

## 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.

### Dual mode fit & fat

WL8200-X10 can work in fit or fat mode and can flexibly switch between the fit mode and the fat mode 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/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

	<p>11ac : MIMO-OFDM: BPSK, QPSK,16QAM,64QAM,256QAM</p> <p>11ax: MIMO-OFDM: BPSK,QPSK,16QAM,64QAM,256QAM,1024QAM</p> <p>802.11b : BPSK , QPSK , CCK</p> <p>802.11a/g/n:BPSK , QPSK , 16-QAM , 64-QAM</p> <p>802.11ac : BPSK , QPSK , 16-QAM , 64-QAM , 256-QAM</p>
<b>Transmit power</b>	<p>2.4GHz : 23dBm ( Per Chain )</p> <p>5GHz : 23dBm ( Per Chain )</p> <p>(Note : final output power comply to deployment regulation might be different in different countries)</p>
<b>Power adjustment granularity</b>	1 dBm
<b>Working/Storage temperature</b>	<p>0°C to +50°C</p> <p>-40°C to +70°C</p>
<b>Working/Storage RH</b>	5% to 95% (non-condensing)
<b>Protection level</b>	IP41

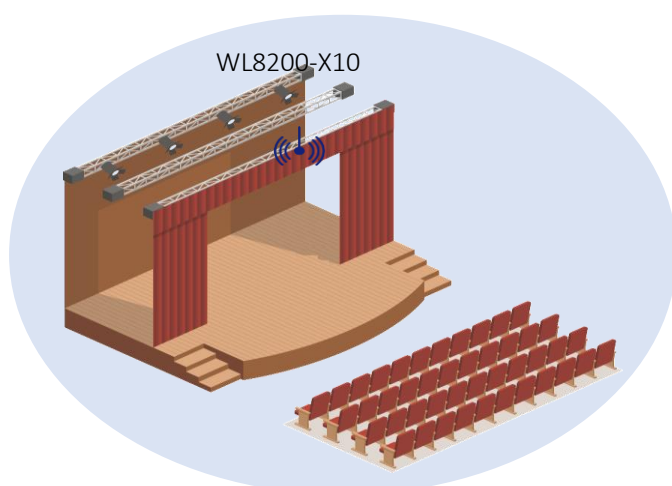
## Software Specifications

Item	Feature	WL8200-X10
WLAN	<b>Product positioning</b>	Indoor tri-band Wi-Fi6 AP
	<b>Working frequency band</b>	<p>1<sup>st</sup> band: 2.4 GHz, 4*4MIMO</p> <p>2<sup>nd</sup> band: 5GHz, 8*8MIMO</p> <p>3<sup>rd</sup> band: 5GHz, 2*2MIMO</p>
	<b>Bandwidth performance</b>	<p>Total 6.82Gbps</p> <p>1<sup>st</sup> band: 2.4 GHz, 1.15Gbps</p> <p>2<sup>nd</sup> band: 5GHz, 4.8Gbps</p> <p>3<sup>rd</sup> band: 5GHz, 867Mbps</p>
	<b>Virtual AP (BSSID)</b>	48
	<b>Concurrent user</b>	400+
	<b>Number of spatial streams</b>	<p>1<sup>st</sup> band: 2.4 GHz, 4 spatial streams</p> <p>2<sup>nd</sup> band: 5GHz, 8 spatial streams</p> <p>3<sup>rd</sup> band: 5GHz, 2 spatial streams</p>
	<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>Intelligent control of terminals based on airtime fairness</b>	Yes	

Item	Feature	WL8200-X10
	<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
	<b>Maximum likelihood demodulation (MLD)</b>	Yes
	<b>Transmit beamforming (TxBF)</b>	Yes
	<b>Maximum ratio combining (MRC)</b>	Yes
	<b>Space-time block coding (STBC)</b>	Yes
	<b>Low-density parity-check code (LDPC)</b>	Yes
Security	<b>Encryption</b>	64/128 WEP, TKIP, and CCMP encryption
	<b>802.11i</b>	Yes
	<b>WAPI</b>	Yes
	<b>MAC address authentication</b>	Yes
	<b>LDAP authentication</b>	Yes
	<b>PEAP authentication</b>	Yes
	<b>WIDS/WIPS</b>	Yes
	<b>Protection against DoS attacks</b>	Anti-DoS for wireless management packets
	<b>Forwarding security</b>	Frame filtering, white list, static blacklist, and dynamic blacklist
	<b>User isolation</b>	AP L2 forwarding suppression isolation between client
	<b>Periodic SSID enabling and disabling</b>	Yes
	<b>Access control of free resources</b>	Yes
	<b>Wireless SAVI</b>	Yes
	<b>ACL</b>	Access control of various data packets such as MAC, IPv4, and IPv6 packets
<b>Secure access control of APs</b>	Secure access control of APs, such as MAC authentication, password authentication, or digital certificate authentication between an AP and an AC	
Forwarding	<b>IP address setting</b>	Static IP address configuration or dynamic DHCP address allocation
	<b>IPv6 forwarding</b>	Yes
	<b>IPv6 portal</b>	Yes
	<b>Local forwarding</b>	Yes
	<b>Multicast</b>	IGMP snooping
	<b>Roaming</b>	Yes
	<b>AP switching reference</b>	Signal strength, bit error rate, RSSI, S/N, whether neighboring APs are normally operating, etc.
	<b>WDS</b>	Yes
QoS	<b>WMM</b>	Yes
	<b>Priority mapping</b>	Ethernet port 802.1P identification and marking Mapping from wireless priorities to wired priorities
	<b>QoS policy mapping</b>	Mapping of different SSIDs/VLANs to different QoS policies Mapping of data streams that match with different packet fields to different QoS policies
	<b>L2-L4 packet filtering and flow classification</b>	Yes: MAC, IPv4, and IPv6 packets
	<b>Load balancing</b>	Load balancing based on the number of users Load balancing based on user traffic

Item	Feature	WL8200-X10
	<b>Bandwidth limit</b>	Load balancing based on frequency bands
		Bandwidth limit based on APs
		Bandwidth limit based on SSIDs
		Bandwidth limit based on terminals
	Bandwidth limit based on specific data streams	
	<b>Call admission control (CAC)</b>	CAC based on the number of users
	<b>Power saving mode</b>	Yes
<b>Management</b>	<b>Automatic emergency mechanism of APs</b>	Yes
	<b>Intelligent identification of terminals</b>	Yes
	<b>Multicast enhancement</b>	Multicast to unicast
	<b>Network management</b>	Centralized management through an AC; both fit and fat modes
	<b>Maintenance mode</b>	Both local and remote maintenance
	<b>Log function</b>	Local logs, Syslog, and log file export
	<b>Alarm</b>	Yes
<b>Fault detection</b>	Yes	
<b>Statistics</b>	Yes	
<b>Switching between the fat and fit modes</b>	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.	
<b>Remote probe analysis</b>	Yes	
<b>Dual-image (dual-OS) backup mechanism</b>	Yes	
<b>Watchdog</b>	Yes	

## Typical Application



Great hall

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

**Order Information**

<b>Product</b>	<b>Description</b>
<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, default no power adapter, could be managed by DCN AP controller.