





IAP3500-2E-1GT1GS-LV

Embedded Mounting

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

- Support 1 Gigabit SFP slot (LAN/ WAN port), 1 Gigabit copper port (LAN port), 2 2.4G/5G dual-frequency antenna interfaces
- 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.
- Support 9~24VDC power supply input
- Support -40~75°C wide operating temperature range
- Conform to the features of intrinsic safety













Introduction

IAP3500-2E-1GT1GS-LV is 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/5G dual-frequency 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. 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.

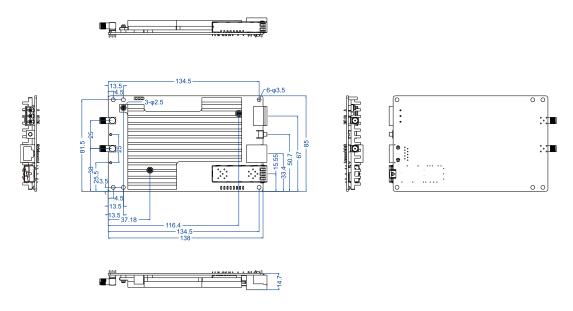
Features and Benefits

- 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 2.4G/5G dual-frequency combined 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 Wireless encryption methods of WPA/WPA2/WPA3 personal edition and WPA2/WPA3 enterprise edition, AC management can specify AC device information for oriented 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
- Support IP filtering, MAC filtering, URL filtering, port forwarding, port redirection, 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
- Network detection can realize network diagnosis and specific network recovery operations

Dimension

Unit: mm



Specification

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

Working Mode	Routing mode (WAN: PPPoE dial-up, static IP, DHCP dynamic IP acquisition) AP mode (LAN: static IP, DHCP dynamically acquiring IP) Bridge mode (connection: WDS bridge, universal bridge; point-to-point, roaming) Client mode (connection: WDS bridge, universal bridge, wireless NAT; point-to-point, roaming)	
WLAN	Encryption mode of WAP/WAP2/WAP3 personal edition and WPA2/WPA3 enterprise edition, hidden wireless SSID, wireless user isolation, wireless transmission power adjustment, maximum user limit, RTS threshold, China/US wireless channel, WMM	
Management	Intranet settings, extranet settings, wireless settings, AC management, SNMP management, QoS management, AP roaming control, roaming agent, user settings, system upgrade, timed restart, profile update, system log, wireless user list, and Wi-Fi real-time traffic monitoring, log management, time settings, access settings and diagnostic Tools	
Security Policy	Wireless user black/white list, wireless user event notice, IP filtering, MAC filtering, URL filtering, port forwarding, port redirection, ARP binding, DMZ settings, access settings	
Routing/Switching	Static routing (routing mode, wireless NAT)	
Location Service	Wireless probe	
Troubleshooting	Network Detection	
Time Management	NTP Client	
Radio Frequency	802.11b/g/n/ax: 2.412GHz~2.4835GHz 802.11a/n/ac/ax: 5.18GHz~5.825GHz RF power output: 20dBm Modulation methods: DBPSK, DQPSK, CCK, OFDM, 16-QAM, 64-QAM, 256-QAM, 1024QAM	
Receiving Sensitivity	802.11b: -87dBm@1Mbps, -76dBm@11Mbps 802.11g/a: -82dBm@6Mbps, -65dBm@54Mbps 802.11n: -82dBm@MCS0, -64dBm@MCS7 802.11ac: -82dBm@MCS0, -57dBm@MCS9 802.11ax: -82dBm@MCS0, -52dBm@MCS11	

Interface

802.11b: 23dBm@1Mbps, 20dBm@11Mbps

802.11g/a: 23dBm@6Mbps, 20dBm@54Mbps

Transmitting Power 802.11n: 23dBm@MCS0, 18dBm@MCS7

> 802.11ac: 23dBm@MCS0, 18dBm@MCS9 802.11ax: 23dBm@MCS0, 18dBm@MCS11

Gigabit copper port: 1 10/100/1000Base-T(X) RJ45 port is LAN port

Gigabit SFP: 1 1000Base-X SFP slot, which is LAN/WAN port

Antenna interface: 2 2.4G/5G dual-frequency SMA-K antenna interfaces

Console port: CLI command management port(RS-232), using 3-pin

2.54mm pitch terminal blocks

9~24VDC, support anti-reverse connection and slow start-up, using 3-pin **Power Supply**

Transmission Voltage

Power

(dBm)

5.08mm pitch terminal blocks

Temperature

Power indicator, running indicator, alarm indicator, 2.4G indicator, 5.8G Indicator

indicator, bridge signal strength indicator, interface indicator

(VDC)

	00	9	0.549	11.612
		12	0.407	11.251
	20	18	0.278	11.105
Normal		24	0.200	11.079
Temperature (25°C)		9	0.560	13.247
(25°C)	27	12	0.419	12.919
		18	0.286	12.834
		24	0.217	12.956
		9	0.601	12.148

Power Consumption and Current

	20	12	0.448	11.800	15.54
		18	0.302	11.756	14.796
High		24	0.232	11.796	15.912
temperature		9	0.694	14.170	18.243
(75°C)	27	12	0.444	13.446	20. 952
		18	0.299	13.370	20.592
		24	0.228	13.350	24.12

Working Environment Operating temperature: -40~75°C Storage temperature:-40~85°C

Relative humidity: 5%~95% (no condensation)

Power

Load

(W)

15.921

14.628

15.174

15.672

18.243

21.156

22.716

20.136

15.921

Start-up Consumption Consumption current of Full Mean of Full Peak

2

(W)

Load

(A)

Your Reliable Industrial Communication Expert

Shell: null

Physical Installation: embedded mounting

Characteristic Dimension (W x H x D): 85mm×14.7mm×138mm

Weight: 0.17kg

Authentication CE, FCC, RoHS

Warranty 3 years



Ordering Information

Available Models	2.4G/5G Dual-Band	Gigabit	Gigabit	Power
	Antenna Interface	SFP	Copper Port	Supply
IAP3500-2E-1GT1GS-LV	2	1	1	9~24VDC





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