

intelbras

Intelbras AP 3622 Indoor

802.11ax Wireless Access Device



Intelbras AP 3622 Indoor (802.11ax) Wireless Access Device

Product description

Intelbras AP 3622 wireless product is a new generation of 802.11ax and adopts a dual-band two-stream 802.11ax design and can be widely used in enterprises, schools and medical scenarios.

AP3000 series currently has a variety of products including AP 3622. AP 3622 has a built-in smart antenna with a small and beautiful appearance and flexible installation methods. It is suitable for various installation methods such as wall-mounted, ceiling-mounted and 86 boxes.



AP 3622 Indoor 802.11ax Wireless Access Device

Product features

Industry-leading new generation 802.11ax technology design

The Intelbras AP 3622 product adopts the industry-leading new generation 802.11ax protocol, dual-frequency 4-stream design, the access rate of the whole machine can reach up to 1.775Gbps, and all radios support MU-MIMO. Among them, the 5GHz radio adopts the design of 2 spatial streams, which supports a maximum access rate of 1.2Gbps, and the 2.4GHz radio adopts the design of 2 spatial streams, which supports a maximum access rate of 1.2Gbps. 0.575Gbps access rate, very suitable for indoor installation scenarios.

Realize multi-terminal simultaneous communication and break through the disadvantages of traditional wireless competition

Intelbras AP 3622 AP supports MU-MIMO technology. MU-MIMO is the most important feature of 802.11ax. Through MU-MIMO technology, AP can send multiple the terminal sends data, that is, AP 3622 can send data information for multiple terminals at the same time, depending on the number of terminal streams. AP 3622 can send up to 2 terminals at the same time the wireless message breaks through the traditional wireless network serial communication mechanism, the utilization rate of wireless spectrum resources is doubled, the number of access users is greatly increased, and the wireless network is effectively reduced. Deployment overhead to improve user experience in high-density user situations

Support OFDMA technology (Orthogonal Frequency Division Multiple Access)

AP3000 series wireless access point products support OFDMA technology, AP can further subdivide the wireless bandwidth, and use different subcarriers to transmit data to multiple terminals at the same time It can reduce the delay caused by multi-user air interface resource conflict and backoff in traditional protocols, and improve the user experience of low-latency applications such as voice and video in multi-user scenarios.

Support spatial multiplexing technology

The AP3000 series wireless access point products support spatial multiplexing technology, and the AP controls and adjusts the transmission power by identifying non-associated packets at the same time, so as to alleviate the problem of multiple users using the same channel. Interference problems, while greatly improving the utilization of spectrum resources.

Support TWT technology (Target Wake Time)

AP3000 series wireless access point products support TWT technology, which allows the AP to uniformly schedule the wake-up and sleep of the terminal, which can not only reduce the conflict between the terminals, but also reduce the number of unnecessary wake-ups of the terminal to achieve the purpose of energy saving.

Green and low-carbon design

AP3000 series AP adopts professional green and low-carbon design, supports dynamic MIMO power saving mode (DMPS) and enhanced automatic power saving transmission (E-APSD), intelligently identifies the actual performance requirements of the terminal, rationally allocates the terminal sleep queue, and dynamically adjusts the MIMO working mode.

AP3000 series APs support the Green AP mode to achieve single-antenna standby and more accurate energy saving.

AP3000 series APs use the innovative packet-by-packet power control (PPC) technology to dynamically adjust the direct bidirectional power between the AP device and the client under the premise of ensuring the successful transmission of packets, so as to reduce device energy consumption and prolong the standby time of mobile terminals role.

Provide local forwarding function

When the AP3000 series AP (Fit mode) is forwarded through the WAN, the wireless access device is deployed in the branch, and the wireless controller is deployed in the headquarters. All user data is sent by the wireless access device to the wireless controller, and then the wireless controller for centralized forwarding. AP3000 series APs can directly convert data packets into wired format packets on the wireless access device, so that the data packets are forwarded locally without passing through the wireless controller, which greatly saves wired bandwidth.

