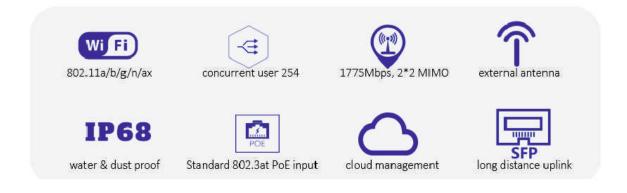


High Performance Outdoor Wireless Access Point

AP690EX (ODU)

## **Quick Overview**

AirPro AP690EX(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 Multiple-Output (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 supports up to 254 concurrent users. With external antenna, AP690EX(ODU) is widely used at outdoor WIFI coverage networks, such as campus, streets, rural area, resorts and scenic spots.



# Features

### High-level outdoor 802.1ax wireless access:

The AP690EX(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 simultaneousl.

## 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:

 ${\sf AP690EX}({\sf ODU})\, {\sf comply}\, {\sf IP68}\, {\sf can}\, {\sf be}\, {\sf deployed}\, {\sf in}\, {\sf the}\, {\sf harshest}\, {\sf outdoor}\, {\sf environment}.$ 

## Multiple antenna options:

AP690EX(ODU) supports external antennal (omnidirectional, directional), the customer can make use accordingly.

#### Model No. AP690EX (ODU)

#### 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.

#### Support WDS mode:

Support WDS mode under both fit/fat AP mode. Use 2.4GHz and 5GHz achieve a wireless bridging function.

#### **Cloud management:**

AP690EX(ODU can operate with the AirPro cloud platform seamless to provide a better costperformance 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			
	5G : 802.11a/n/ac/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	External Antenna			
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, DBPS	-		
	11a/g:OFDM:64QAM@48/54Mbps,16QAM@24Mb	ps, QPSK@12/18Mbps, BPSK@6/9Mbps		
	11n : MIMO-OFDM: BPSK, QPSK,16QAM,64QAM			
	11ac : MIMO-OFDM: BPSK, QPSK, 16QAM, 64QAM, 2			
11ax : MIMO-OFDMA: BPSK, QPSK,16QAM,64QAM,256QAM,102           Transmit power         2.4G: 27dBm		,256QAM,1024QAM		
Transmit power	5G : 27dBm			
	(Note : final output power comply with deployment re	aulation might be different)		
Power adjustment	1 dBm	gulation might be differently		
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		
802.11ax enhancements	Space streams	2.4GHz:2, 5GHz:2		
	Frequency band 80 MHz bundling	2.4GHz + 5GHz Yes		
	1200Mbps (PHY)	Yes		
	Frame aggregation (A-MPDU)	Yes		
	Frame aggregation (A-MSDU)	Yes		
	Maximum likelihood demodulation (MLD)	Yes		
	Transmit beamforming (TxBF)	Yes		
		Vee		
	Maximum ratio combining (MRC)	Yes		
		Yes Yes Yes		

