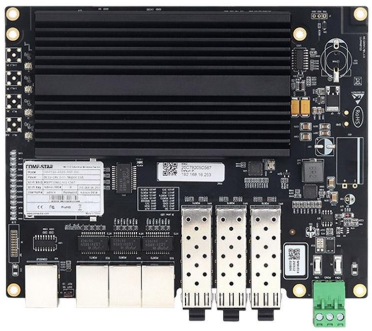
# CIAP766-4A25-3GF-Exi

## 6-Port Gigabit Dual-Band Wi-Fi 6 Embedded Intrinsically Safe Industrial Wireless AP



- 3 x 1G fiber ports, 3 x 1G copper ports
- Support 2 x 2.4GHz + 2 x 5GHz antenna interfaces, IPEX 1 or SMA-K connectors
- Operating modes: Router, AP, Repeater, Bridge, and Client
- Support Wi-Fi Mesh and wired Mesh self-organizing networks
- Support fiber port ring protocol for rapid ring network redundancy, enhancing network reliability
- DC 12~24V power input with intrinsically safe circuit design
- -40°C to +75°C operating temperature range

## Product Description

The CIAP766-4A25-3GF-Exi is a 6-port Gigabit dual-band Wi-Fi 6 intrinsically safe industrial wireless AP. It supports dual-band wireless connectivity at 2.4GHz and 5GHz, achieving a concurrent dual-band throughput of up to 2976Mbps. Featuring web-based management capabilities and support for multiple network protocols, it enhances network efficiency, reliability, and security to meet diverse complex network requirements. The fiber ports support multiple optional optical modules, utilizing fiber transmission for strong resistance to electromagnetic interference. The copper ports support 10/100/1000M, full/half-duplex, and MDI/MDI-X auto-negotiation, delivering high-bandwidth, low-latency, and highly reliable network communication for industrial automation applications.

CIAP766-4A25-3GF-Exi features 3 x 1G SFP ports (1 WAN + 2 LAN), 3 x 1G copper ports (LAN), 2 x 2.4GHz antennas, and 2 x 5GHz antenna interfaces. Its intrinsically safe design supports operating temperatures from -40°C to +75°C. It has passed rigorous functional, high/low temperature, safety, and electromagnetic immunity tests, meeting diverse network field and harsh industrial environment requirements. Widely applicable in industrial automation, integrated energy management, smart cities, intelligent transportation, smart mining, and smart factories.

## Features and Benefits

- 3 x 1G fiber ports + 3 x 1G copper ports, with 1 fiber port designated as WAN and 2 fiber ports plus 3 copper ports as LAN
- 2 x 2.4GHz + 2 x 5GHz antenna interfaces, with IPEX 1 or SMA-K connectors;
- Support five operating modes: Router, AP, Repeater, Bridge, and Client
- Support Wi-Fi Mesh and wired Mesh self-organizing networks
- Support fiber port ring protocol for rapid ring network redundancy, enhancing network reliability
- Support VLAN segmentation for broadcast domain isolation, improving security
- Support optical module DDM for viewing module information and status
- Support static routing for controlling network routing selection
- Support country code, transmit power adjustment, user count limit, SSID hiding, user isolation, WDS bridging, black/white lists
- Support port forwarding, IP/MAC/domain name filtering, NAT, DMZ, UPnP, DDNS, SNMP, LLDP, etc.
- Support VPN client and server for private network construction
- DC 12~24V power input, compliant with intrinsically safe circuit design standards
- Operating temperature range: -40°C to +75°C

