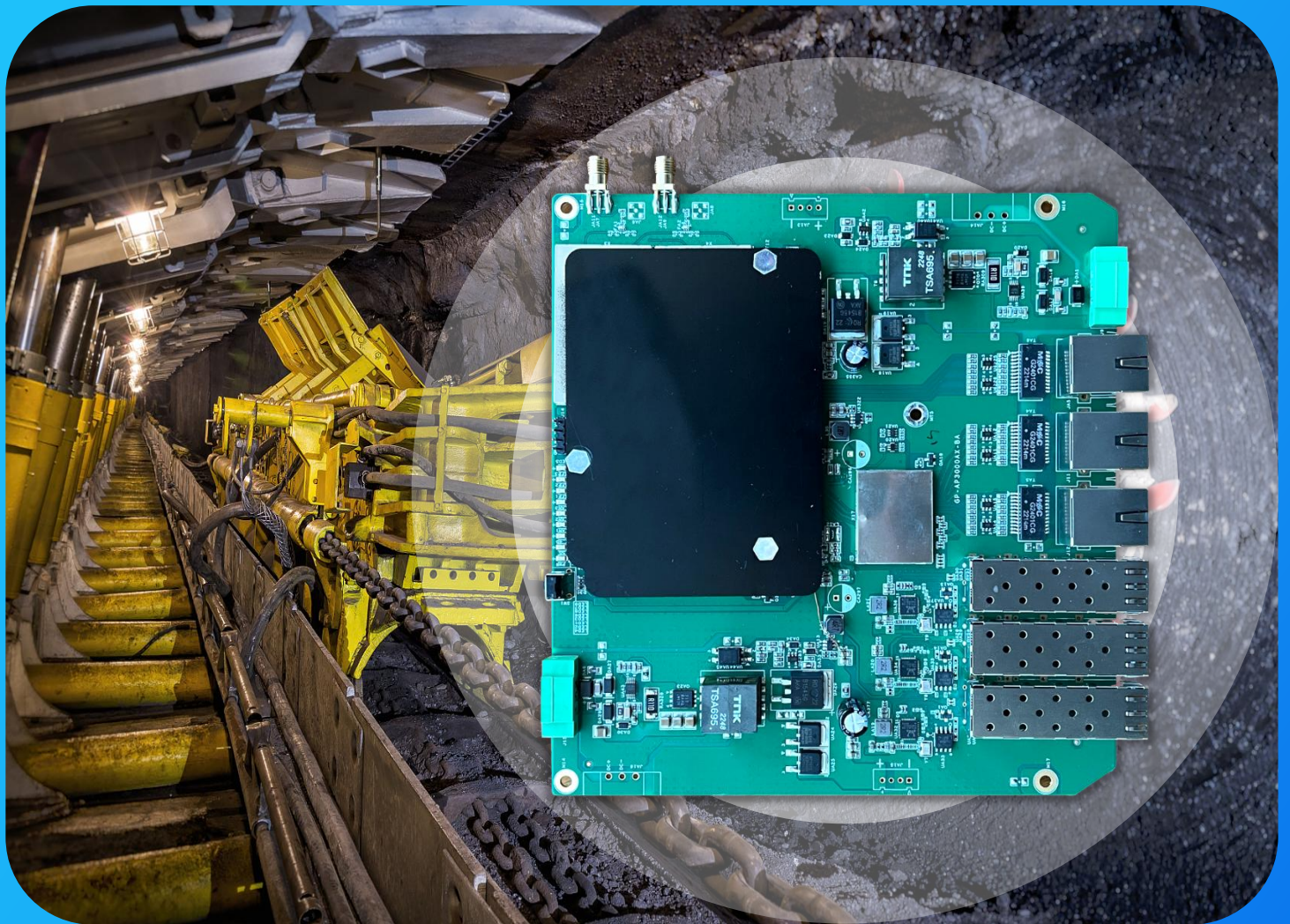




I.S Mining Wireless AP 2975Mbps Dual-Band

GP-AP3000AX-BA-PI Series



INDUSTRIAL NETWORK SOLUTION SPECIALIST
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Introduction

GP-AP3000AX-BA-PI Series is a high-bandwidth, high-speed Intrinsic Safety (I.S.) wireless access point. It utilizes the IEEE 802.11a/b/g/n/ac/ax standards, supporting dual-band operation at 2.4GHz and 5GHz with data rates up to 2975Mbps.