Air Pro

#### **TECHNICAL SPECIFICATIONS**

Encryption         64/28 WEP, TKIP, and CCMP encryption           902.111         Yes           Portal authentication         Yes           WAPI         Yes           MAC address authentication         Yes           EVER Parthentication         Yes           Protection against DS attacks         Anti-DoS for wireless management packets           Forwarding security         Yes           UBS*/MIPS         Yes           Virolesion         Yes           Protection against DS attacks         Frame filtering, white list, static blacklat, and dynamic blacklat           Jeer isolation         AP 12 forwarding suppression           Loatation between cilent         Yes           Vireless SAVI         Yes           Wireless SAVI         Yes           ACL         Access control of APs           Secure access control of APs         Secure access configuration or dynamic DHCP address allocation           IP-6 forwarding         Yes           IP-6 forward	HARDWARE FEATURES		
Portal authentication         Yes           MAC address authentication         Yes           MAC address authentication         Yes           PEAP authentication         Yes           PEAP authentication         Yes           Protection against DoS attacks         Anti-DoS for wireless management packets           Forwarding security         Frame filtering, white list, static blacklist, and dynamic blacklist           ad dynamic blacklist         and dynamic blacklist           Access control of frame resources         Yes           Wireless SAVI         Yes           Security         Yes           Periodic SSID enabling and disabiling         Access control of APs, such as MAC           Access control of Frame resources         Yes           Wireless SAVI         Yes           Secure access control of APs         Secure access control of APs, such as MAC           authentication, password authentication, or adjust certificate authentication, password		Encryption	64/128 WEP, TKIP, and CCMP encryption
WAPI         Yes           MAC address authentication         Yes           LDAP authentication         Yes           UDAP authentication         Yes           PEAP suthentication         Yes           Protection against DoS attacks         Ant-DoS for wireless management packets           Protection against DoS attacks         Ant-DoS for wireless management packets           Forwarding security         Frame filtering, white list, static blacklist, and dynamic blacklist           User isolation         Kall Static S		802.11i	Yes
MAC address authentication         Yes           LDAP authentication         Yes           PEAP authentication         Yes           PEAP authentication         Yes           Protection against DoS attacks         Anti-DoS for wireless management packets           Forwarding security         Frame filtering, while list, static blacklist, and dynamic blacklist           and dynamic blacklist         Periodic SSID enabling and disabiling           Access control of free resources         Yes           Wireless SAVI         Yes           ACL         as MAC, IPv4, and IPv6 packets           Secure access control of APs         Secure access control of various data packets such as MAC authentication, or digital certificate authentication, or digital certificate authentication or dynamic           PP address setting         Diverse constrol of dynamic           PP address setting         Diverse constrol of dynamic           IPv6 portal         Yes           Portal         Yes           IPv6 portal         Yes           AP end in APS are normally operating, etc.         Yes           Priority mapping         Ethernet port B02.1P identification and marking           Multicast         IGMP snooping           Roaming         Yes           Priority mapping         Ethernet port B02.1P identification and		Portal authentication	Yes
LDAP subnetication         Yes           PEAP subnetication         Yes           WIDS/WIPS         Yes           Protection against DoS attacks         Anti-DoS for virieless management packets           Provarding security         Frame filtering, white list, static blacklist, and dynamic blacklist           User isolation         AP L2 forwarding suppression           Virieless SAI         AP L2 forwarding suppression           Periodic SSID enabling and disabling         Yes           Access control of free resources         Yes           Access control of free resources         Yes           Access control of APs         Secure access control of APs, such as MAC           Secure access control of APs         Secure access control of APs, such as MAC           Access control of APs         Secure access control of APs, such as MAC           Secure access control of APs         Secure access control of APs, such as MAC           Secure access control of APs         Secure access control of APs           Secure access control of APs         Secure access control of APs, such as MAC           Prive forwarding         Yes           IPv6 forwarding         Yes           Provarding Wes         Secure access control of APs, such as MAC           AP wortching reference         Yes           AP wortching re		WAPI	Yes
PEAP authentication         Yes           WIDS/WIPS         Yes           Protection against DoS attacks         Anti-DoS for wireless management packets           Forwarding security         Frame fittering, white list, static blacklist, and dynamic blacklist           User isolation         AP L2 forwarding suppresion           Access control of free resources         Yes           Access control of free resources         Yes           Access control of APs         Secure access control of APs, such as MAC           Secure access control of APs         Secure access control of APs, such as MAC           Boz:IW         Yes           Forwarding         Predores setting           IP-6 forwarding         Yes           I		MAC address authentication	Yes
