DATASHEET
AIR-AP690IX-V2

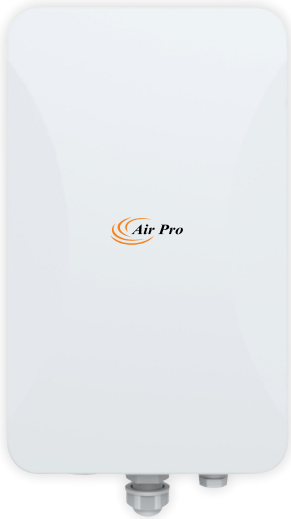
Air Pro®
Simple | Secure | Trusted

High Performance Dual-Band Outdoor Access Point

PRODUCT OVERVIEW

The AIR-AP690IX-Version2 is a rugged, high-performance outdoor wireless access point designed for seamless connectivity across wide-area environments. Supporting both 2.4 GHz and 5 GHz frequency bands, it utilizes advanced wireless technologies such as MU-MIMO (Multi-User Multiple-Input Multiple-Output) and OFDM (Orthogonal Frequency Division Multiplexing) to ensure stable, high-speed communication.

With data rates of up to 575 Mbps on the 2.4 GHz band and 2400 Mbps on the 5 GHz band, the device can efficiently serve up to 254 concurrent users. Its built-in omnidirectional antenna ensures broad and consistent coverage, making it ideal for deployment in outdoor settings such as campuses, parks, industrial sites, resorts, and public Wi-Fi zones.



802.11 b/g/n/ax

2975Mbps, (575+2400)
2×2 (2.4G) + 4×4 (5G)

Concurrent users 254

Internal Antenna
2.4G = 5dBi, 5G = 6dBi

2.5GE 802.3at PoE Input

Water & Dust Proof

Cloud Management

KEY FEATURES AND HIGHLIGHTS

High-level outdoor 802.1ax wireless access
The AIR-AP690IX-Version2 supports the 802.11ax standard and can operate in 2.4 GHz and 5 GHz both bands. It provides an access bandwidth up to 2975 Mbps, which can connect users up to 254 simultaneously.

Uplink Connection
The 2.5G WAN PoE port is used as the uplink interface, effectively overcoming traditional bandwidth limitations and ensuring high-speed data transmission.

Operating in a normal outdoor temperature range
Thanks to deliberate hardware design and the selection of dedicated components it can operate in a temperature range from -25°C to 55°C.

IP66 Anti-dust & water standard
It comply IP66 can be deployed in the harshest outdoor environment.

Good PoE compatibility
AIR-AP690IX-Version2 can work well with the third-part PoE switches that support 802.3at standard.

High-performance RF
The professional optimized design is employed for the RF module, integrated directional antenna which can greatly improve wireless coverage.

Cloud management
It can operate with the cloud platform seamlessly to provide a better cost-performance solution;

Multi-mode: fit, fat, bridge
It can work in fit, fat or bridge mode and can flexibly switch between these three modes according to network planning requirements.

PRODUCT SPECIFICATIONS

Hardware Specifications

Item	AIR-AP690IX-V2	
Dimensions(L*W*D) (mm)	304×181×88	
Working Frequency	2.4G : 802.11b/g/n/ax 5G : 802.11a/n/ac/ax	
Maximum Data Rate	2.4G : 575Mbps 5G : 2400Mbps	
Physical Port	1 * 10/100/1000/2500M Base-T PoE port for uplink 1 * 10/100/1000Base-T downlink port	
LED indicator	Yes	
Mounting mode	Pole-mounting	
PoE	802.3at	
Maximum power consumption	< 19W	
Antenna type	Internal Omni directional antenna	
Antenna gain	2.4G 5dBi, 5G 6dBi	
Transmit power	2.4G: 20dBm (Per Chain) 5G : 23dBm (Per Chain) (This is subject to each country's regulations)	
Transmit power adjustment granularity	1 dBm	
Working frequency band	802.11b/g/n/ax: 2.4 GHz to 2.483 GHz 802.11a/n/ac/ac wave 2/ax: 5.150~5.350GHz 5.725~5.850GHz	
Modulation technology	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：MIMO-OFDM: BPSK, QPSK, 16QAM, 64QAM, 256QAM 11ax: MIMO-OFDMA: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM	
Working/Storage temperature	-25°C to +55°C –40°C to +70°C	
Working/Storage RH	5% to 95% (non-condensing)	
Protection level	Ip66	
WLAN	Product positioning	Outdoor dual-frequency
	Working frequency band	2.4GHz and 5GHz
	Bandwidth performance	2975Mbps
	Virtual AP (BSSID)	32
	Concurrent user	254
	Number of spatial streams	2.4GHz:2, 5GHz:4
	Dynamic channel adjustment (DCA)	Yes
	Transmit power control (TPC)	Yes
	Blind area detection and repair	Yes
	SSID hiding	Yes
	RTS/CTS	Yes
	RF environment scanning	Yes
	Hybrid access	Yes
	Restriction on the number of access users	Yes
	Link integrity check	Yes
	Accessing control of terminals based on signal strength	Yes
	Forcing terminals to roam based on signal strength	Yes
	Intelligent control of terminals based on airtime fairness	Yes
	High-density application optimization	Yes
802.11ax	Space streams	2.4GHz:2, 5GHz:4
	Frequency band	2.4GHz + 5GHz
	80 MHz bundling	Yes
	1200Mbps（PHY）	Yes
	Frame aggregation (A-MPDU)	Yes
	Frame aggregation (A-MSDU)	Yes
	Maximum likelihood demodulation (MLD)	Yes
	Transmit beamforming (TxBF)	Yes
	Maximum ratio combining (MRC)	Yes
	Space-time block coding (STBC)	Yes
	Low-density parity-check code (LDPC)	Yes

