

IAP3600Exi-2225-2GS4GT-SMA-P12_48

Embedded Mounting

6-Port Gigabit Safety Dual-Frequency Wi-Fi6 Industrial Wireless AP for Mine

- Support 2 Gigabit SFP slots (LAN/ WAN port), 4 Gigabit copper ports(LAN port), 2 2.4G WiFi antennas and 2 5G Wi-Fi antennas
- Support Wi-Fi6 (802.11ax), which can improve system capacity and concurrent access, and reduce transmission delay.
- Support multiple network modes such as routing, AP, bridge and client mode.
- Adopt patented SW-Ring technology and support multiple ring functions. Automatic recovery time from network failure is <20ms
- Support power input of 12~48VDC (the input range of safety power is 12~24VDC)
- Support -40~75°C wide operating temperature range
- Conform to the features of intrinsic safety



Introduction

IAP3600Exi-2225-2GS4GT-SMA-P12_48 is a Gigabit safety dual-frequency Wi-Fi6 industrial wireless AP for mine. This product provides Gigabit copper port (LAN), Gigabit SFP slot (LAN/WAN), 2.4G antenna interface and 5G antenna interface, supports embedded installation, and can meet the needs of different application sites.

The management system supports route, AP, bridge, client and other work modes; Support IEEE802.11a/b/g/n/ac/ax wireless technology, the wireless rate of the whole device is up to 1774.5Mbps; The device supports wireless encryption methods such as WPA/WPA2/WPA3, and has various security policies such as SSID hiding, wireless user isolation, IP address filtering, MAC address filtering, port forwarding, port redirection, ARP binding, DMZ setting, etc. Support virtual AP, that is, one AP device supports multiple SSIDs.

RESET button can reboot the device and restore factory defaults. When the device temperature is too higher, ALM indicator would be blinking and send alerts for quick troubleshooting on the scene. Hardware adopts fanless, low power consumption, wide temperature and voltage design and has passed rigorous industrial standard tests, which can suit for the industrial scene environment with harsh requirements for EMC. It can be widely used in wireless communication, wireless video transmission and other WiFi coverage system design in mining system and provides reliable and rapid solutions for users' Ethernet device connection.

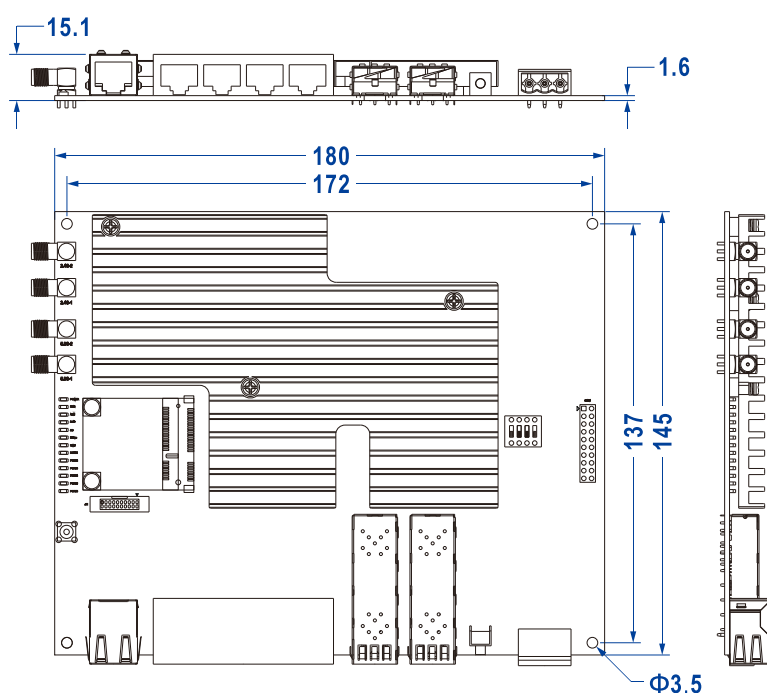
Features and Benefits

- ⦿ Support routing mode, AP mode, bridge mode, client mode, support connection methods like WDS and universal bridge
- ⦿ The client mode supports wireless NAT connection, and the wireless network can connect with the external network through PPPoE, static IP and DHCP dynamic acquisition, and implement route switch
- ⦿ Support high-speed wireless connection, the transmission speed of 2.4GHz can reach up to 573.5Mbps, the transmission speed of 5GHz can reach up to 1201Mbps
- ⦿ Support 2×2MIMO and 4 dual-RF antenna interfaces
- ⦿ Support wireless probe, it can realize personal positioning function with location engine
- ⦿ Support SNMP network management and Trap alarm
- ⦿ Support multiple SSID settings and provide SSID hiding function
- ⦿ Support WPA/WPA2/WPA3 wireless encryption method of both personal edition and enterprise edition and TKIP/AES encryption algorithm
- ⦿ AC management can specify AC device information to realize directional management
- ⦿ Roaming proxy can realize roaming proxy host across network segments, effectively avoiding the data interruption caused by the failure to update the forwarding list of upper-level device in time

- Supports IP filtering, MAC filtering, port forwarding, ARP binding, DMZ isolation area and other firewall functions
- Support wireless user management and user event, and support blacklist and whitelist filtering rules, wireless user online/offline notification
- WMM can achieve better transmission quality of voice, video and other applications in wireless networks
- Wireless network detection can realize wireless network diagnosis and specific network recovery operations
- SW-Ring could implement network redundancy and prevent network storm
- VLAN is used for simplifying network planning