WDS/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         Isolation           Periodic SSID enabling and disabiling         Yes           Accease control of free resources         Yes           Wireless SAVI         Yes           ACL         Secure access control of APs           Secure access control of APs         Secure access control of APs, such as MAC           Secure access control of APs         Secure access configuration or dynamic           Orderess acting         Static IP address configuration or dynamic           Profecting         Static IP address configuration or dynamic           DHCP address acting         Yes           Forwarding         Yes           Local forwarding         Yes           Profectal         Yes           Multicast         IGMP sooping           Reaming         Yes           Priority mapping         Yes           Priority mapping         Ethernet port 802.1P identification and marking           Mapping of different port 802.1P identification and marking         Mapping of different QS policies           GoS policy mapping         Mapp		LDAP authentication	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 of free resources         Yes           Access control of free resources         Yes           ACL         Access control of APs           Secure access control of APs         Secure access control of APs, such as MAC           ACL         authentication, password authentication, or digital certificate authentication, password authentincation, password authentication, password authentication, pass			
Forwarding security         Frame filtering, white list, static blacklist, and dynamic blacklist           User isolation         AP L2 forwarding suppression Isolation between client           Periodic SSID enabling and disabiling Access control of free resources         Yes           Wireless SAVI         Yes           ACL         Access control of APs, Sacure access control of APs           Secure access control of APs         Secure access control of APs, such as MAC authentication, password authentication between an AP and an AC           802.11W         Yes, entryption of management frames           Forwarding         Static IP address configuration or dynamic DHCP address allocation           Prof forwarding         Yes           IPs dorters atoming         Yes           IPs dorters atoming         Yes           Forwarding         Yes           IPs dorters atoming         Yes           IPs dorters atoming         Yes           IPs dorters atoming         Yes           Koaming         Yes           VDS         Yes           VDS         Yes           VDS         Yes           QoS policy mapping         Mapping form wireless priorities to wired priorities           QoS policy mapping         Call admission control (CAC)           QoS policy mapping <t< td=""><td></td><td></td><td></td></t<>			
Security         and dynamic blacklist           Security         Periodic SSID enabling and disabling Access control of free resources         Yes           Access control of free resources         Yes           Wireless SAVI         Access control of various data packets such as MAC, IPA4, and IPA6 packets           Secure access control of APs         Secure access control of APs, such as MAC authentication, password authentication, or digital certificate authentication of management frames           B2.1W         Yes, encryption of management frames           Forwarding         IP address setting           IP address setting         Static IP address configuration or dynamic DHCP address allocation           IPv6 forwarding         Yes           VDS         Yes           WDM         Yes           VDS         Yes           QoS policy mapping         Ethernet port 802.1P identification and marking           Mapping of diat streams that match with different QoS policies         Mapping of diat streams that match with different QoS policies           GoS         L2-L4 packet filtering and flow classification Load balancing based on		-	
Security         Isolation between client           Periodic SSD enabling and disabling Access control of free resources Wireless SAVI         Yes           ACL         Access control of various data packets such as MAC, IPA, and IPA6 packets           Secure access control of APs         Secure access control of APs           Secure access control of APs         Secure access control of APs           B02.1W         Yes, encrystion of management frames           IPa ddress setting         IPa ddress auton           IPa ddress setting         Yes           IPv6 forwarding         Yes           WMM         Yes           VDS         Yes           VDS         Yes           OoS policy mapping         Mapping of different SSIDs/VLANs to different QoS policies           IAP switching reference         Yes           VDS         Yes           VDS         Yes           VDS         Yes           VDS <t< td=""><td></td><td>Forwarding security</td><td></td></t<>		Forwarding security	
Periodic SSID enabling and disabling     Yes       Access control of free resources     Yes       Wireless SAVI     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 display (Cold convarding     Yes       Forwarding     Yes     Yes       Number     Yes     Yes       WDS     Yes     Yes       WMM     Yes     Yes       QoS policy mapping     Ethernet proto Policies       QoS policy mapping     L2-L4 packet filtering and flow classification Lad balancing based on the number of users       Load balancing     Lad balancing based on the number of users       Load balancing     Call admission control (		User isolation	AP L2 forwarding suppression