Support IPv4/IPv6 dual protocol stack (Native IPv6)

AP3000 series APs fully support IPv6 features, and the device implements IPv4/IPv6 dual protocol stack. Regardless of whether the original wired network is IPv4 or IPv6, it can automatically communicate with the WX the series controllers register to provide WLAN services and will not become information islands in the network.

Built-in Radio Frequency Optimization Engine (ROE)

The AP3000 series APs have a built-in RF Optimizing Engine (RF Optimizing Engine). Through feature and protocol-based RF optimization, it can effectively improve the application acceleration capability and quality assurance effect in scenarios such as wireless deployment with high-density access and streaming media transmission. These include: multi-user fair scheduling, hybrid access fairness, interference filtering, rate optimization, spectrum navigation, multicast enhancement (IPv4/IPv6), packet-by-packet power control, and intelligent bandwidth guarantee, etc.

Support intelligent load balancing

AP3000 series APs support a complex balancing method based on the number of access users and traffic. When the wireless controller finds that the load of the wireless access device exceeds the set threshold, it for a newly connected user, the wireless controller will automatically calculate whether there are wireless access devices with light loads around the user for user access, and if so, it will reject the user's association request however,

if the wireless user is not in the overlapping coverage area, the traditional load balancing method will often cause the connection to fail network, resulting in false balance. Intelbras innovatively supports intelligent load balancing technology to ensure that the load balancing function is enabled only for wireless users in overlapping coverage areas, effectively avoid false equalization, thereby maximizing the wireless network capacity.

Fully support intelligent wired and wireless integrated management

All Intelbras Future wireless products can implement WSM-based wired and wireless integrated management through open network management protocols. WSM is a wireless operation management component on the basis of the next-generation business software platform on-premise centralized software. Scalability, able to meet the ever-evolving needs of customer network management. The web-based management system provides a simple and friendly management platform for wireless business managers. Cooperating with on-premise centralized software platform and other components, wireless devices can also be realized panel management, fault management, performance monitoring, software version management, configuration file management, access user management and other functions, and can perform unified management on other devices in the network, realize intelligent wired and wireless integrated management.

Specifications

Hardware specifications

Name	AP 3622
Weight	0.4Kg
Dimensions (not including antenna interface and accessories)	150mm×150mm×31.5mm
Ethernet interface	3x 100/1000M electrical ports (one of which supports PoE out expansion)
PoE	Support 802.3at/af compatible power supply
Local power supply	Support 54V DC *not included
Console port	1x
Antenna	Two built-in dual-band omni-directional antennas, which: 2x2 2.4GHz with 3dBi 2x2 5GHz with 5dBi
Working frequency	802.11ax/ac/n/a: 5.15GHz - 5.35GHz; 5.47GHz - 5.725GHz; 5.725GHz-5.850GHz 802.11ax/b/g/n: 2.4GHz-2.483GHz

Name	AP 3622
Compatible bandwidth	2.4GHz: 20/40MHz 5GHz: 20/40/80MHz
Modulation technique	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/ac wave2: MIMO-OFDM: BPSK, QPSK, 16QAM, 64QAM, 256QAM 11ax: MIMO-OFDM: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM
Transmitting power (combined circuit)	23dBm
Adjustable power granularity	1dBm
Reset/restore factory configuration	support
Status Indicator	Blink alternate blinking mode, orange, green and blue different working status blinking mode, terminal access breathing blinking mode
Working temperature/storage temperature	-10°C a 55°C/-40°C a 70°C
Working Humidity/Storage Humidity	5%~95%(non-condensing)
Overall power consumption	14W (excluding PSE)
MTBF	>250000H