GP-AP3000AX-BA-PI Series designed with Qualcomm chipset, and it supports Gigabit Ethernet and Gigabit SFP. The access point features OFDMA, UL, MU-MIMO, and 1024QAM, providing low power consumption, strong concurrency, numerous standby users, strong penetration, and wider coverage advantages.

GP-AP3000AX-BA-PI Series has been specifically optimized for heat dissipation under high motherboard load conditions. It includes dedicated onboard components designed to resist surges and electromagnetic interference, enhancing the device's stability in harsh industrial environments. It is ideal for use in coal mines, mining sites, underground utility tunnels, and petrochemical plants.

Main Feature

- Intrinsic Safety (I.S.) Power-Protection Design
- Whole Power consumption \leq 25W
- Support 3*Gigabit RJ45 Ethernet Port + 3*Gigabit SFP Fiber Port
- Support 802.11 ax standard with 2-Stream(2400Mbps),whole speed up to 2975Mbps
- Support OFDMA (Orthogonal Frequency Division Multiple Access)
- Support 1024-QAM to increase capacity, reduce latency, and improve Wi-Fi efficiency
- Support 4 × 4 MU-MIMO
- Support BSS(Basic Service Set) Color
- Support TWT (Target Wake Time)
- Support IPv4/IPv6
- Support Open System, Shared Key, WPA, WPA-PSK, WPA2-Enterprise, WPA2-PSK
- Support Dual-DC12V Power Supply

Software Parameter

WLAN	Frequency Band	2.4GHz	5GHz
	Channel Bonding	40MHz	160MHz
	MU-MIMO	Support	Support
	OFDMA	Support	Support
	TWT	Support	Support
	2400Mbps(PHY)	NA	Support
	575Mbps(PHY)	Support	NA
	A-MPDU	Support	Support
	MLD	Support	Support
	MRC	Support	Support
	STBC	Support	Support
	LDPC	Support	Support
	MAX Virtual AP	Single Band-- Support 16 Virtual AP	
	Max Access Users	1024 (Influenced by Environment Fators)	
	Max Access Spend	2.4GHz: 575Mbps 5GHz: 2400Mbps	
	RTS/CTS	Support	
	CTS-to-self	Support	
	Hidden SSID	Support	
Terminal Aging/Heartbeat Detection	Support		
Working Mode	AP Mode	Bridge Mode(LAY-2) , Router Mode(LAY-3)	
	Client Mode	Client Mode& MAC Clone	
Roaming	Roaming Switch	Support 802.11k, 802.11v, 802.11r	
		LAY2/LAY3 Roaming	
RF	Load Balancing	Load balancing is supported based on the number of users and user traffic	
	5G Priority	Support	
	Automatic Channel Selection	Support	
	Automatic Power Regulation	Support	
	Intelligent Speed Select	Support	
	Time Fair Scheduling	Support	

