

intelbras

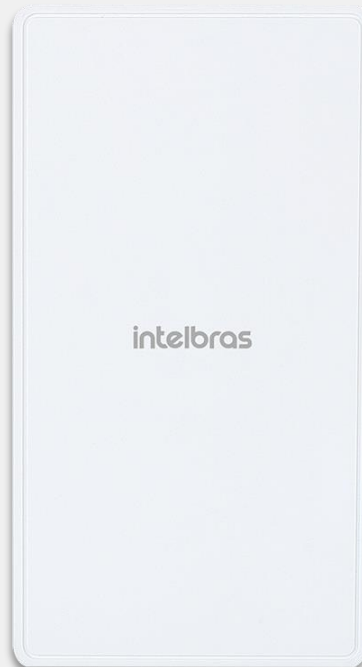
Intelbras Wi-Fi Router AP 3620H



Intelbras AP 3620H New Generation 802.11ax Indoor Series Wall-Plate Access Point

Overview

Intelbras AP 3620H series access point is the latest generation Wall-Mount wireless access point developed based on 802.11ax standard. They are designed with creative dual-radio 802.11ax technology standard respectively, and provide a transmission speed at least 2 times faster than 802.11ac products. High performance and cost-effective Wi-Fi 6 (802.11ax) for hospitality, branch, and teleworker deployments.



Intelbras AP 3620H Internal Antennas 4 Streams Dual Radio 802.11ax Wall-Plate AP

Features and benefits

Install AP in 3 to 5 minutes, 5 steps only (AP 3620H)

Wall-Mount series AP uses the international standard wall plate design. Installing an AP is just as simple as installing other switching panels. All it takes is 5 steps in less than 5 minutes which effectively accelerates the wireless network deployment process.

New-generation Wi-Fi standard 802.11ax (Wi-Fi 6)

AP 3620H dual-radio AP adopts 802.11ax technology can provide up to 1.775Gbps access rate, which is suitable for hotel guest room, small office.

DL/UL MU-MIMO

Intelbras AP 3620H series AP supports DL/UL MU-MIMO technology, which is the most important feature of 802.11ax. DL/UL MU-MIMO technology allows AP to send data to multiple stations simultaneously, breaking through the traditional wireless serial communication mechanism, increasing the utilization rate of wireless spectrum resources, improving the number of effective access users and access experience under high-density deployment.

Smart cloud access and optimal WLAN

The AP 3620H series complies with the 802.11ax standard. It works on dual radio and provides high-speed transmission that is at least 2 times faster than 802.11ac products under the same conditions. The AP 3620H series is available for easy maintenance and management from the Intelbras Cloud platform. Through smart RF optimization technologies, the series provides mobile cloud access in coverage scope, access density, and operation stability, and achieves the optimal wireless network.

Orthogonal frequency division multiple access (OFDMA)

802.11ax uses OFDMA to allow multiple users to transmit data simultaneously. OFDMA splits a channel into sub-channels, known as resource units (RUs), with specific subcarriers, and assigns RUs to different users for simultaneous transmission. OFDMA enables simultaneous multi-user transmission and reduces latency caused by channel contention.

Spatial multiplexing

802.11ax assigns a different color per BSS to help AP 3620H identify co-channel interference and stop transmission in time. If a radio detects 802.11ax signals from a BSS that has the same color as the radio's BSS, it determines that co-channel interference exists and stops data transmission. This optimizes frequency reuse and improves network capacity.

Target Wake Time (TWT)

TWT improves power efficiency and reduces contention by increasing client sleep time and allowing negotiation of the times that clients can access the medium.

Green design

AP 3620H employs a green design that supports dynamic MIMO power saving (DMPS), enhanced automatic power save delivery (E-APSD), and smart identification of terminal network requirements. It can dynamically adjust the MIMO working mode and efficiently put terminals to sleep.

AP 3620H supports green AP mode that enables single radio standby and allows for more precise power control.

AP 3620H supports the innovative per-packet power control (PPC) technology, which reduces standby power consumption and improves mobile device standby time.

Local forwarding

AP 3620H supports both centralized forwarding and local forwarding. With centralized forwarding, APs tunnel incoming data frames to the AC and the AC forwards the data frames. With local forwarding, APs directly forward data frames. The local forwarding mode significantly saves wired bandwidth.

IPv4 and IPv6 dual stack (Native IPv6)

AP 3620H is fully compliant with IPv6, and implements dual IPv4/IPv6 protocol stacks. It can automatically associate with an AC to provide wireless services no matter in an IPv4 or IPv6 network, so that it never runs as an information silo.