PRODUCT SPECIFICATIONS

Hardware Specifications

Security	Encryption	64/128 WEP, WPA2/WPA3 PSK, WPA2/WPA3 Enterprise 802.1x, TKIP, and CCMP encryption
	802.11i,	Yes
	Portal authentication	Yes
	WAPI	Yes
	MAC address authentication	Yes
	LDAP authentication	Yes
	PEAP authentication	Yes
	WIDS/WIPS	Yes
	Real time spectrum guard	Yes
	Protection against DoS attacks	Anti-DoS for wireless management packets
	Forwarding security	Frame filtering, white list, static blacklist, and dynamic blacklist
	User isolation	AP L2 forwarding suppression Isolation between client
	Periodic SSID enabling and disabling	Yes
	Access control of free resources	Yes
	Wireless SAVI	Yes
	ACL	Access control of various data packets such as MAC, IPv4, and IPv6 packets
	Secure access control of APs	Secure access control of APs, such as MAC authentication, password authentication, or digital certificate authentication between an AP and an AC
	802.11W	Yes, encryption of management frames
Forwarding	IP address setting	Static IP address configuration or dynamic DHCP address allocation
	IPv6 forwarding	Yes
	IPv6 portal	Yes
	Local forwarding	Yes
	Multicast	IGMP snooping
	Roaming	Yes
	AP switching reference	Signal strength, bit error rate, RSSI, S/N, whether neighboring APs are normally operating, etc.
	WDS	Yes
QoS	WMM	Yes
	Priority mapping	Ethernet port 802.1P identification and marking Mapping from wireless priorities to wired priorities
	QoS policy mapping	Mapping of different SSIDs/VLANs to different QoS policies Mapping of data streams that match with different packet fields to different QoS policies
	L2-L4 packet filtering and flow classification	Yes: MAC, IPv4, and IPv6 packets
	Load balancing	Load balancing based on the number of users Load balancing based on user traffic Load balancing based on frequency bands
	Bandwidth limit	Bandwidth limit based on Aps Bandwidth limit based on SSIDs Bandwidth limit based on terminals Bandwidth limit based on specific data streams
	Call admission control (CAC)	CAC based on the number of users
	Power saving mode	Yes
	Automatic emergency mechanism of APs	Yes
	Intelligent identification of terminals	Yes
	Multicast enhancement	Multicast to unicast
Management	Network management	Centralized management through an AC; both fit and fat modes
	Mesh networking	Through central AP to manage the RE AP
	Maintenance mode	Both local and remote maintenance
	Log function	Local logs, Syslog, and log file export
	Alarm	Yes
	Fault detection	Yes
	Statistics	Yes
	Switching between the fat, fit and bridge modes	An AP working in fit mode can switch to the fat mode through a wireless AC; An AP working in fat mode can switch to the fit or bridge mode through a local control port or Telnet(web) An AP working in bridge mode can switch to the fit or fat mode through a local control port or Telnet(web)
	Remote probe analysis	Yes
	Watchdog	Yes
Value added service	Wi-Fi location	For Wi-Fi terminal and tag
	Wi-Fi probe	Yes
	Value added marketing	Support: various apps based on intelligent terminals, advertising push based on location, personalized push of portals
	Value added authentication	SMS, QR code, Voucher, Email
	Passenger flow analysis	Yes

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