DATASHEET AP690IX (ODU)

High Performance Outdoor Wireless Access Point

QUICK 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.





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FEATURES

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:

AP690EX(ODU) comply IP68 can be deployed in the harshest outdoor environment.

Good PoE compatibility:

AP690EX(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 AP690EX(ODU), integrated directional antenna supports 27 dB transmission power which can greatly improve wireless coverage.

Cloud management:

AP690EX(ODU can operate with the AirPro cloud platform seamless to provide a better cost-performance solution.



Dual-mode fit & fat:

AP690EX(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.

TECHNICAL SPECIFICATIONS

HARDWARE FEATURES			
Dimensions(L*W*D) (mm)	245 × 200 × 90		
Working Frequency 2.4G : 802.11b/g/n/ax			
training requercy	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	External Antenna		
Working frequency band	802.11a/n/ac: 5.150 GHz to 5.850 GHz		
working nequency band	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		
0,	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	1 dBm		
granularity			
Working/Storage	-40°C to + 65°C		
temperature	-45°C to + 80°C		
Working/Storage RH	5% to 95% (non-condensing)		
Protection level	IP68		
	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	
WLAN	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	

AP690IX (ODU)



	Space streams	2.4GHz:2, 5GHz:2
	Frequency band	2.4GHz + 5GHz
	80 MHz bundling	Yes
	1200Mbps (PHY)	Yes
	Frame aggregation (A-MPDU)	Yes
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802.11ax	Frame aggregation (A-MSDU)	Yes
enhancements	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
	Encryption	64/128 WEP, 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
	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
Security		Isolation between client
beeding	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
	IP address setting	Static IP address configuration or dynamic
		DHCP address allocation
	IDv6 forwarding	
	IPv6 forwarding	Yes
	IPv6 portal	Yes
Forwarding	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
	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
QoS	Load balancing	Load balancing based on the number of users
		Load balancing based on user traffic
		Load balancing based on frequency bands
		Bandwidth limit based on Aps
	Bandwidth limit	
	Bandwidth limit	
	Bandwidth limit	Bandwidth limit based on SSIDs
	Bandwidth limit	Bandwidth limit based on SSIDs Bandwidth limit based on terminals
	Bandwidth limit	Bandwidth limit based on SSIDs



	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
	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
Management	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 marketing	Support: various apps based on intelligent
Value added service		terminals, advertising push based on
		location, personalized push of portals
	Value added authentication	WeChat, SMS, QR code
	Passenger flow analysis	Yes



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