Access control of free resources     Yes       Wireless SAVI     Yes       ACL     Access control of various data packets such as MAC, IPV4, and IPV5 packets       Secure access control of APs     Secure access control of APs, such as MAC authentication, password authentication, or digital certificate authentication, password authentication, or digital certificate authentication between an AP and an AC       802.11W     Yes, encryption of management frames       IP address setting     IP address setting       IP of forwarding     Yes       IPv6 forwarding     Yes       IPv6 portal     Yes       Local forwarding,     Yes       Multicast     IGMP snooping       Reaming     Yes       WDS     Yes       WDS     Yes       WMM     Yes       Priority mapping     Ethernet port 802.1P identification and marking       Mapping of data streems that match with different QoS policies     Mapping of data streems that match with different packets fields to different QoS policies       QoS     Local balancing     Yes: MAC, IPv4, and IPv6 packets       GoS     Laceket filtering and flow classification     Yes: MAC, IPv4, and IPv6 packets       Load balancing     Cal admission control (CAC)     CAC based on the number of users       Load balancing based on the number of users     Bandwidth limit based on specific data streams       Bandwidth limit </td <td>Security</td> <td></td> <td></td>	Security		
Wireless SAVI     Yes       ACL     ACcess control of APs       Secure access control of APs     Secure access control of APs, such as MAC, IPv4, and IPv6 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 password authentication of APs, such as MAC       802.11W     Yes, encryption of management frames       IP address setting     Static IP address configuration or dynamic DHCP address allocation       IPv6 forwarding     Yes       IPv6 portal     Yes       Local forwarding     Yes       Multicast     IGMP snooping       Raaming     Yes       MWM     Yes       VDS     Yes       WDS     Yes       WMM     Yes       Priority mapping     Ethernet port 802.1P identification and marking       Mapping of thermet SSIDs/ULNs to different OSS     Mapping of data streams that match with different OS policies       GoS     L2-L4 packet filtering and flow classification     Yes       Load balancing     Vas: MAC, IPv4, and IPv6 packets       Load balancing     Lada balancing based on the number of users       Load balancing     Lada balancing based on the number of users       Load balancing     Call admission control (CAC)       QoS policy mapping     Ethernet port Bus			
ACL       Access control of various data packets such as MAC, IP-VA, and IPV5 packets         Secure access control of APs       Secure access control of APs, such as MAC         Book       Book         Vest       Vest excess control of APs, such as MAC         Book       Book         Vest       Vest excess control of APs, such as MAC         Book       Book         Vest       Vest excess control of APs         Book       IP address setting         Vest excess       Vest excess control of APs         Book       IP address setting         IP address setting       Vest excess control of APs         IP address setting       Vest excess control of APs         Forwarding       Vest         IP of portal       Vest         Local forwarding       Yes         Multicast       IGMP snooping         Rearning       Yes         AP switching reference       Signal strength, bit error rate, RSSI, S/N, whether neighboring APs are normally operating, etc.         WDS       Yes         Priority mapping       Ethernet port 802.1P identification and marking         Mapping of data streams that match with different 02S policies       Mapping of data streams that match with different 02S policies         QoS       Load balancing			
GoS     as MAC, IPv4, and IPv6 pockets       Secure access control of APs     Secure access control of APs, such as MAC       Secure access control of APs     Secure access control of APs, such as MAC       Secure access control of APs     Aps, such as MAC       Secure access control of APs     Aps, such as MAC       Secure access control of APs     Aps, such as MAC       Secure access control of APs     Aps, such as MAC       Secure access control of APs     Aps, such as MAC       Secure access control of APs     Aps, such as MAC       Secure access control of APs     Aps, such as MAC       Secure access control of APs     Aps, such as MAC       Secure access control of APs     Secure access control of APs, such as MAC       Secure access control of APs     Secure access control of APs, such as MAC       Secure access control of APs     Secure access control of APs, such as MAC       Secure access control of APs     Secure access control of APs       Secure access control of APs     Secure access configuration or dynamic       Decide of the address configuration or dynamic     Secure access allocation       Prioriting     Uticast     Icocel forwarding       Woth     Yes     Secure access as control of APs       Priority mapping     With M     Yes       QoS policy mapping     Mapping form wireless priorities to wired priorities			
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           Forwarding         Yes           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           VDS         Yes           QoS policy mapping         Etherne to SIDs/VLANs to different QoS policies           L2-L4 packet filtering and flow classification         Yes: MAC, IPv4, and IPv6 packets           Load balancing         Load balancing based on user traffic Load balancing based on user straffic Load balancing based on ser straffic Load balancing based on the number of users Load balancing base		ACL	•