Cloud-based Management

Intelbras cloud-managed APs were developed based on the Cloud platform, on which network administrators can manage the cloud-managed APs directly, for example, view cloud-managed AP status in real time and deploy configurations from the cloud to cloud-managed APs. This greatly improves network efficiency and enhances security and stability.

Intelligent load balancing

AP 3620H supports session- and traffic-based load balancing. When the load of the AP reaches the upper limit, the AC rejects the association requests of new clients and directs the clients to another AP with smaller load. What sets Intelbras intelligent load balancing apart from existing load balancing solutions is that it starts load balancing only for clients that are in the overlapping AP coverage. This maximizes wireless network capacity.

Intelligent unified wired and wireless management

The whole series of Intelbras wireless products can be managed by the Wireless Service Manager (WSM) component of Intelbras On-premise centralized software. WSM provides unified management of wired and wireless networks, adding wireless network management functions into existing wired network management systems.

WSM offers a simple and user-friendly management platform for wireless network administrators. It implements panel management, troubleshooting, performance monitoring, software version control, configuration management, and user access management of wireless devices. In addition, it can manage wired devices by cooperating with other components in On-premise centralized software.

Specifications

Hardware specifications

Name	AP 3620H
Weight (excluding mounting accessories)	0.25Kg
Dimensions (excluding mounting and accessories)	160mm×86mm×30mm
Ethernet ports	Front panel: 4x100/1000Mbps Ethernet ports 1x RJ45 pass-through port 1x USB port 1x Console port Back panel: 1x uplink GE port (100/1000Mbps) 1 x RJ45 pass-through port

Name	AP 3620H
PoE	Port1: 802.3af
Local Power supply	54V DC
Console port	1x
Built-in antenna	Built-in omni-directional antenna dual-radio, which: <ol style="list-style-type: none"> 1. 2x2 2.4GHz with 3dBi gain 2. 2x2 5GHz with 3dBi gain
Working frequencies	802.11ax/ac/n/a: 5.150 - 5.35GHz, 5.470 - 5.725GHz; 5.725GHz - 5.850GHz 802.11ax/b/g/n: 2.4GHz - 2.483GHz
Compatible bandwidth	2.4GHz: 20/40MHz 5GHz: 20/40/80MHz
Nominal Throughput	2.4GHz: 574Mbps 5GHz: 1201Mbps Combined: 1775Mbps
Modulation techniques	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 (MCS 0 -31): BPSK, QPSK, 16QAM, 64QAM 11ac/ac wave2 - MIMO-OFDM (0 - 9): BPSK, QPSK, 16QAM, 64QAM, 256QAM 11ax - MIMO-OFDM (0 - 11): BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM
Transmitting power (combined circuit)	20dBm
Adjustable power granularity	1dBm
Reset/restoration to factory default	Supported
State LED	Alternating flashing mode, orange/green/blue for different working states, breathing mode
Working Temperature/ Storage Temperature	-10°C ~ 55°C(32°F to 113°F)/-40°C ~ 70°C(-40°F to +158°F)
Working Humidity/ Storage Humidity	5%~95%(non-condensing)
Protection class	IP31
Overall power consumption	≤12.95W
MTBF	>250000H

Software specifications

Item		AP 3620H
Operating mode	Fit	Managed by AC Control
	Cloud (Fat)	It can be managed by the cloud-simplified network, or it can work independently
	Mode switching	via command lines, ACs, Cloud, or reset button
	Router (IPv4/IPv6)	via command line or web interface
Management and maintenance	Cloud management	Cloud mode support
	AC 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	
802.11ax	A-MPDU	Supported
	A-MSDU	Supported
	Maximum likelihood decoding (MLD)	Supported
	Maximum-ratio combining (MRC)	Supported
	Space-time block coding (STBC)	Supported
	Low-density parity-check (LDPC)	Supported
	Cyclic Delay Diversity (CDD)/Cyclic Shift Diversity (CSD)	Supported
	DFS (dynamic frequency selection)	Supported

Item	AP 3620H	
	Transmit Beamforming	Supported
WLAN basics	Maximum client's connections	1024 (512 per frequency rate)
	Maximum number of SSIDs for each radio	16
	Virtual APs	32 As a best practice, configure a maximum of 5 virtual APs for each radio
	Open system/shared key authentication	Supported
	Broadcast probe request acknowledge control	Supported
	Concurrent login of WPA, WPA2, WPA3 and Pre-RSNA users	Supported
	RTS/CTS	Supported
	CTS-to-self	Supported
	802.11k and 802.11v smart roaming	Supported
	802.11r fast transition roaming	Supported
	Hide SSID	Supported
	Advanced Traffic Management	Supported
	Restrict low rate/sticky terminals access	Supported
	Channel reuse	Supported
	Receiver sensitivity adjustment	Supported
	Automatic channel/power/bandwidth adjustment	Supported
WLAN extension	Station related	Abnormal offline check, station aging, statistics and status query
	Client number limit	Supported
	Link integrity check	Supported
	Repeater mode	Supported

