WL8200-XW1

In-wall 802.11ax Wi-Fi 6 Dual Band Enterprise AP

Product Overview

WL8200-XW1 is a dual-band high-performance in-wall gigabit wireless access point device based on the 802.11ax standard launched by DCN, it could offer maximum 1775Mbps access rate. WL8200-XW1 works in the 2.4GHz and 5GHz frequency bands and supports advanced wireless technologies such as MU-MIMO, OFDMA, spatial multiplexing, and TWT. The first radio of WL8200-XW1 works in the 2.4GHz frequency band and can provide a maximum access rate of 575Mbps; the second radio works in the 5GHz frequency band and can provide a maximum access rate of up to 1200Mbps.

802.11a/b/g/n/ac /ax

1775Mbps, 2*2 MIMO

Concurrent 200+ user

Standard PoE input

Standard size

Cloud management

Downlink Port

Key Features and Highlights

802.11ax Wi-Fi 6 wireless in-wall access point
WL8200-XW1 supports the 802.11ax standard, operates in both 2.4 GHz and 5 GHz band, and provides an access bandwidth up to 1775 Mbps. This model is a high-end in-wall access point for hotel, education, government and business networks.

Wired and wireless gigabit access
WL8200-XW1 integrated gigabit wired uplink port, can truly meet the bandwidth requirement of wireless clients.

Easy to deploy x86 standard panel
WL8200-XW1 panel supports 86 box standard, and can perfectly fit plug-in installed to any standard panel, With the use of the PoE cable, the whole installation will be low cost, no noise, short period (the time to install an AP is less than 3 minutes).

Downlink Port
WL8200-XW1 provides one gigabit downlink port for the accessing of wired devices, which improves the flexibility of networking deployment.

Good PoE compatibility
WL8200-XW1 can work well with all PoE switch (cisco, HUAWEI, juniper, etc.) which support 802.3at standard, this allows to power up WL8200-XW1 directly, power adapter is not required anymore.

Dual-mode fit & fat
WL8200-XW1 can work in fit or fat mode and can flexibly switch between the fit mode and the fat mode according to network planning requirements.

Product Specifications

Hardware Specifications

Item	WL8200-XW1
Dimensions (L*W*D) (mm)	86 x 86 x 51.8
Uplink-port	1* 10/100 /1000Base-T (PoE)
Downlink port	1* 10/100 /1000Base-T
Power supply	802.3 at PoE
LED indicators	Power
Maximum power consumption	<12W
Antenna gain	Built-in 2.4 GHz 3 dBi antenna and 5 GHz 3 dBi antenna
Working frequency band	802.11b/g/n/ax: 2.4 GHz to 2.483 GHz 802.11a/n/ac/ac wave 2/ax: 5.150GHz to 5.350GHz 5.47GHz to 5.725GHz 5.725GHz to 5.850GHz
Modulation technology	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
Transmit power	2.4G: 20dBm 5G : 20dBm (*Note：final output power comply with deployment regulation and might be different*)
Power adjustment granularity	1 dBm
Working/Storage temperature	–10°C to +55°C –40°C to +70°C

Working/Storage RH	5% to 95% (non-condensing)
Protection level	IP41

Software Specifications

Item	Feature	WL8200-XW1
WLAN	**Product positioning**	In-wall dual-frequency
	Working frequency band	2.4GHz and 5GHz
	Bandwidth performance	1775Mbps
	Virtual AP (BSSID)	8（4 for each radio）
	Concurrent user	254
	Number of spatial streams	2.4GHz:2, 5GHz:2
	Dynamic channel adjustment (DCA)	Yes
	Blind area detection and repair	yes
	SSID hiding	Yes
	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	2.4GHz + 5GHz
	80 MHz bundling	Yes
	1200Mbps（PHY）	Yes
	Frame aggregation (A-MPDU)	Yes
	Frame aggregation (A-MSDU)	Yes
	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
Security	**Encryption**	64/128 WEP, TKIP, and CCMP encryption
	802.11i	Yes
	Portal authentication	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 Isolation between client

Item	Feature	WL8200-XW1
	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
	Binding SSID with VLAN	Yes
	802.11W	Yes, encryption of management frames
Forwarding	**IP address setting**	Static IP address configuration or dynamic DHCP address allocation
	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.
QoS	**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
	Load balancing	Load balancing based on the number of users Load balancing based on user traffic Load balancing based on frequency bands
	Bandwidth limit	Bandwidth limit based on APs 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
	Multicast enhancement	Multicast to unicast
Management	**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
	Fault detection	Yes

Item	Feature	WL8200-XW1
	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 service	**Value added marketing**	Support: various apps based on intelligent terminals, advertising push based on location, personalized push of portals
	Value added authentication	WeChat, SMS, QR code
	Passenger flow analysis	yes

WL8200-XW1

Dormitory room

- 802.11a/b/g/n/ac /ax
- High performance, 1775Mbps
- 802.3 at PoE
- X86 standard, easy installation
- Multiple gigabit downlink port

Typical Application

Order Information

Product	Description
WL8200-XW1	DCN Indoor Wi-Fi 6 AP, 802.11a/b/g/n/ac/ax supported(2.4GHz:2*2, 5GHz 2*2), max 1775Mbps access rate, fat & fit, 802.3 at, managed by DCN hardware controller & cloud platform