WL8200-IT3

802.11ac Wave 2 Outdoor Dual-Band Enterprise AP

Product Overview

DCN WL8200-IT3 is high performance outdoor wireless access point which can support 2.4 GHz and 5 GHz band, adopting technologies such as multiple-input multiple-output (MIMO) and orthogonal frequency division multiplexing (OFDM), providing a data transmission rate of at most 400 Mbps in 2.4GHz band and 867Mbps in 5GHz band. It supports up to 254 concurrent users. With integrated antenna inside, WL8200-IT3 is widely used at outdoor WIFI coverage networks, such as campus, streets, rural area, resorts and scenic spots.

Wi Fi
802.11a/b/g/n/ac wave 2

concurrent user 254

1267Mbps, 2*2 MIMO

Embedded directional antenna

IP68
Water & Dust proof

Bluetooth interface

Cloud management

SFP
Long distance uplink

Highlights

High-level outdoor wave 2 wireless access
The WL8200-IT3 supports the 802.11ac wave 2 standards and can operate in 2.4 GHz and 5 GHz both bands. It provides an access bandwidth up to 1.267Gbps, 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 operating in a broad temperature range from -40°C to 65°C.

Highest IP68 Anti-dust & water standard
WL8200-IT3 comply IP68 can be deployed in the harshest outdoor environment.

IoT era for the future
The internet of Things (IoT) will boom in the future. WL8200-IT3 can provide the connection by using Bluetooth protocol.

High-performance RF
The professional optimized design is employed for the RF module of the WL8200-IT3, integrated directional antenna supports 27 dB transmission power which can greatly improve wireless coverage.

Cloud management
WL8200-IT3 can operate with the DCN cloud platform seamless to provide a better cost-performance solution;

Dual-mode fit & fat
WL8200-IT3 can work in fit or fat mode and can flexibly switch between the fit mode and the fat mode according to network planning requirements.

Product Specifications

Hardware Specifications

Item	WL8200-IT3
Dimensions (L*W*D) (mm)	$214 \times 214 \times 67.5$
Working Frequency	2.4G：802.11b/g/n 5G：802.11a/n/ac wave2 2.4G：Bluetooth
Maximum Data Rate	2.4G：400Mbps 5G：867Mbps
Physical Port	1 * 10/100/1000Base-T PoE port for uplink 1 * 10/100/1000Base-T port for downlink, could connect external IoT module 1 * 1000M SFP fiber port One Bluetooth interface could connect Bluetooth device which could be used for IoT
PoE	802.3at
Maximum power consumption	< 20W
Antenna	Internal antenna, 2.4G 10dBi, 5G 10dBi, H110
Working frequency band	802.11a/n: 5.150 GHz to 5.850 GHz 802.11b/g/n: 2.4 GHz to 2.483 GHz 802.11ac: 5.150GHz to 5.250GHz 　　　　　5.250GHz to 5.350GHz 　　　　　5.725GHz to 5.850GHz
Modulation technology	OFDM: BPSK@6/9Mbps, QPSK@12/18Mbps, 16-QAM@24Mbps, 64-QAM@48/54Mbps DSSS: DBPSK@1Mbps, DQPSK@2Mbps, CCK@5.5/11Mbps MIMO-OFDM (11n）：MCS 0-15 MIMO-OFDM (11ac）：MCS 0-9 802.11b：BPSK，QPSK，CCK 802.11a/g/n: BPSK，QPSK，16-QAM，64-QAM 802.11ac：BPSK，QPSK，16-QAM，64-QAM，256-QAM
Transmit power	Maximum 27 dBm for all rate levels and modulation modes

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Power adjustment granularity	1 dBm	
Working/Storage temperature	-40°C to +65°C –45°C to +80°C	
Working/Storage RH	5% to 95% (non-condensing)	
Protection level	IP68	

Software Specifications

Item	Feature	WL8200-IT3
WLAN	**Product positioning**	Outdoor dual frequency
	Working frequency band	2.4 GHz and 5 GHz
	Bandwidth performance	1267Mbps
	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
	Intelligent control of terminals based on airtime fairness	Yes
	High-density application optimization	Yes
11n enhancements	**40 MHz bundling**	Yes
	400Mbps (PHY)	Yes
	Frame aggregation (A-MPDU)	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
Security	**Encryption**	64/128 WEP, dynamic WEP, TKIP, and CCMP encryption
	802.11i	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

Item	Feature	WL8200-IT3
		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
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
	Maintenance mode	Both local and remote maintenance

Item	Feature	WL8200-IT3
	Log function	Local logs, Syslog, and log file export
	Alarm	Yes
	Fault detection	Yes
	Statistics	Yes
	Switching between the fat and fit 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 mode through a local control port or Telnet.
	Remote probe analysis	Yes
	Watchdog	Yes

Typical Application

WL8200-IT3

Stadium
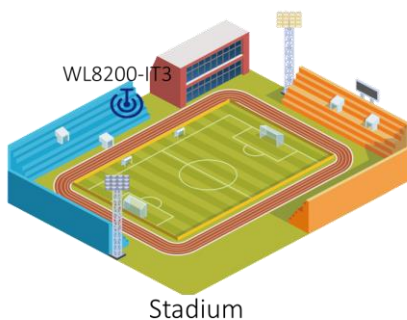
- 802.11ac wave 2
- Uplink fiber port
- 802.3at PoE
- IP68
- Concurrent user 254
- Embedded directional antenna

Order Information

Product	Description
WL8200-IT3	802.11a/b/g/n/ac wave2 outdoor high-performance AP (2.4GHz & 5GHz dual band, 1.267Gbps, internal 10dBi directional antenna, 2*10/100/1000Base-T GE ports and 1*SFP fiber port, 802.3 at PoE)