CIAP355-2A25-2D

5-Port 100M Dual-Band DIN-Rail Wi-Fi 5 High-Power Industrial Wireless AP



- 1×100M WAN/LAN combo port, 4×100M LAN ports, 2×2.4 GHz/5 GHz dual-band antenna ports
- IEEE 802.11a/b/g/n/ac standards and 2×2 spatial streams, with a maximum speed of 867 Mbps on the 5 GHz band
- Five operating modes: Router, AP, Repeater, Bridge, and Client
- Port forwarding, IP/MAC/domain filtering, NAT, DMZ, UPnP, bandwidth control, QoS services, DDNS, VPN, SNMP, LLDP, and other firewall and service features
- Aluminum alloy housing with efficient heat dissipation, IP40 protection rating
- -40°C~+75°C working temperature

Product Description

The CIAP355-2A25-2D is a 5-port 100Mbps Ethernet, DIN-rail-mounted, dual-band Wi-Fi 5 high-power industrial wireless AP featuring a 32-bit MIPS24Kc core with a clock speed of up to 650MHz. It supports dual-band wireless connectivity at 2.4GHz and 5GHz, with a combined data rate of up to 1167Mbps. It supports web-based configuration of various network management functions and offers different operating modes, including router, AP, repeater, bridge, and client, to enhance network efficiency, reliability, and security, meeting the demands of diverse and complex network environments. The LAN and WAN ports support wired connections to internal and external networks, featuring 10/100 Mbps, full/half-duplex, and auto MDI/MDI-X, providing high-bandwidth, low-latency, and highly reliable network communication for industrial automation applications.

CIAP355-2A25-2D features 1×100M WAN/LAN combo port, 4×100Mbps LAN ports, and 2×2.4GHz/5GHz antenna interfaces. Built with a reliable industrial-grade design, it operates in temperatures ranging from -40°C to +75°C operating temperature range. It has passed rigorous functional, high/low temperature, safety, and electromagnetic immunity tests, meeting the demands of various network environments and harsh industrial conditions. It is widely applicable in fields such as industrial automation, integrated energy, smart cities, intelligent transportation, smart mining, and smart factories.

Product Features

- 1 x 100 Mbps WAN/LAN combo port + 4 x 100 Mbps LAN ports
- 2 x 2.4 GHz/5 GHz dual-band antenna ports
- IEEE 802.11a/b/g/n/ac standards and 2×2 spatial streams; maximum speed of 867 Mbps on the 5 GHz band
- Five operating modes: Router, AP, Repeater, Bridge, and Client
- 802.11k/v/r fast roaming, fast handover, low latency, and seamless transitions
- PROFINET real-time protocol transmission, Layer 2 Tunnel technology
- DHCP, static IP, and PPPoE dial-up methods for external network connectivity
- Three connection methods: WDS, Universal, and Wireless NAT
- Static routing to control network routing selection
- AC-controllable: fast roaming, fast discovery, bulk management, and upgrades
- Country code, transmit power adjustment, user limit, SSID hiding,user isolation, WDS bridging, black/white lists, and multicast enhancement
- Port forwarding, IP/MAC/domain filtering, NAT, DMZ, UPnP, bandwidth control, QoS services, DDNS, VPN, SNMP, LLDP, and other firewall and service features
- Support centralized network management, bulk configuration, and bulk upgrades
- Standard 5dBi high-gain antenna with high-power design for stronger wireless signals
- High-grade EMS protection ensures normal and stable operation in complex electromagnetic environments, unaffected by external electromagnetic interference
- Wide-voltage input (DC 9–36 V), non-polarity
- Aluminum alloy housing with efficient heat dissipation, IP40 protection rating
- Operating temperature range: -40°C to +75°C