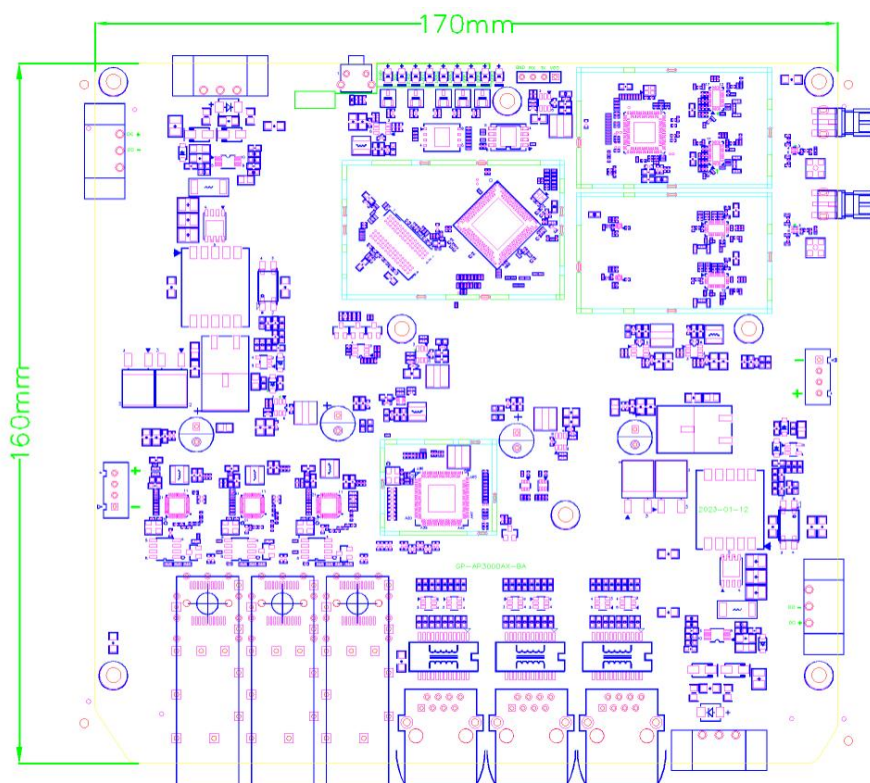
Security	Encryption	Support 64/128 bit WEP、Dynamic WEP、TKIP、CCMP encryption
	Authentication Method	Cooperate With AC Support WPA、WPA-PSK、WPA2- Enterprise、WPA2-PSK、WPA3、MAC address Verify、Web Verify、PPPoE Verification and etc Methods
	LAY2 Isolation of Wireless Users	Support
	wIDS	Support
AAA	RadiusClient	Support
	Authentication Server Multi-domain configuration	Support
	Authentication Server Backup	Support
LAY2/LAY3	IP Address	Static IP and DHCP dynamically obtain addresses
	IPv6	Support
	ACL	Support
	DHCP server	Support (Router Mode)
	NAT	Support (Router Mode)
Service Quality	WMM(802.11e)	Support
	Priority Mapping	Support
	QoS Policy Mapping	Support
	Bandwidth Managed	Support Bandwidth Speed Limitation based on SSID and Users
	Call Admission Control (CAC)	Support
Maintenance	Network Management	SNMPV1/V2c/V3、Trap、Telnet、FTP/TFTP、WEB

