SUNDRAY

X-LINK SERIES

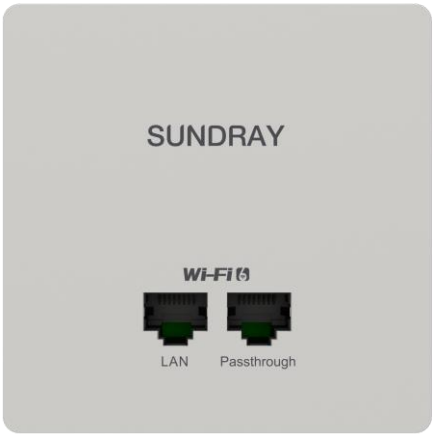
XAP-6210P Datasheet

http://www.sundray.com

1 Product Overview

SUNDRAY XAP-6210P is a in-wall Wi-Fi6 access point specially designed for hotels, dorms, offices, and wards. It has 2x2 MIMO antenna embedded, complies with the 802.11b/g/n/ac/ac wave2 protocol, and provides a maximum wireless access rate of 1775Mbps. The dimensions of the XAP-6210P comply with standard 86 switch panels. XAP-6210P can be installed on any 86 switch panels without damaging wall decorations and this reduces the deployment costs remarkably. In cooperation with the SUNDRAY XMG series controllers, XAP-6210P brings unrivaled quick and secure access experience to users.

XAP-6210P integrates Ethernet ports for wire connection, The product is aesthetically designed and can be conveniently deployed. It is the best choice for wireless network construction in environments like hotels.



SUNDRAY XAP-6210P

Top-speed Wireless Experience

Wi-Fi 6 high-speed access

SUNDRAY XAP-6210P series products comply with the new-generation 802.11ax standard and are embedded with an intelligent antenna matrix. The 2.4 GHz RF provides a transmission rate high up to 574Mbps, the 5 GHz RF provides a transmission rate high up to 1201Mbps, and the system transmission rate can reach 1.775Gbps, thereby providing high-performance wireless access services in terms of coverage scope, access density and operation stability.

Gigabit uplink

A 10/100/1000Base-T Ethernet port is used as the uplink port and a Gigabit port is used for uplink, breaking the restriction of traditional 100M transmission rate. The wired port is no longer the bottleneck of the wireless access rate.

QoS guarantee

SUNDRAY XAP-6210P supports different QoS levels. It supports air interface resource management based on applications, SSIDs or STAs to ensure that air interfaces are appropriately allocated and that the data of important SSIDs and applications is transmitted in preference. Transmission priorities can be defined for different service data through 802.11e/WMM. This ensures differentiated QoS levels.

Seamless roaming for L2 and L3

SUNDRAY XAP-6210P works with SUNDRAY wireless controller to implement seamless roaming for L2 and L3. When a wireless user roams, the IP address and authentication status remain unchanged. The terminal viscosity prevention function is provided to intelligently guide an STA to the optimal AP, increasing the roaming speed.

Airtime fairness

Terminal dragging prevention involves enabling terminals with different negotiated rates to occupy the identical wireless channel time by using the time fairness algorithm. This avoids problems of low wireless access speed, high delay and low network performance caused by low access rates of some terminals.

Intelligent load balancing

In the case of high-density wireless users, SUNDRAY XAP-6210P works with SUNDRAY wireless controller to implement intelligent load balancing based on the user quantity, traffic, and frequency band for the purpose of improving the bandwidth usage, thereby ensuring high wireless access speed for users. Frequency band-based load balancing enables 2.4/5 GHz dual-frequency terminals to access the 5 GHz frequency band in preference.

Intelligent RF to reduce wireless interference in an all-round way

The work channel and transmit power of the wireless access point are adjusted automatically and interference from the surrounding environment is detected in real time to reduce radio interference in an all-round way and to improve the overall service quality of the wireless network.

All-Round Security Protection

Multiple easy-to-use and secure authentication modes

Multiple flexible, easy-to-use and secure user authentication modes are available. 802.1x, portal, SMS, WeChat, and QR code authentication modes are provided with the support of SUNDRAY wireless controller to meet network deployment requirements in environments including enterprises, schools, shopping malls, hotels, and financial organizations.