Technical Specifications

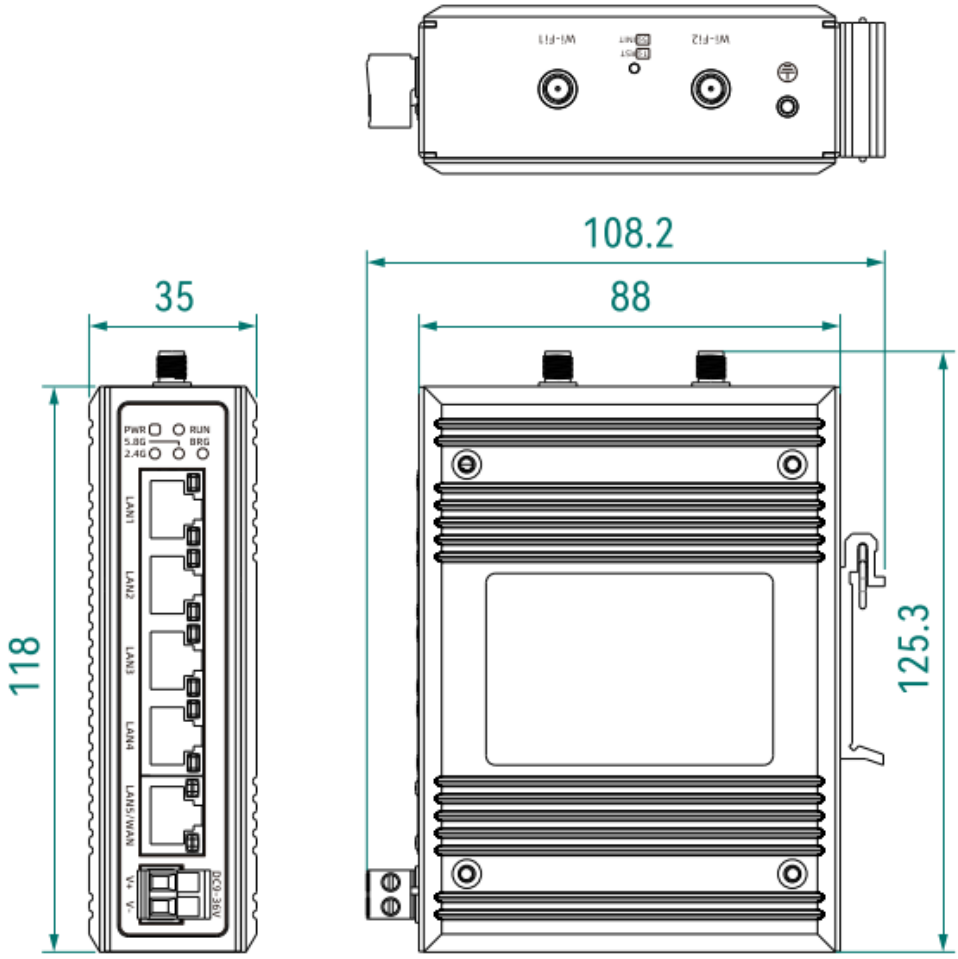
Protocol Standard	
IEEE Standards	IEEE 802.3, IEEE 802.3u, IEEE 802.11a/b/g/n/ac, IEEE 802.11k/v/r
Interface	
100M WAN	1×10/100Base-T(X) auto-sensing WAN/LAN port, RJ45 connector, supports full/half-duplex and auto MDI/MDI-X
100M LAN	4×10/100Base-T(X) auto-sensing LAN ports, RJ45 connector, full/half duplex, auto MDI/MDI-X
Antenna Connector	2×2.4GHz/5GHz dual-band antenna interfaces, both using RP-SMA-K (external thread, internal pin)
Button	Reset or Factory Reset button
Status LEDs	Power indicator, Operation indicator, 2.4GHz indicator, 5.8GHz indicator, BRG indicator, Ethernet port connection/activity indicator
Wi-Fi 5 RF Parameters	
Wireless Standards	IEEE 802.11b/g/n (2.4GHz), IEEE 802.11a/n/ac (5GHz)
Working Frequency	2.412GHz–2.484GHz (2.4GHz ISM Band) 5.18 GHz–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
TX Power	2.4 GHz: IEEE 802.11b: 27 dBm @ 1 Mbps, 27 dBm @ 11 Mbps IEEE 802.11g: 25 dBm @ 6 Mbps, 20 dBm @ 54 Mbps IEEE 802.11n (HT20): 25 dBm @ MCS0, 20 dBm @ MCS7 IEEE 802.11n (HT40): 24 dBm @ MCS0, 20 dBm @ MCS7 5 GHz: IEEE 802.11a: 23 dBm @ 6 Mbps, 20 dBm @ 54 Mbps IEEE 802.11n (HT20): 23 dBm @ MCS0, 18 dBm @ MCS7 IEEE 802.11n (HT40): 23 dBm @ MCS0, 18 dBm @ MCS7 IEEE 802.11ac (VHT20): 23 dBm @ MCS0, 18 dBm @ MCS8 IEEE 802.11ac (VHT40): 23 dBm @ MCS0, 18 dBm @ MCS9 IEEE 802.11ac (VHT80): 23 dBm @ MCS0, 18 dBm @ MCS9