QoS         authentication, password authentication, or digital cardinate authentication between an AP and an AC           IP address setting         IP address setting           IP address setting         DHCP address allocation           IPv6 forwarding         Yes           IPv6 forwarding         Yes           IV call forwarding         Yes           Multicast         IGMP snooping           Reaming         Yes           AP switching reference         Signal strength, bit error rate, RSSI, S/N, whether neighboring APs are normally operating, etc.           VDS         Yes           Priority mapping         Ethernet port 802.1P identification and marking           Mapping from wireless priorities to wired priorities         Mapping from wireless priorities to wired priorities           QoS policy mapping         L2-14 packet filtering and flow classification         Yes: Mapping of data streams that match with different QSS policies           QoS         L2-14 packet filtering and flow classification         Yes: Mapping based on user traffic Load balancing based on user traffic Load balancing based on user traffic Bandwidth limit based on SSIDs Bandwidth limit based on SSIDs Bandwidth limit based on specific data streams           Call admission control (CAC)         CAC based on the number of users Power saving mode           Call admission control (CAC)         CAC based on the number of users Intelligent identification of terminals			
QoS       IP address setting       digital certificate authentication between an AP and an AC         Forwarding       Yes, encryption of management frames         IP address setting       Static IP address configuration or dynamic DHCP address allocation         IPv6 portal       Yes         Local forwarding       Yes         Powerding       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         Priority mapping       Ethernet port 802.1P identification and marking         Mapping of different SDDs/VLANs to different QOS policies       Mapping of different SDDs/VLANs to different QOS policies         QoS       L2-L4 packet filtering and flow classification       Yes: Load balancing based on the number of users Load balancing based on the number of users Load balancing based on seruminals         Bandwidth limit       Bandwidth limit based on SDDs       Bandwidth limit based on specific data streams         Call admission control (CAC)       CAC based on the number of users Load balancing based on specific data streams         Call admission control (CAC)       Yes       Yes         Power saving mode       Yes       Yes         Automatic emergency mechanism of APs		Secure access control of APs	
AP and an AC Ves, encryption of management frames           IP address setting         Static IP address configuration or dynamic DHCP address configuration or dynamic DHCP address allocation           Forwarding         Yes           IPv6 forwarding         Yes           Multicast         IGMP snopping           Roaming         Yes           AP switching reference         Signal strength, bit error rate, RSSI, S/N, whether neighboring APs are normally operating, etc.           WDS         Yes           WMM         Yes           QoS policy mapping         Ethernet port 802.1P identification and marking           QoS policy mapping         Mapping of different SSIDs/VLANs to different QoS policies           QoS         L2-L4 packet filtering and flow classification           Load balancing         Load balancing based on the number of users Load balancing based on the number of users           Bandwidth limit         Bandwidth limit based on APs Bandwidth limit based on APs Bandwidth limit based on APs Bandwidth limit based on SIDs Bandwidth limit based on SIDs Bandwidth limit based on SIDs Bandwidth limit based on specific data streams           Call admission control (CAC)         CAC based on the number of users Power saving mode           Power saving mode         Yes           Automatic emergency mechanism of APs Intelligent identification of terminals         Yes <td></td> <td></td> <td></td>			
B02.11W         Yes, encryption of management frames           IP address setting         Static IP address configuration or dynamic DHCP address allocation           IPv6 forwarding         Yes           IPv6 forwarding         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           Priority mapping         Ethernet port 802.1P identification and marking           Mapping from wireless priorities to wired priorities         Mapping of different SSIDs/VLANs to different QoS policies           QoS         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 the rumber of users           Bandwidth limit         Bandwidth limit based on APs Bandwidth limit based on sSIDs           Bandwidth limit         Bandwidth limit based on specific data streams           Call admission control (CAC)         CAC based on the number of users           Power saving mode         Yes           Call admission control (CAC)         CAC based on the number of users           Power saving mode         Yes			
IP address setting         Static IP address configuration or dynamic DHCP address allocation           Forwarding         Yes           Local forwarding         Yes           Multicast         IGMP snopping           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           QoS policy mapping         Mapping of different SSIDs/VLANs to different QoS policies           Load balancing         Load balancing based on the number of users           QoS         Load balancing         Load balancing based on the number of users           Gandwidth limit         Bandwidth limit based on SSIDs         Bandwidth limit based on terminals           Bandwidth limit based on terminals         Bandwidth limit based on terminals         Bandwidth limit based on terminals		200 11/1/	
