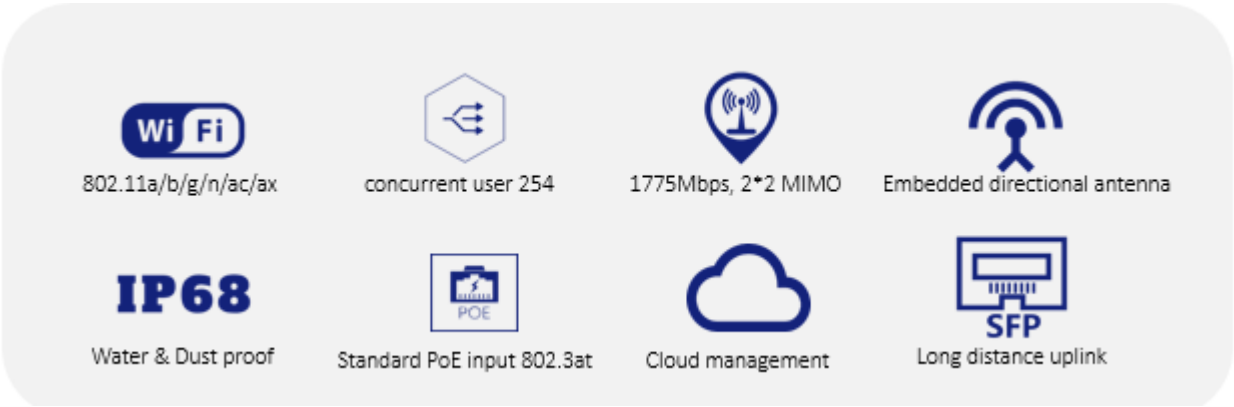
WL8200-XIT2

802.11ax Outdoor Dual-Band Enterprise AP

Product Overview

DCN WL8200-XIT2 is high performance outdoor wireless access point which can support 2.4 GHz and 5 GHz band, adopting technologies such as Multi-User Multiple-Input Multiple-Output (MU-MIMO) and orthogonal frequency division multiplexing (OFDM), providing a data transmission rate of at most 575 Mbps in 2.4GHz band and 1200Mbps in 5GHz band. It supports up to 254 concurrent users. With integrated antenna inside, WL8200-XIT2 is widely used at outdoor WIFI coverage networks, such as campus, streets, rural area, resorts and scenic spots.



Highlights

High-level outdoor 802.1ax wireless access
The WL8200-XIT2 supports the 802.11ax standard and can operate in 2.4 GHz and 5 GHz both bands. It provides an access bandwidth up to 1.775Gbps, which can connect users up to 254 simultaneously.

Fiber uplink for long-distance connection
Fiber port used as uplink ports, which break through the limitations of the conventional copper port, the distance is no longer a bottleneck.

Operating in a wide temperature range
Thanks to deliberate hardware design and the selection of dedicated components it can operate in a broad temperature range from -40°C to 65°C.

Highest IP68 Anti-dust & water standard
WL8200-XIT2 comply IP68 can be deployed in the harshest outdoor environment.

Good PoE compatibility
WL8200-XIT2 can work well with the third-part PoE switches that support 802.3at standard.

High-performance RF
The professional optimized design is employed for the RF module of the WL8200-XIT2, integrated directional antenna supports 27 dB transmission power which can greatly improve wireless coverage.

Cloud management
WL8200-XIT2 can operate with the DCN cloud platform seamless to provide a better cost-performance solution;

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-XIT2
Dimensions (L*W*D) (mm)	214 × 214 × 68
Working Frequency	2.4G：802.11b/g/n/ax 5G：802.11a/n/ac/ax
Maximum Data Rate	2.4G：575Mbps 5G：1200Mbps
Physical Port	1 * 10/100/1000Base-T PoE port for uplink 1 * 1000M SFP fiber port（Combo） 1 * 10/100/1000Base-T downlink port 1 build-in M.2 port for IoT and LTE expension
LED indicator	Yes
Console Port	Yes
Mounting mode	Pole-mounting
PoE	802.3at
Maximum power consumption	< 18W
Antenna type	Internal directional antenna: horizontal 130°,vertical 74°
Antenna gain	2.4G 10dBi, 5G 10dBi
Transmit power	2.4G: 27dBm (Per Chain) 5G : 27dBm (Per Chain) (*Note：final output power comply with deployment regulation might be different*)
Transmit power adjustment granularity	1 dBm
Working frequency band	802.11b/g/n/ax: 2.4 GHz to 2.483 GHz 802.11a/n/ac/ac wave 2/ax: 5.150 ~ 5.350GHz 5.47 ~ 5.725GHz 5.725 ~ 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
Working/Storage temperature	-40°C to +65°C –45°C to +75°C
Working/Storage RH	5% to 95% (non-condensing)
Protection level	IP68

Software Specifications

Item	Feature	WL8200-XIT2
WLAN	**Product positioning**	Outdoor dual frequency
	Working frequency band	2.4 GHz and 5 GHz
	Bandwidth performance	1775Mbps
	Virtual AP (BSSID)	32
	Concurrent user	254
	Number of spatial streams	2.4G: 2 5G:2
	Dynamic channel adjustment (DCA)	Yes
	Transmit power control (TPC)	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	**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

Item	Feature	WL8200-XIT2
Security	**Encryption**	64/128 WEP, TKIP, and CCMP encryption
	802.11i	Yes
	Portal authentication	Yes
	WAPI	Yes
	MAC address authentication	Yes
	LDAP authentication	Yes
	PEAP authentication	Yes
	WIDS/WIPS	Yes
	Real time spectrum guard	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
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.
	WDS	Yes
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

Item	Feature	WL8200-XIT2
	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 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**	For WiFi termial and tag
	WiFi probe	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, Facebook
	Passenger flow analysis	yes

Typical Application

- 802.11ax
- Uplink fiber port
- 802.3at PoE
- IP68
- Concurrent user 254
- Embedded directional antenna

Order Information

Product	Description
WL8200-XIT2	802.11a/b/g/n/ac/ac wave 2/ax outdoor high-performance AP, 2.4GHz & 5GHz dual band, 1.775Gbps, 2*10/100/1000Base-T GE ports and 1*SFP fiber port, 1*console port, 802.3 at PoE, internal 10dBi directional antenna: horizontal 130°,vertical 74°, built-in m.2 interface for IoT and LTE expension, basic wall and pole mounting kit (Interface waterproof adhesive tape, grounding cable and PoE power supply module shall be purchased separately)
DCWL-PoEINJ-G+	802.3at PoE module with one 10/100/1000Mbps port