Receiving Sensitivity	2.4 GHz: -77 dBm (HT20/MCS7/1SS) -74 dBm (HT40/MCS7/1SS) -94 dBm (HT20/MCS0/1SS) -92 dBm (HT40/MCS0/1SS) 5 GHz: -75 dBm (HT20/MCS7/1SS) -73 dBm (HT40/MCS7/1SS) -71 dBm (VHT20/MCS8/1SS) -67 dBm (VHT40/MCS9/1SS) -63 dBm (VHT80/MCS9/1SS) -93 dBm (HT20/MCS0/1SS) -90 dBm (HT40/MCS0/1SS) -93 dBm (VHT20/MCS0/1SS) -90 dBm (VHT40/MCS0/1SS) -87 dBm (VHT80/MCS0/1SS)
Theoretical Transfer Rate	2.4GHz band 2T2R: Maximum data rate of 300Mbps at 40MHz bandwidth 5GHz band 2T2R: Maximum data rate of 867 Mbps at 80 MHz bandwidth Total wireless data rate: 1167 Mbps
Operating Mode	Router mode, AP mode, Repeater mode, Bridge mode, Client mode
Power Supply	
Input Voltage	DC9~36V, dual-power redundancy, non-polarity
Power Consumption	Average ≤7.9 W @ 24 V DC, Peak ≤14.9 W @ 24 V DC
Connection Method	2-position 5.08mm pitch terminal block
Physical Characteristics	
Dimensions	118×35×88 mm (excluding DIN rail and connector)
Installation Method	Easy installation on 35mm DIN rails
Enclosure Protection	Aluminum alloy housing, IP40 protection rating
Weight	About 0.37 kg (excluding antenna)
Working Environment	
Operating Temp	-40°C ~+75°C

Storage Temp	-40°C ~+85°C
Relative Humidity	5%~95% (non-condensing)
Industry Standard	
EMS	IEC 61000-4-2 (ESD): Level 4 (Contact discharge ±8 kV, air discharge ±15 kV) IEC 61000-4-5 (Surge): Level 4 (Power supply: Common-mode ±4 kV, differential-mode ±2 kV; Ethernet port: ±4 kV common-mode, ±2 kV differential-mode) IEC 61000-4-4 (EFT): Level 4 (Power supply: ±4 kV; Ethernet port: ±2 kV)
Warranty	
Warranty Period	5 years

Dimensions

Unit: mm



Ordering Information

Standard Model	100M WAN	100M LAN	2.4GHz/5GHz Antenna	Input Voltage
CIAP355-2A25-2D	1	4	2	DC9~36V

Contact Us

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