All-round wireless security protection

With the support of SUNDRAY wireless controller, XAP-6210P provides a wide range of wireless security protection functions including ARP spoofing prevention, and DoS attack prevention, constructing a truly secure and reliable wireless network for users.

Timed turning off of RF for network security and environment protection

RF can be turned off and on based on time periods. The wireless network can be automatically turned off at nights and weekends to prevent malicious users from intruding the network and to reduce energy consumption of the equipment.

Flexible Network Deployment

Convenient deployment

XAP-6210P adopts the standard 86 design, in this way, the original network is retained, lowering the deployment costs significantly and shortening the construction period.

Full signal coverage

XAP-6210P is deployed on the inside wall of a room and the entire room is covered by wireless signals. This avoids problems of poor network signal and network unavailability in the case that a ceiling-mounted AP is deployed in the corridor, which deteriorates the signal when the signal penetrates through the wall of the room or rest room.
After the panel XAP-6210P is deployed, full signal coverage is ensured at any location of the room, providing unprecedented wireless network access experience for users.

Access via network cable

XAP-6210P integrates Ethernet ports for wired terminals and phones. It is the best choice for wireless network construction in environments like hotels.

Power supply via PoE

XAP-6210P supports 802.3af PoE remote power supply. Power supply and data transmission can be implemented via the original network cable. In addition to convenient deployment, strong current threats can be avoided. In other words, the equipment is protected against damage caused by burst over-high voltage or unstable voltage.

Data forwarding

With the bridge mode forwarding technology, XAP-6210P can directly forward data that features high real-time transmission requirements, delay sensitivity, and large amount over the wired network without passing the wireless controller. This alleviates the traffic load of the wireless controller significantly and breaks the traffic restrictions of the wireless controller.

Virtual AP technology

A maximum of 32 ESSIDs can be provided by using the virtual AP technology. Different SSIDs use different authentication modes and have different network access permission. The SSIDs are isolated from each other. L2 isolation can be implemented for terminals that use the same SSID on a subnet or VLAN to ensure user data security.

SSID

An SSID with a maximum of 32 characters can be specified. An SSID can also contain both Chinese and English characters. Individualized SSIDs are available for shopping malls or enterprises to improve discrimination.

3 Technical Specifications

Hardware Specifications

Product Specifications of SUNDRAY XAP-6210P	
Item	**Description**
Model	XAP-6210P
Weight	0.25kg
Dimensions (excluding antenna interfaces and accessories)	86 mm x 86mm x 14 mm
Ethernet port	Rear: 1*1000Mpbs uplink ports, 1 * passthrough port Front: 2* 10/100/1000Base-T Ethernet port, 1*1000Mbps LAN port and 1 * passthrough port
PoE	802.3af / 802.3at power supply supported
Transmit power	≤ 20 dBm
Power adjustment granularity	1 dBm
Power range	1 dBm to the value specified by national regulations
Power consumption	< 10W
Antenna	2*2MIMO embedded antenna
Reset / restore factory settings	Support
Operating/storage temperature	0ºC to + 40ºC or - 40ºC to + 70ºC
Operating/storage humidity	10% - 90% (non - condensing)/5% - 95% (non - condensing)
Protection level	IP 41
MTBF	> 250000 H

Software Specifications

Item		Description
Model		XAP-6210P
RF	MIMO	2*2:2
	Maximum transmission speed of a single frequency	2.4 G: 574 Mbps 5 G: 1201 Mbps
	Operating frequency band	802.11ax/ac /n/a: 5.725-5.850 GHz, 5.15-5.35 GHz (China) 802.11ax/b/g/n: 2.4-2.483GHz (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 : MCS 0-15 MIMO-OFDM (11ac): MCS 0-9 MIMO-OFDMA (11ax):MCS 0-11
	Channel rate	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
	Channel quantity	802.11a, 802.11n, 802.11ac, 802.11ax (compatible with 802.11a): 5 channels 802.11b, 802.11g, 802.11n, 802.11ax (compatible with 802.11b / g mode): 13 channels
	Manual and automatic channel adjustment	Support
	Automatic power adjustment	Support
	Manual power adjustment	The AP supports manual power adjustment with an adjustment granularity of 1 dBm. The power scope is from 1 dBm to the value specified by national regulations.
	Timed turning on or off of RF	RF can be turned on or off based on the specified time period.
	Coverage black hole detection and compensation	Support