Software specifications

Product Positioning		wall-mounted, ceiling-mounted and 86 boxes
Operating mode	Fit	Managed by WC Control
	Cloud (Fat)	It can be managed by the cloud-simplified network, or it can work independently
	Mode switching	via command lines, WCs, Cloud, or reset button
	Router (IPv4/IPv6)	via command lines or web interface
Management and maintenance	Cloud Centralized management	Support by INC Cloud
	Local centralized management	Support by INC

Product Positioning		wall-mounted, ceiling-mounted and 86 boxes
	WC centralized management	Fit mode: support Cloud mode: support version upgrade, switch mode
	Local web	Cloud mode support
	Telnet	Cloud mode support
	SSH	Cloud mode support
	SNMP	Cloud mode support
	Debug serial port	support
	Intelligent operation and maintenance	Fit/ Cloud mode support
11ax support	Working frequency	5GHz+2.4GHz
	A-MPDU	support
	A-MSDU	support
	MU-MIMO	support
	OFDMA	support
	Maximum Similarity Demodulation (MLD)	support
	Maximum Combined Ratio Receive (MRC)	support
	Space Time Block Code (STBC)	support
	Low Density Parity Check Coding (LDPC)	support
	Maximum client's connections	1024 (512 per frequency rate)
	Virtual AP (in practice, it is recommended to set up to 5 per radio frequency)	32
	open system/shared key authentication	support
	Broadcast Probe request response control	support
	WPA, WPA2, Pre-RSNA user mixed access	support
RTS/CTS	support	
CTS-to-self	support	

Product Positioning		wall-mounted, ceiling-mounted and 86 boxes
	802.11k/v/r	support
	Hide SSID	support
WLAN extension	STA related	Support STA abnormal offline detection, STA aging, STA-based statistics and status query, etc.
	Access user limit	support
	Link Integrity Detection	support
	Repeater mode	support
Security strategy	encryption	Support 64/128 bit WEP, dynamic WEP, TKIP, CCMP, WPA3 encryption Support multiple key update trigger conditions to dynamically update unicast/broadcast keys
	802.11i	support
	certified	Support 802.1x authentication, MAC address authentication, PSK authentication.
	user isolation	support: 1. Layer 2 isolation of wireless users 2. SSID-based wireless user isolation
	forward security	Support packet filtering, MAC address filtering, broadcast storm suppression, etc.
	SSID and VLAN binding	support
	Intelligent Wireless Service Awareness (wIAA)	support
	wIDS/wIPS	support
	Management frame protection (802.11w)	support
Layer 2 and Layer 3 functions	IP address setting	Support: Static IP address (FAT) or DHCP to obtain IP address (optional option 60)
	Native IPv6	support
	IPv6 Portal	support
	IPv6 SAVI	support
	ACLs	Support (IPv4/IPv6)
	local forwarding	Support: local forwarding based on SSID+VLAN
	multicast	IGMP Snooping/MLD Snooping

Product Positioning		wall-mounted, ceiling-mounted and 86 boxes
Service quality	802.11e	Support WMM
	priority	Support Ethernet port 802.1p identification and marking Supports mapping from wireless priority to wired priority
	QoS policy map	Support different SSID/VLAN mapping different QoS policies
	Support L2~L4 packet filtering and traffic classification functions	support
	CAR	support
	User Bandwidth Management	Available bandwidth can be allocated per STA, or all STAs can share the total bandwidth by SSID
	load balancing	Support: based on traffic, user, frequency band (dual frequency support)
	Spectrum Navigation	support
	Multicast Enhancement	Support: multicast to unicast (IPv4/IPv6)
	CAC (Call Admission Control)	support: based on the number of users and based on channel utilization
	802.11k/v/r	support
	SVP Phone	support
Green technology	Packet-by-Packet Power Control (PPC)	support
	Green AP mode	support
	Dynamic MIMO Power Saving	support
	Enhanced Auto Power Save Delivery (E-APSD)	support
	WMM Power Save	support