

WL8200-X1

Indoor 802.11ax Wi-Fi 6 Dual Band Enterprise AP

Product Overview

WL8200-X1 is a dual-band high-performance gigabit wireless access point device based on the 802.11ax standard launched by DCN, it could offer maximum 1775Mbps access rate. WL8200-X1 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-X1 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



Downlink Port



Cloud management

Key Features and Highlights

Entry-level enterprise-class indoor 802.11ax Wi-Fi 6 wireless access point

WL8200-X1 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 the best choice for Entry-level office or company as it can support concurrent users up to 128.

Wireless user management at a fine granularity

WL8200-X1 can support a maximum of 8 WLANs to implement multi-layer multi-service management of wireless users at a fine granularity. Each WLAN supports access control and uplink/downlink rate limit based on MAC or IP addresses. These WLANs may be bound to virtual local area networks (VLANs).

Flexible installation

WL8200-X1 supports wall mounting, ceiling mounting, T-keel mounting, you can deploy it almost everywhere

that you want.

Downlink Port

WL8200-X1 provides 1 downlink port for the accessing of wired devices, which improves the flexibility of networking deployment.

Good PoE compatibility

WL8200-X1 can work well with all PoE switch (cisco, HUAWEI, juniper, etc.) which support 802.3af & at standard, this allows to power up WL8200-X1 directly, a power adapter is not required anymore.

Multi-mode: fit, fat, bridge

WL8200-X1 can work in fit, fat or bridge mode and can flexibly switch between these three modes according to network planning requirements.

Product Specifications

Hardware Specifications

Item	WL8200-X1
Dimensions (L*W*D) (mm)	180 x 180 x 28.5
Uplink-port	1* 10/100 /1000Base-T (PoE)
Downlink port	1* 10/100 /1000Base-T
Power supply	802.3 at PoE and External power adapter (Input: 100 ~ 240V AC , Output: 12 V DC)
LED indicators	Power, 2.4G, 5G
Maximum power consumption	<13W
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: 23dBm 5G : 22dBm (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-X1
WLAN	Product positioning	Indoor dual-frequency
	Working frequency band	2.4GHz and 5GHz
	Bandwidth performance	1775Mbps
	Virtual AP (BSSID)	8 (4 for each radio)
	Concurrent user	128
	Number of spatial streams	2.4GHz:2, 5GHz:2
	Dynamic channel adjustment (DCA)	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
	Forwarding security	Frame filtering, white list, static blacklist, and dynamic blacklist
User isolation	AP L2 forwarding suppression Isolation between client	

Item	Feature	WL8200-X1
	Periodic SSID enabling and disabling	Yes
	Access control of free resources	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
	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
	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
	Mesh networking	Through central AP to manage the RE AP
	Maintenance mode	Both local and remote maintenance
	Log function	Local logs, Syslog, and log file export
	Alarm	Yes
	Fault detection	Yes
	Statistics	Yes
	Switching between the fat, fit and bridge	An AP working in fit mode can switch to the

Item	Feature	WL8200-X1
	modes	fat mode through a wireless AC; An AP working in fat mode can switch to the fit or bridge mode through a local control port or Telnet(web) An AP working in bridge mode can switch to the fit or fat mode through a local control port or Telnet(web)
	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

Typical Application

WL8200-X1 is ideal AP for indoor Wi-Fi coverage, with zero touch provisioning, advanced RF control and cost-effective design, it could offer best indoor Wi-Fi experience for customers.



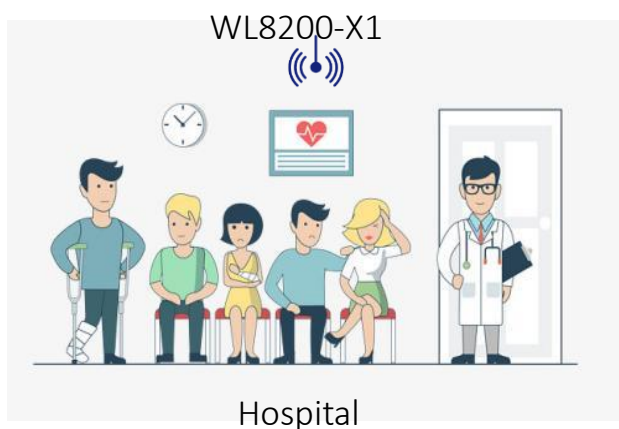
Class room



Small Meeting room



Office



Hospital

- 802.11ax, Wi-Fi 6
- Access bandwidth 1775Mbps
- 802.3at PoE
- Downlink port
- Concurrent user 128

Order Information

Product	Description
WL8200-X1	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/bridge, 802.3 at, managed by DCN hardware controller & cloud platform