, Client (default)
Power Supply	
Power Input	DC 9~36 V, non-polarity

Full-Load Power Consumption	Avg. ≤ 6.8 W @ DC 24 V; Max. ≤ 11.5 W @ DC 24 V
Connection	3-pin 5.08 mm-pitch locking terminal block
Physical Characteristics	
Dimensions	115 × 26 × 75 mm (excluding DIN-rail clip and connectors)
Installation	35 mm standard DIN-rail, desktop, or wall mounting; DIN-rail mounting standard, wall-mounting plate optional
Housing Protection	Metal housing, IP40
Weight	Approx. 0.31 kg (excluding antennas)
Operating Environment	
Operating Temperature	-40°C to +75°C
Storage Temperature	-40°C to +85°C
Relative Humidity	5%–95% RH, non-condensing
Industry Standards	
EMS	IEC 61000-4-2 (ESD): Level 3 (Contact ±8 kV, Air ±8 kV) IEC 61000-4-4 (EFT): Level 3 (Power: ±2 kV; Ethernet, RS232/485: ±2 kV) IEC 61000-4-5 (Surge): Level 3 (Power, Ethernet, RS485: Common mode ±4 kV, Differential mode ±2 kV; RS232: Common mode ±2 kV, Differential mode ±1 kV)
Warranty	
Warranty Period	5 years

Dimensions

Unit: mm



Ordering Information

Standard Model	100M Ethernet	Serial	2.4GHz/5GHz Antenna	Input Voltage
CIAP335-2A25-D	1×WAN/LAN 2×LAN	RS232/485	2	DC9~36V

Contact Us

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

Address: Building 4, East Area, Wuhan Innocenter, No.27 Yangqiaohu Avenue, Jiangxia District, Wuhan, China.

Tel: +86-027-59257958

Mail: sales@come-star.com

Official site: www.come-star.com

Copyright © Come-Star All rights reserved