

# WL8200-X2 R2

# Indoor 802.11ax Wi-Fi 6 Dual Band Enterprise AP

### **Product Overview**

WL8200-X2 R2 is a dual-band high-performance gigabit wireless access point device based on the 802.11ax standard launched by DCN, it could offer maximum 2975Mbps access rate. WL8200-X2 R2 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-X2 R2 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 to2400Mbps.





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



2975Mbps, 2\*2 MIMO



Concurrent 254 user



Standard PoE input



Q POE

Flexible power input



Cloud management



## **Key Features and Highlights**

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

WL8200-X2 R2 supports the 802.11ax standard, operates in both 2.4 GHz and 5 GHz band, and provides an access bandwidth up to 2975 Mbps. This model is the best choice for middle-level office or company as it can support concurrent users up to 254.

### Wireless user management at a fine granularity

WL8200-X2 R2 can support a maximum of 32 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-X2 R2 supports wall mounting, ceiling

mounting, T-keel mounting, you can deploy it almost everywhere you want.

#### Powered by PoE port or external power adapter

WL8200-X2 R2 can be powered by PoE port or external power adapter, input  $100 \sim 240 \text{V}$  AC, output: 12 V DC.

#### Good PoE compatibility

WL8200-X2 R2 can work well with all PoE switch (cisco, HUAWEI, juniper, etc.) which support 802.3af & at standard, this allows to power up WL8200-X2 R2 directly.

#### Multi-mode: fit, fat, bridge

WL8200-X2 R2 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-X2 R2	
Dimensions (L*W*D) (mm)	247 x 153 x 30	
10/100 /1000Base-T port	2	
Console port (RJ-45)	1	
BLE port	1	
Indicator LED	Yes	
Reset button	on Yes	
Power supply  802.3af & at and External power adapter (Input: 100 ~ 240V AC DC)		
Maximum power consumption	power <13W	
RF port	Built-in 2.4 GHz 4 dBi antenna and 5 GHz 5 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 5.725GHz 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 (Per Chain) 5G: 20dBm (Per Chain) (Note: final output power comply with deployment regulation might be different)	
Power adjustment granularity	1 dBm	



Working/Storage	-10°C to +55°C
temperature	-40°C to $+70$ °C
Working/Storage RH	5% to 95% (non-condensing)
Protection level	IP41

# **Software Specifications**

Item	Feature	WL8200-X2 R2
	Product positioning	Indoor dual-frequency
	Working frequency band	2.4GHz and 5GHz
	Bandwidth performance	2975Mbps
	Virtual AP (BSSID)	32
	Concurrent user	254
	Number of spatial streams	2.4GHz:2, 5GHz:2
	Dynamic channel adjustment (DCA)	Yes
	Transmit power control (TPC)	Yes
	Blind area detection and repair	Yes
WLAN	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
	Space streams	2.4GHz:2, 5GHz:2
	Frequency band	2.4GHz + 5GHz
	80 MHz bundling	Yes
	1200Mbps ( PHY )	Yes
802.11ax	Frame aggregation (A-MPDU)	Yes
enhancemen	Frame aggregation (A-MSDU)	Yes
ts	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
	WAPI	Yes
	MAC address authentication	Yes
	LDAP authentication	Yes



Item	Feature	WL8200-X2 R2
	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
	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
	802.11W	Yes, encryption of management frames
	IP address setting	Static IP address configuration or dynamic DHCP address allocation
	IPv6 forwarding	Yes
	IPv6 portal	Yes
Forwarding	Local forwarding	Yes
2 01 // 412 413129	Multicast	IGMP snooping
	Roaming	Yes
	AP switching reference	Signal strength, bit error rate, RSSI, S/N, whether neighboring APs are normally operating, etc.
	WDS WMM	Yes Yes
	Priority mapping	Ethernet port 802.1P identification and marking Mapping from wireless priorities to wired priorities
QoS	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  Multicast enhancement	Yes Multicast to unicast
	Network management	Centralized management through an AC; both fit and fat modes
Managemen	Mesh networking	Through central AP to manage the RE AP
t	Maintenance mode	Both local and remote maintenance
	Log function	Local logs, Syslog, and log file export
	Log function	Local logs, bysiog, and log life export



Item	Feature	WL8200-X2 R2
	Alarm	Yes
	Fault detection	Yes
	Statistics	Yes
	Switching between the fat, fit and bridge 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 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)
	Remote probe analysis	Yes
	Watchdog	Yes
Value added service	WIFI location	Yes, for WIFI terminal or Tag
	WIFI sniff	Yes
	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-X2 R2 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



- 802.11ax, Wi-Fi 6
- Access bandwidth 2975Mbps
- 802.3af/at PoE
- External power adapter
- Concurrent user 254



# **Order Information**

Product	Description
	DCN Indoor Wi-Fi 6 AP, 802.11a/b/g/n/ac/ax supported(2.4GHz:2*2, 5GHz 2*2), max
WL8200-X2 R2	2975Mbps access rate, fat/fit/bridge, 802.3 af & at, managed by DCN hardware
	controller & cloud platform
DCWL-PoEINJ-G+	Single-port 10/100/1000Mbps 802.3at PoE module (optional)
WA-24E12R0-BA	External power adapter(input: 100~240V AC, 50/60Hz, 55A, output: 12V DC, 2A)
	(optional)