## Specifications

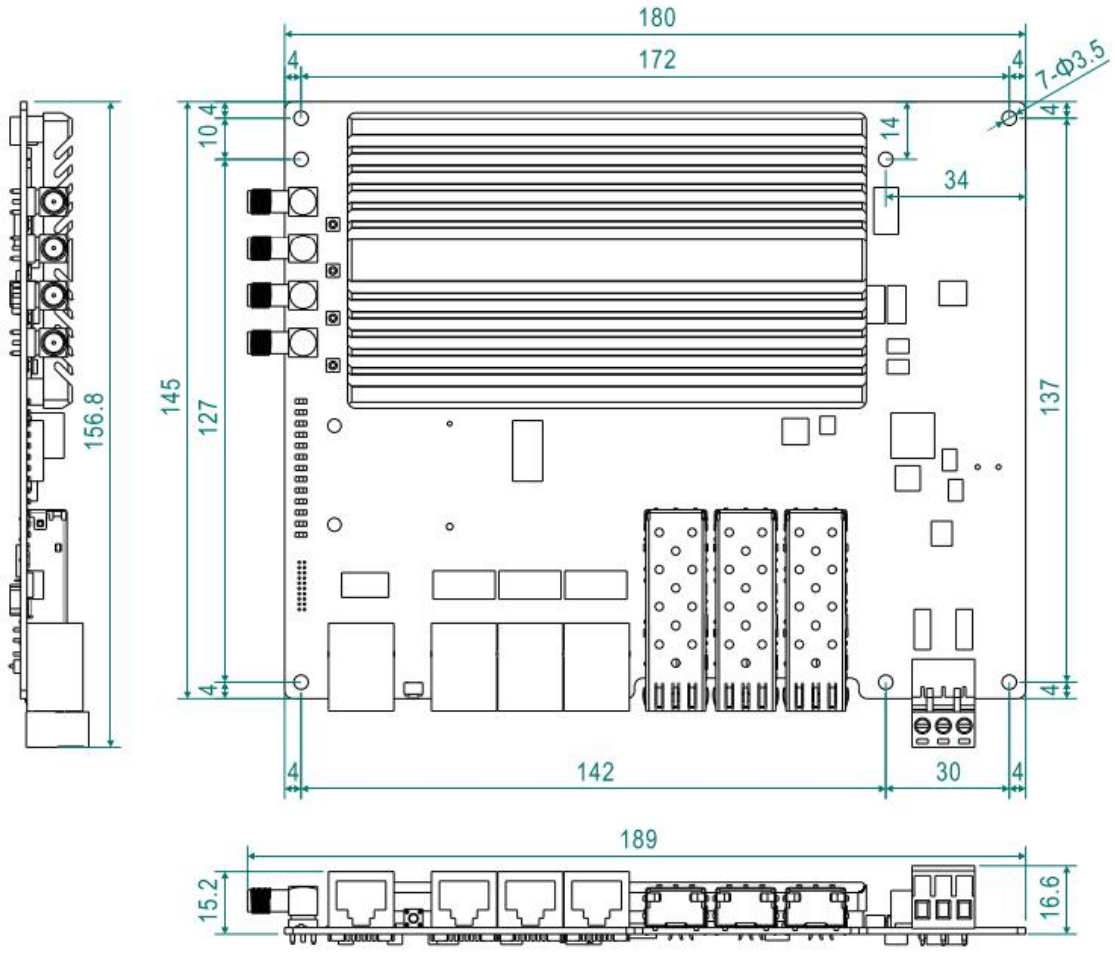
| Protocol Standards | |
|---|---|
| IEEE Standards | IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.1Q, IEEE 802.11a/b/g/n/ac/ax, IEEE 802.11i |
| **Interface** | |
| 1G Fiber Port | 3×1000Base-X SFP ports, PORT4 and PORT5 are Gigabit LAN ports compatible with 100Base-FX, and PORT6 is a Gigabit WAN port |
| 1G Copper Port | 3×10/100/1000Base-T(X) auto-sensing RJ45 LAN port, full/half-duplex, auto MDI/MDI-X |
| Wi-Fi Antenna | 2×2.4GHz and 2×5GHz antenna interfaces, supporting either IPEX 1 board-side antenna connectors or SMA-K (male threaded, female socket) connectors |
| Button | One-Click Reboot or Factory Reset |

| | |
|---|---|
| Status LED | Power indicator, Operation indicator, Alarm indicator, 2.4GHz indicator, 5.8GHz indicator, Bridge indicator, Interface indicator, with support for external signal output |
| **Power Supply** | |
| Power Input | DC12~24V |
| Power Consumption | Average power ≤ 15.7W @ DC 12V, Peak power ≤ 25.5W @ DC 12V (full load) |
| Connection | 3-pin 5.08mm terminal block |
| Protection | Reverse polarity protection, pre-charge |
| **Physical Characteristics** | |
| Dimensions | 180×145×16.6mm (excluding connectors) |
| Installations | Embedded |
| Weight | About 0.33 kg |
| **Working Environment** | |
| Operating Temp | -40°C ~+75°C |
| Storage Temp | -40°C ~+85°C |
| Relative Humidity | 5%~95% (non-condensing) |
| **Industry Standard** | |
| EMS | IEC 61000-4-5 (Surge): Level 2 (Power supply: Common mode ±1kV,Differential mode ±0.5kV;<br><br>Ethernet port: Common mode ±6kV, Differential mode ±2kV) |

| | |
|---|---|
| | IEC 61000-4-4 (EFT): Level 3 (Power supply: ±2kV; Ethernet port: ±2kV) |

## Dimensions

Unit: mm (Choose one antenna interface; ensure at least 5mm of installation space is reserved at the bottom of the motherboard)



## Ordering Information

| Standard Model | 1G Fiber Port (WAN) | 1G Fiber Port (LAN) | 1G Copper Port (LAN) | 2.4 GHz Antenna | | 5GHz Antenna | | Input Voltage |
|---|---|---|---|---|---|---|---|---|
| | | | | IPEX 1 | SMA-K | IPEX 1 | SMA-K | |
| CIAP766-4A25-3GF-Exi | 1 | 2 | 3 | 2 | / | 2 | / | DC12~24V |
| CIAP766-4A25-3GF-Exi -SMAK | 1 | 2 | 3 | / | 2 | / | 2 | |

## Contact Us

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