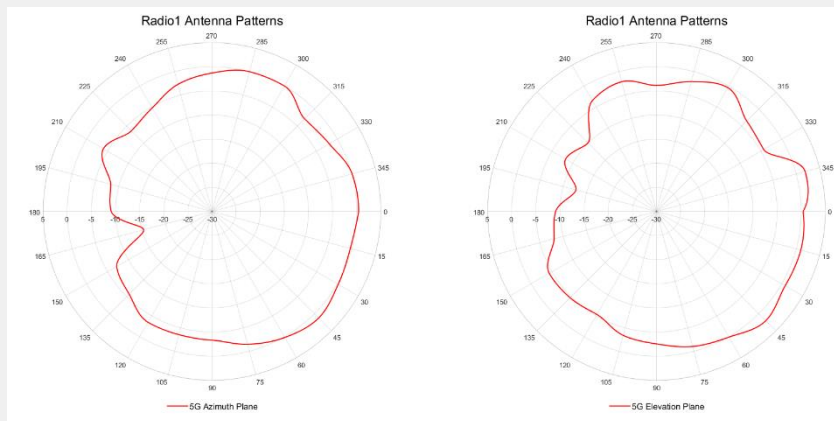
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Security policy	Encryption	WEP-64/128/152bit, dynamic WEP, TKIP, AES, EAP, CCMP, WPA3
		Multiple triggering conditions for unicast and broadcast key update
	802.11i	Supported
	Authentication	802.1X authentication, MAC authentication, PSK authentication Intelbras WX series access controllers might be required for authentication.
	User isolation	Layer 2 user isolation SSID-based user isolation
	Forwarding security	Packet filtering MAC address filtering Broadcast storm suppression
	Wireless terminal access	Wireless EAD
	SSID and VLAN binding	Supported
	WIDS/WIPS	Supported
	Rogue device detection and countermeasure	Supported
	Dynamic ARP Inspection (DAI)	Supported
	IP Source Guard (IPSG)	Supported
	Management frame protection (802.11w)	Supported
Layer 2 and Layer 3 features	Router (IPv4 and IPv6) and Bridge	
	IP address configuration	Static IP (available only in fat AP mode) DHCP assigned IP (Option 60)
	Native IPv6	Supported
	IPv6 Portal	Supported
	IPv6 SAVI	Supported
	ACL	IPv4/IPv6
	Local forwarding	Local forwarding based on SSID and VLAN

Item	AP 3620H	
	Link Layer Discovery Protocol (LLDP)	Supported
	SSID-based VLAN assignment	Supported
	EoGRE Tunnel	Supported
	Multicast	IGMP Snooping/MLD Snooping
QoS	802.11e	Wi-Fi Multimedia (WMM)
	Priority	802.1p priority and marking on Ethernet ports
		Priority mapping for wired and wireless packets
	QoS policy mapping	SSID/VLAN and QoS policy mapping
	Layer 2 to Layer 4 packet filtering and traffic classification	Supported
	CAR	Supported
	Client bandwidth management	Station-based bandwidth allocation
		SSID-based bandwidth allocation
	Load balancing	Traffic-based load balancing
		Session-based load balancing
		Frequency-based load balancing (supports dual-band)
	Band navigation (5GHz priority)	Supported
	Airtime optimization	Supported
	Airtime fairness	Supported
	Layer 4-7 application identification	Coupled with Intelbras WLAN ACs, the APs can identify variety of applications and policy control can be implemented including priority adjustment, scheduling, blocking, and rate limiting on users
Multicast optimization (IPv4/IPv6)	Supported	
Call Admission Control (CAC)	Session-based CAC	
	Channel usage-based CAC	
SVP Phone	Supported	
Power saving	PPC	Supported
	Green AP mode	Supported

Item	AP 3620H	
	Dynamic MIMO power saving	Supported
	E-APSD	Supported
	WMM Power Save	Supported
Mesh	Mesh Link connection	Supported
	Multi-hop Mesh	Supported
Certification	Wi-Fi Alliance	WFA130165

Antenna Patterns

Radio1: 5GHz (AP front facing right)



Radio2: 2.4GHz (AP front facing right)