3 Technical Specifications

Item		Description
WLAN function	Maximum number of connected users	256 (maximum number of connected users of a single RF: 128)
	Connected user quantity restriction	Support
	Virtual AP	32
	Chinese SSID	Support
	SSID hiding	Support
	Wireless relay/bridge	Point-to-point and point-to-multipoint supported
	User-, traffic-, and frequency band-based intelligent load balancing	Support
	Bandwidth restriction	STA-, SSID-, or AP-based rate limiting is supported.
	STA function	Abnormal STA disconnection detection, STA aging detection, and STA statistic and status query are support
	Link integrity detection	Support
Security authentication	Authentication mode	Support PSK/WPA enterprise authentication/Portal authentication

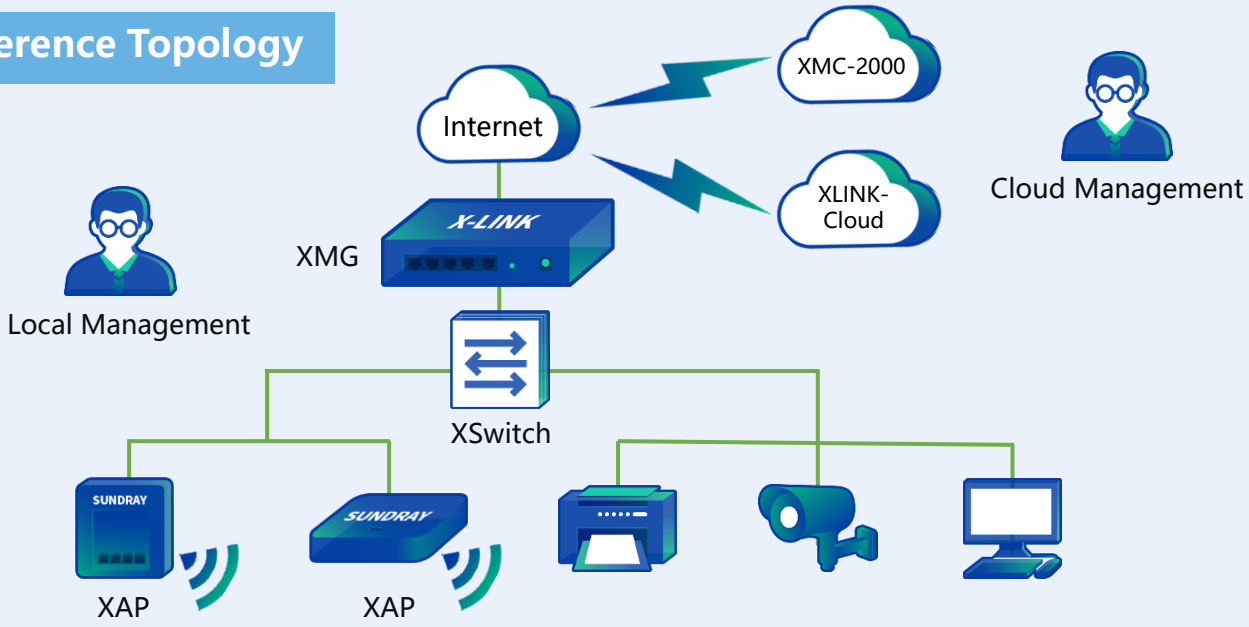
3 Technical Specifications

Item		Description
WLAN Optimization	ARP-unicast conversion	ARP broadcast packets are converted into unicast packets. This reduces the number of broadcast packets, thereby improving the transmission speed.
	Prohibited DHCP requests destined for wireless terminals	After this function is enabled, DHCP broadcast requests will be forwarded only to the wired network, instead of another wireless network. This improves the network throughput and performance of the wireless network.
AP access mode	AC discovery mechanism	L2 broadcast automatic discovery L3 discovery based on configured static IP addresses DHCP Option43 discovery DNS domain name discovery
Layer3 function	Network access mode	DHCP and static IP address

4 Order Information

Model	Specifications	Remarks
SUNDRAY XAP-6210P series		
XAP-6210P	Wi-Fi 6 in-wall AP, provides a wireless access rate of up to 1775Mbps, with gigabit port uplink integrates Ethernet ports and passthrough port, and supports PoE power supply (PoE injector needs to be purchased independently).	Essential

Reference Topology



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