

## WL8200-X10

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

#### Product Overview

WL8200-X10 is a next generation Wi-Fi 6 high-performance enterprise Wi-Fi AP (Access Point) released by DCN, it can support 802.11ax and provide 2.5G Ethernet uplink connectivity. With high performance 6.82Gbps access bandwidth, WL8200-X10 is expected to have high density client connectivity to deliver better Wi-Fi user experience. With industry-leading triple band 14 spatial streams, WL8200-X10 is ideal choice for high-density and high-bandwidth access scenarios such as AR/VR application, 4K/8K HD video streaming, libraries, lecture halls, convention centers, etc.



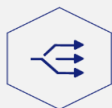
802.11a/b/g/n/ac/ax



6.82Gbps, 8\*8 MIMO



Triple band



concurrent user 400+



flexible power input



cloud management

## Highlights

### Industry-leading innovative design of tri-band, 14 spatial streams

Traditional wireless APs usually use 2.4GHz and 5GHz dual-band solutions. The WL8200-X10 product innovatively adopts a tri-band design. The whole AP supports 3 radio frequency modules to work at the same time, with an access rate of up to 6.82Gbps, and one radio frequency is fixed for 2.4G working mode, the other two radios are in 5G working mode. Adopt the latest MU-MIMO technology (multi-user input and output), OFDMA technology (orthogonal frequency division multiple access), spatial multiplexing technology, TWT technology (target wake-up time) and other advanced wireless technologies, the data transmission breaks through the traditional wireless network serial communication mechanism. The utilization rate of wireless spectrum resources has been doubled, and the number of effective access users has been greatly increased, effectively reducing the deployment cost of wireless network and increasing the user experience in high density scene.

### Flexible installation

WL8200-X10 supports wall mounting, ceiling

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

### Triple band total 6.82Gbps for high density scene

WL8200-X10 support tri-band, accessing bandwidth can reach to 6.82Gbps, it could connect much more clients simultaneously, improve the overall throughput of the WIFI network greatly.

### 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.

### Anti-thief

WL8200-X10 can work with Kensington technology to protect the investment of customer, which is very important to the specific customer.

### Flexible power input

The power input of WL8200-X10 can be standard PoE or DC adapter, customer can make choice accordingly.

## Product Specifications

### Hardware Specifications

Item	WL8200-X10
<b>Dimensions (L*W*H) (mm)</b>	215 x 215 x 45
<b>Physical port</b>	2 x 10/100/1000/2500Mbps ethernet ports 1 x BLE module
<b>Console port (RJ-45)</b>	1
<b>USB 2.0 port</b>	1
<b>Power supply</b>	802.3bt PoE and External power adapter(Input: 100 ~ 240V AC , Output: 12 V DC)
<b>Maximum power consumption</b>	<30W
<b>RF port</b>	Built-in 2.4 GHz 4 dBi antenna and 5 GHz 5 dBi antenna
<b>Working frequency band</b>	802.11b/g/n/ax: 2.4GHz-2.483GHz 802.11a/n/ac/ac wave 2/ax : 5.725~5.850GHz ; 5.150~5.350GHz ; 5.47~5.725GHz
<b>Modulation technology</b>	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
<b>Transmit power</b>	2.4GHz : 23dBm ( Per Chain )

	5GHz : 23dBm ( Per Chain ) (Note : final output power comply to deployment regulation might be different in different countries)
<b>Power adjustment granularity</b>	1 dBm
<b>Working/Storage temperature</b>	0°C to +50°C -40°C to +70°C
<b>Working/Storage RH</b>	5% to 95% (non-condensing)
<b>Protection level</b>	IP41

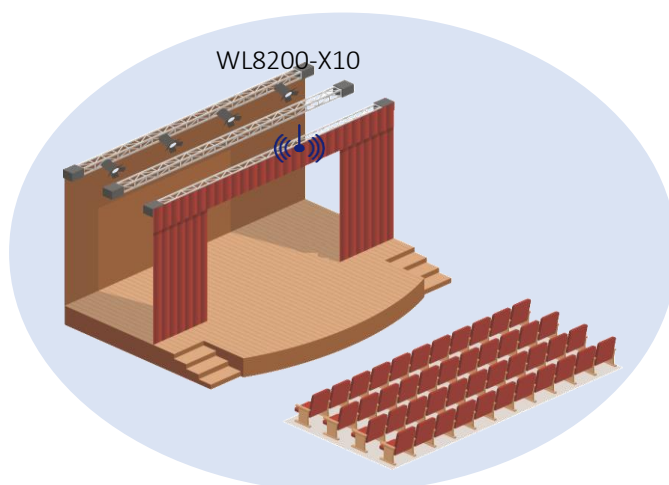
## Software Specifications

Item	Feature	WL8200-X10
WLAN	<b>Product positioning</b>	Indoor tri-band Wi-Fi6 AP
	<b>Working frequency band</b>	1 <sup>st</sup> band: 2.4 GHz, 4*4MIMO 2 <sup>nd</sup> band: 5GHz, 8*8MIMO 3 <sup>rd</sup> band: 5GHz, 2*2MIMO
	<b>Bandwidth performance</b>	Total 6.82Gbps 1 <sup>st</sup> band: 2.4 GHz, 1.15Gbps 2 <sup>nd</sup> band: 5GHz, 4.8Gbps 3 <sup>rd</sup> band: 5GHz, 867Mbps
	<b>Virtual AP (BSSID)</b>	48
	<b>Concurrent user</b>	400+
	<b>Number of spatial streams</b>	1 <sup>st</sup> band: 2.4 GHz, 4 spatial streams 2 <sup>nd</sup> band: 5GHz, 8 spatial streams 3 <sup>rd</sup> band: 5GHz, 2 spatial streams
	<b>Dynamic channel adjustment (DCA)</b>	Yes
	<b>Transmit power control (TPC)</b>	Yes
	<b>Blind area detection and repair</b>	Yes
	<b>SSID hiding</b>	Yes
	<b>RTS/CTS</b>	Yes
	<b>RF environment scanning</b>	Yes
	<b>Hybrid access</b>	Yes
	<b>Restriction on the number of access users</b>	Yes
	<b>Link integrity check</b>	Yes
	<b>Accessing control of terminals based on signal strength</b>	Yes
	<b>Forcing terminals to roam based on signal strength</b>	Yes
	<b>Intelligent control of terminals based on airtime fairness</b>	Yes
	<b>High-density application optimization</b>	Yes
802.11ax	<b>Space streams</b>	2.4GHz:4, 5GHz:8
	<b>Frequency band</b>	2.4GHz + 5GHz
	<b>80 MHz bundling</b>	Yes
	<b>Frame aggregation (A-MPDU)</b>	Yes
	<b>Frame aggregation (A-MSDU)</b>	Yes

Item	Feature	WL8200-X10
	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
	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
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

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	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
	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	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



- 802.11ax
- Access bandwidth 6.82Gbps
- 3 radio bands
- High density access scenario
- Concurrent user 400+

Great hall

**Order Information**

Product	Description
<b>WL8200-X10</b>	DCN new generation Wi-Fi6 indoor AP, tri-band and total 14 spatial streams, 802.11a/b/g/n/ac/ax supported (2.4GHz 4*4, first 5GHz 8*8 and second 5GHz 2*2), fat/fit/bridge, default no power adapter, could be managed by DCN AP controller.