WL8200-E2 MANUAL TÉCNICO

Indoor 802.11be Wi-Fi 7 Dual Band Enterprise AP

Product Overview

WL8200-E2 is a dual-band high-performance 2.5 gigabits wireless access point device based on the 802.11be standard launched by DCN, it could offer maximum 3570Mbps access rate. WL8200-E2 works in the 2.4GHz and 5GHz frequency bands and supports advanced wireless technologies such as 240 MHz Channel Bonding and 4096-QAM. The first radio of WL8200-E2 works in the 2.4GHz frequency band and can provide a maximum access rate of 688Mbps; the second radio works in the 5GHz frequency band and can provide a maximum access rate of up to 2882Mbps.

Key Features and Highlights

Middle-level enterprise-class indoor 802.11be Wi-Fi 7 wireless access point
WL8200-E2 supports the 802.11be standard, operates in both 2.4 GHz and 5 GHz band, and provides an access bandwidth up to 3570 Mbps. This model is the best choice for middle-level office or company as it can support concurrent users up to 240.

Wireless user management at a fine granularity
WL8200-E2 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-E2 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-E2 can be powered by PoE port or external power adapter, input 100 ~ 240V AC, output: 48 V DC.

Good PoE compatibility
WL8200-E2 can work well with all PoE switch (cisco, HUAWEI, juniper, etc.) which support 802.3af & at standard, this allows to power up WL8200-E2 directly.

Multi-mode: fit, fat, bridge
WL8200-E2 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-E2
Dimensions (L*W*D) (mm)	210 x 210 x 41
Memory	512MB
Flash	144MB
1/2.5G Base-T port	1
1/2.5G SFP port	1
USB 2.0	1
Console port (RJ-45)	1
BLE port	1
Indicator LED	Yes
Reset button	Yes
Power supply	802.3af & at and External power adapter (Input: 100 ~ 240V AC , Output: 48 V DC)
Maximum power consumption	<19.7W
RF port	Built-in 2.4 GHz 3 dBi antenna and 5 GHz 3 dBi antenna
Working frequency band	802.11b/g/n/ax/be: 2.4 GHz to 2.483 GHz 802.11a/n/ac/ax/be: 5.150GHz to 5.350GHz 5.725GHz to 5.850GHz
Modulation technology	802.11b: BPSK, QPSK, CCK 802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM 802.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM 802.11ax: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM 802.11be: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM, 4096-QAM
Transmit power	2.4G: 19dBm (Per Chain: 16dBm) 5G : 21dBm (Per Chain: 18dBm)

	(*Note：final output power comply with deployment regulation might be different*)
Power adjustment granularity	1 dBm
Working/Storage temperature	0°C to 40°C –40°C to +70°C
Working/Storage RH	10% to 95% (non-condensing)
Protection level	IP30

Software Specifications

Item	Feature	WL8200-E2
WLAN	**Product positioning**	Indoor dual-frequency
	Working frequency band	2.4GHz and 5GHz
	Bandwidth performance	3570Mbps, 2.4G:688Mbps, 5G:2882Mbps
	Virtual AP (BSSID)	32
	Concurrent user	240
	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
	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
802.11be enhancements	**Space streams**	2.4GHz:2, 5GHz:2
	Frequency band	2.4GHz + 5GHz
	240 MHz bundling	Yes
	4096-QAM	Yes
	Frame aggregation (A-MPDU)	Yes
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	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**	WPA（TKIP）、WPA-PSK、WPA2（AES）、WPA3、WEP(64/128 bits)
	802.11i	Yes

Item	Feature	WL8200-E2
	802.1x authentication	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	wireless user layer 2 isolation, wireless user isolation based on SSID
	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	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
	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

Item	Feature	WL8200-E2
	Mesh networking	Yes
	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

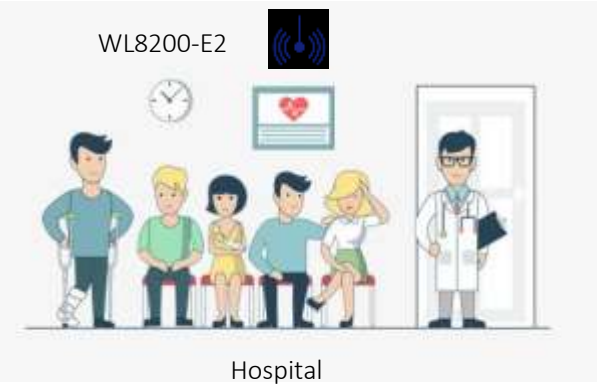
Typical Application

WL8200-E2 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

- 802.11be, Wi-Fi 7
- Access bandwidth 3570Mbps
- 802.3af/at PoE
- External power adapter
- Concurrent user 240