Dimension

Unit: mm



Specification

Standard & Protocol

IEEE 802.3 for 10Base-T
IEEE802.3u for 100Base-TX
IEEE 802.3ab for 1000Base-T
IEEE 802.3z for 1000Base-X
IEEE802.11a/b/g/n/ac/ax for WLAN
IEEE802.11i for wireless security
IEEE802.11r for fast roaming

	IEEE802.11e for WMM IEEE802.1Q for VLAN
Working Mode	<p>Routing mode (WAN: PPPoE dial-up, static IP, DHCP dynamic IP acquisition)</p> <p>AP mode (LAN: static IP, DHCP dynamically acquiring IP)</p> <p>Bridge mode (connection: WDS bridge, universal bridge; point-to-point, roaming)</p> <p>Client mode (connection: WDS bridge, universal bridge, wireless NAT; point-to-point, roaming)</p>
WLAN	WAP/WAP2/WAP3 personal/enterprise edition encryption mode, hidden wireless SSID, wireless user isolation, wireless transmission power adjustment, maximum user limit, packet segmentation and RTS threshold, China/US wireless channel, WMM
Management	Intranet settings, extranet settings, wireless settings, AC management, SNMP management, roaming agent, user settings, system upgrade, timed restart, profile management, system log, wireless user list, and Wi-Fi real-time traffic monitoring
Security Policy	Wireless user black/white list, wireless user event notice, IP filtering, MAC filtering, port forwarding, port redirection, ARP binding, DMZ setting
Redundancy Technology	SW-Ring
Routing/Switching	Static routing (routing mode, wireless NAT), VLAN
Location Service	Wireless probe
Troubleshooting	Network Detection
Time Management	NTP Client
Radio Frequency	<p>802.11B/g/n: 2.412GHz~2.4835GHz</p> <p>802.11Ac/n/a: 5.18GHz~5.825GHz</p> <p>RF power output: 20dBm</p> <p>Modulation methods: DBPSK, DQPSK, CCK, OFDM, 16-QAM, 64-QAM, 256-QAM, 1024QAM</p>
Receiving Sensitivity	<p>802.11b: -87dBm@1Mbps, -76dBm@11Mbps</p> <p>802.11g/a: -82dBm@6Mbps, -65dBm@54Mbps</p>

802.11n: -82dBm@MCS0, -64dBm@MCS7
 802.11ac: -82dBm@MCS0, -57dBm@MCS9
 802.11ax: -82dBm@MCS0, -52dBm@MCS11

Transmitting Power	802.11b: 23dBm@1Mbps, 20dBm@11Mbps 802.11g/a: 23dBm@6Mbps, 20dBm@54Mbps 802.11n: 23dBm@MCS0, 18dBm@MCS7 802.11ac: 23dBm@MCS0, 18dBm@MCS9 802.11ax: 23dBm@MCS0, 18dBm@MCS11
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Gigabit copper port: 4 10/100/1000Base-T(X) RJ45 port, LAN port
 Gigabit SFP: 2 1000Base-X SFP slot, LAN/WAN port

Interface	Antenna interface: - Two 2.4G antenna interfaces, SMA-k type (Female) - Two 5G antenna interfaces, SMA-k type (Female) - 1 UWB antenna interface (reserved)
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Console port: CLI command management port(RS-232), RJ45

Power Supply	12~48VDC, the input range of safety power is 12~24VDC, anti-reverse connection and slow start are supported, and 3-pin 5.08mm pitch terminal blocks are used.
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Indicator	Power indicator, running indicator, alarm indicator, 2.4G indicator, 5.8G indicator, WLAN bridge signal strength indicator, UWB indicator (reserved), interface indicator; provides external pin of indicator
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Power Consumption	Temperature	Transmitting Power(dbm)	Voltage (VDC)	Peak Value (A)	Full Mean Load (W)	Full Peak Load (W)
	Normal Temperature (25°C)	20	12	1.299	14.3	16.2
			18	0.885	14	16.6
			24	0.686	14.2	16.8
	27		12	1.558	15	20
			18	1.041	14.8	21.3
			24	0.813	14.4	21.3
	High temperature (75°C)	20	12	1.376	14.6	17.9
			18	0.909	14.8	23
			24	0.717	14.8	18.4
		27	12	1.627	16.2	21.7
			18	1.099	15.9	23.2
			24	0.846	15.9	23.6

Working Environment	Operating temperature: -40~75℃
	Storage temperature:-40~85℃
	Relative humidity: 5% ~ 95% (no condensation)
Physical Characteristic	Shell: null
	Installation: embedded mounting
	Dimension (W x H x D): 180mm×15.1mm×145mm
Authentication	CE, FCC, RoHS
Warranty	3 years



Ordering Information

Available Models	Antenna Interface			Gigabit SFP	Gigabit Copper Port	Power Supply
	2.4G	5G	UWB (Reserved)			
IAP3600Exi-2225-2GS4GT-SMA-P12_48	2	2	1	2	4	12~48VDC

Optional Accessories

Type	P/N	Gain (dBi)	Quantity (pcs)	Remark
2.4G omnidirectional antennass	3005040006	5	2	Optional
5.8G omnidirectional antennas	3005040057	5	2	Optional
Magnetic base connecting line for sucker	3005040115	—	4	Optional



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