Hardware Parameter

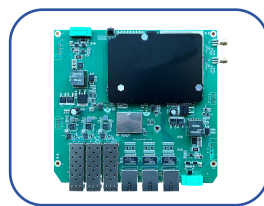
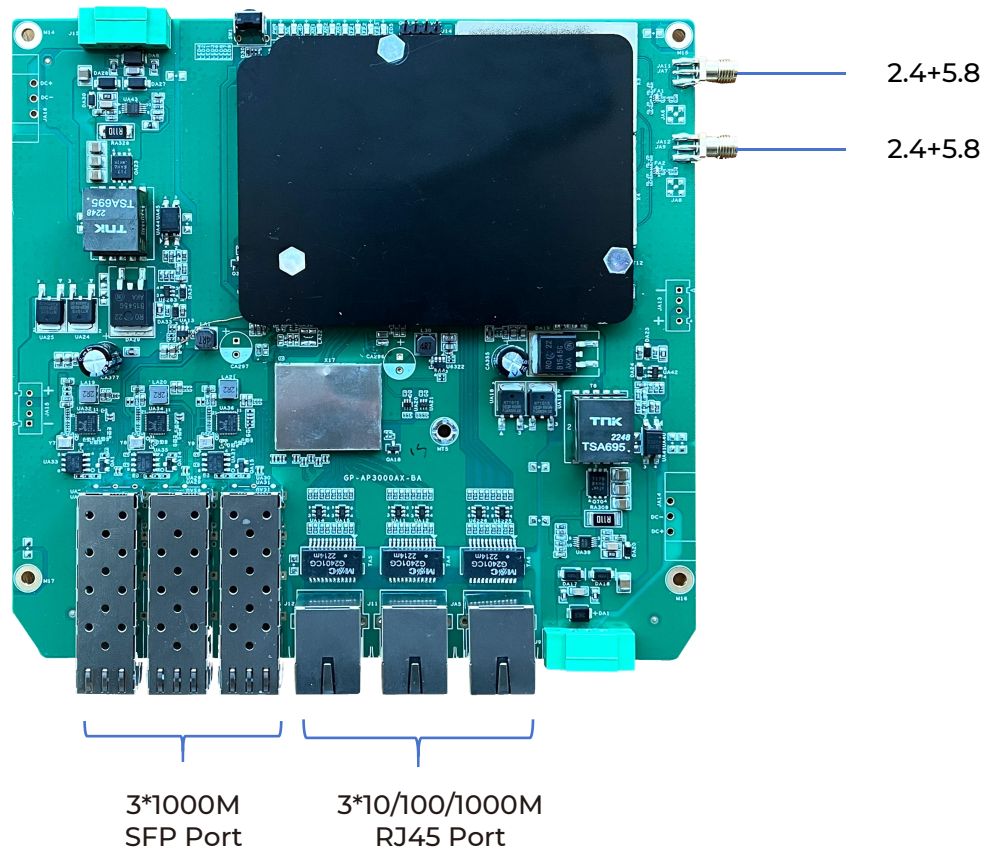
Size	160mm×170mm	
Port	Ethernet	3× 10/100/1000Base-T RJ45 Port
	Fiber	3× 1000Base-T SFP Port
	Power	2×3PIN (3.81) Power Port
	Antenna	2 × SMA or MMC (2.4G+5G Combined-Circuit Antenna Port)
Working Band	2.4G	802.11ax/n/g/b: 2.4GHz-2.483GHz (CHINA)
	5G	802.11 ax/ac/n/a: 5.150GHz-5.350GHz 5.725GHz-5.850GHz (CHINA)

Modulation Technology	OFDM : BPSK@6/9Mbps、 QPSK@12/18Mbps、 16-QAM@24Mbps、 64-QAM@48/54Mbps DSSS : DBPSK@1Mbps、 DQPSK@2Mbps、 CCK@5.5/11Mbps MIMO-OFDM (11n) : MCS 0-15 MIMO-OFDM (11ac) : MCS 0-9 MIMO-OFDM (11ax) : MCS 0-11
Modulation Method	11b: DSS:CCK@5.5/11Mbps,DQPSK@2Mbps,DBPSK@1Mbps 11a/g OFDM:64QAM@48/54Mbps,16QAM@24Mbps, QPSK@12/18Mbps,BPSK@6/9Mbps 11n: MIMO-OFDM:BPSK,QPSK,16QAM,64QAM 11ac/ac wave2: MIMO-OFDM:BPSK,QPSK,16QAM,64QAM,256QAM 11ax: MIMO-OFDM: BPSK,QPSK,16QAM,64QAM,256QAM,1024QAM
MAX Transmit Power	27dBm
Adjustable Granularity	1dBm
Operating Temperature	-40°C ~ 75°C
Storage Temperature	-40°C ~ 80°C
Operating Humidity	0%~95%(Non-condensing)
Power Supply	Dual-Power: DC12V (Range DC9V~32V)
Consumption(Client5.8G)	≤20W
MTBF	>250000H

Size Design



Appearance & Accessories



Device*1



Manual*1

Model Selection

Model	GP-AP3000AX-BA-PI	
Speed	2975M	
Omnidirectional Antenna	Optional	<input type="radio"/>
Directional Antenna	<input type="radio"/>	Optional
Feeder Extension Cable	Optional According to Project Requirements	

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