Porwarding     DHCP address allocation       IPv6 forwarding     Yes       IPv6 portal     Yes       Local forwarding     Yes       Multicast     IGMVP snooping       Roaming     Yes       AP switching reference     Signal strength, bit error rate, RSSI, S/N, whether neighboring APs are normally operating, etc.       WDS     Yes       WDS     Yes       Priority mapping     Ethernet port 802.1P identification and marking       Mapping of different SSIDs/VLANs to different QoS policies     Mapping of different SSIDs/VLANs to different QoS policies       QoS     L2-L4 packet filtering and flow classification     Yes: MAC, IPV4, and IPV6 packets       Load balancing     Load balancing based on user traffic       Load balancing     Load balancing based on supertification and streams       GoI admission control (CAC)     CAC based on the number of users       Power saving mode     Yes       Call admission control (CAC)     CAC based on the number of users       Power saving mode     Yes       Numatic emergency mechanism of APs     Yes       Intelligent identification of terminals     Yes			
Powerding       Yes         Forwarding       Yes         IPv6 portal       Yes         Local forwarding       Yes         Multicast       IGMP snooping         Rearning       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 form wireless priorities to wired priorities       Mapping of different SSIDs/VLANs to different QoS policies         QoS       L2-L4 packet filtering and flow classification       Yes: MAC, IPv4, and IPv6 packets         Load balancing       Load balancing based on trequency bands         Bandwidth limit       Bandwidth limit based on SBDs         Bandwidth limit       Bandwidth limit based on SBDs         Bandwidth limit       Bandwidth limit based on SBDs         Bandwidth limit       Bandwidth limit based on specific data streams         Call admission control (CAC)       CAC based on the number of users         Power saving mode       Yes         Intelligent identification of terminals       Yes		IP address setting	- ,
Forwarding     IPv6 portal     Yes       Local forwarding     Yes       Multicast     IGMP snooping       Rearing     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     Mapping of different SSIDs/VLANs to different QoS policies       QoS policy mapping     Mapping of data streams that match with different packet fileds to different QoS policies       L2-L4 packet filtering and flow classification     Lead balancing based on the number of users Load balancing based on serue traffic Load balancing based on serue bandwidth limit based on SSIDs Bandwidth limit based on SSIDs Bandwidth limit based on serue straffic Load balancing based on the number of users Fower saving mode       Call admission control (CAC)     CAC based on the number of users Fower saving mode       Power saving mode     Yes       Intelligent identification of terminals     Yes		IPv6 forwarding	
ForwardingLocal forwardingYesMulticastIGMP snoopingRoamingYesAP switching referenceSignal strength, bit error rate, RSSI, S/N, whether neighboring APs are normally operating, etc.WDSYesWMMYesPriority mappingEthernet port 802.1P identification and marking Mapping from wireless priorities to wired prioritiesQoSQoS policy mappingMapping of different SSIDs/VLANs to different QoS policies Mapping of data streams that match with different packet fields to different QoS policiesQoSL2-L4 packet filtering and flow classification L2-L4 packet filtering and flow classification Bandwidth limit based on specific data streamsQoSCall admission control (CAC) Power saving mode Automatic emergency mechanism of APs Intelligent identification of terminals YesYesCall admission control (CAC) Power saving modeYesYesIntelligent identification of terminals YesYes			
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 of different SSIDs/VLANs to different QoS policies       Mapping of different SSIDs/VLANs to different QoS policies         QoS       L2-L4 packet filtering and flow classification       Yes: MAC, IPv4, and IPv6 packets         Load balancing       Load balancing based on the number of users         Bandwidth limit       Bandwidth limit based on SSIDs         Bandwidth limit       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	Forwarding		
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 of different SSIDs/VLANs to different QoS policies       Mapping of different SSIDs/VLANs to different QoS policies         QoS       L2-L4 packet filtering and flow classification       Yes: MAC, IPv4, and IPv6 packets         Load balancing       Load balancing based on the number of users         Bandwidth limit       Bandwidth limit based on APs         Bandwidth limit       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	1 of Warding		
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       Mapping form wireless priorities to wired priorities         QoS policy mapping       Mapping of different SSIDs/VLANs 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         Bandwidth limit       Bandwidth limit based on SSIDs         Bandwidth limit       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			
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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			• · ,
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Power saving modeYesAutomatic emergency mechanism of APsYesIntelligent identification of terminalsYes		Call admission control (CAC)	
Automatic emergency mechanism of APsYesIntelligent identification of terminalsYes			
Intelligent identification of terminals Yes		-	



#### Model No. AP690EX (ODU)

#### **TECHNICAL SPECIFICATIONS**

HARDWARE FEATURES	S	
	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
		fat 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
		terminals, advertising push based on
Value added service		location, personalized push of portals
	Value added authentication	WeChat, SMS, QR code
	Passenger flow analysis	Yes





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