Air Pro®

Simple | Secure | Trusted

High Performance Outdoor Wireless Access Point

PRODUCT OVERVIEW

AirPro AP690IX(ODU) is high performance outdoor wireless access point which can support 2.4 GHz and 5 GHz band, adopting technologies such as Multi-User Multiple-Input MultipleOutput (MU-MIMO) and orthogonal frequency division multiplexing (OFDM), providing a data transmission rate of at most 575 Mbps in 2.4GHz band and 1200Mbps in 5GHz band. It supportsup to 254 concurrent users. With integrated antenna inside, AP690IX(ODU) is widely used at outdoor WIFI coverage networks, such as campus, streets, rural area, resorts and scenic spots.

WIFI 802.11 a/b/g/n/ax	1775Mbps, 2*2 MIMO	Concurrent users 254	Internal Antenna
PoE Standard 802.3at PoE Input	**IP68** Water & Dust Proof	Cloud Management	SFP Long Distance Uplink

KEY FEATURES AND HIGHLIGHTS

High-level outdoor 802.1ax wireless access:
The AP690IX(ODU) supports the 802.11ax standard and can operate in 2.4 GHz and 5 GHz both bands. It provides an access bandwidth up to 1.775Gbps, which can connect users up to 254 simultaneously.

Fiber uplink for long-distance connection:
Fiber port used as uplink ports, which break through the limitations of the conventional copper port, the distance is no longer a bottleneck.

Operating in a wide temperature range:
Thanks to deliberate hardware design and the selection of dedicated components it can operate in a broad temperature range from-40°C to 65°C.

Highest IP68 Anti-dust & water standard:
AP690IX (ODU) comply IP68 can be deployed in the harshest outdoor environment.

Multiple antenna options:
AAP690IX (ODU) supports external antennal (omnidirectional, directional), the customer can make use accordingly.

Good PoE compatibility:
AP690IX (ODU) can work well with the third-party PoE switches that support 802.3at standard.

High-performance RF:
The professional optimized design is employed for the RF module of the AP690IX (ODU), integrated directional antenna supports 27 dB transmission power which can greatly improve wireless coverage.

Cloud management:
AP690IX (ODU) can operate with the AirPro cloud platform seamless to provide a better cost-performance solution.

Dual-mode fit & fat:
AP690IX (ODU) can work in fit or fat mode and can flexibly switch between the fit mode and the fat mode according to network planning requirements.

PRODUCT SPECIFICATIONS

Hardware Specifications

Item	AP690IX (ODU)	
Dimensions(L*W*D) (mm)	245 × 200 × 90	
Working Frequency	2.4G : 802.11b/g/n/ax	
	5G : 802.11a/n/ac/ax	
Maximum Data Rate	2.4G : 575Mbps	
	5G : 1200Mbps	
Physical Port	1 * 10/100/1000Base-T PoE port for uplink	
	1 * 1000M SFP fiber port	
PoE	802.3at	
Maximum power consumption	< 23.4W	
Antenna	Internal Antenna 2.4G 10dBi, 5G 10dBi	
Working frequency band	802.11a/n/ac: 5.150 GHz to 5.850 GHz	
	802.11b/g/n/ax: 2.4 GHz to 2.483 GHz	
	802.11a/n/ac/ax:	
	5.150 ~ 5.350GHz	
	5.47 ~ 5.725GHz	
	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	
Transmit power	2.4G: 27dBm	
	5G : 27dBm	
	(Note : final output power comply with deployment regulation might be different)	
Power adjustment granularity	1 dBm	
Working/Storage temperature	−40°C to + 65°C	
	−45°C to + 80°C	
Working/Storage RH	5% to 95% (non-condensing)	
Protection level	Ip68	
WLAN	Product positioning	Outdoor dual-frequency
	Working frequency band	2.4GHz and 5GHz
	Bandwidth performance	1775Mbps
	Virtual AP (BSSID)	32
	Concurrent user	254
	Number of spatial streams	2.4GHz:2, 5GHz:2
	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 enhancements	Space streams	2.4GHz:2, 5GHz:2
	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

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Hardware Specifications

Security	Encryption	64/128 WEP, WPA/WPA2/WPA3 Enterprise, TKIP, and CCMP encryption
	802.11i, 802.11r/k/v, Dynamic PSK (optional)	Yes
	Portal authentication/ Hotspot2.0 /Passpoint support	Yes
	WAPI	Yes
	MAC address authentication	Yes
	LDAP authentication	Yes
	PEAP authentication	Yes
	WIDS/WIPS	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

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Hardware Specifications

Management	*Network management*	*Centralized management through an AC; both fit and fat modes*
	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 and fit modes	*An AP working in fit mode can switch to the at mode through a wireless AC; An AP working in fat mode can switch to the fit mode through a local control port or Telnet.*
	Remote probe analysis	*Yes*
	Watchdog	*Yes*
Value added service	*Value added marketing*	*Support: various apps based on intelligent terminals, advertising push based on location, personalized push of portals*
	Value added authentication	*WeChat, SMS, QR code*
	Passenger flow analysis	*Yes*

Air Pro

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