ECW5211-L
INDOOR ACCESS POINT

INTRODUCTION

The ECW5211-L is an enterprise-grade, concurrent dual-band 802.11ac Wave 2 indoor access point, designed specifically for high-density Wi-Fi environments. The ECW5211-L features two 2x2:2 MU-MIMO radios that can each transmit data to multiple clients simultaneously, and together have a combined data rate of up to 1.2 Gbps. Besides, the ECW5211-L's integrated Bluetooth Low Energy (BLE) radio also enables new value-added applications such as indoor location tracking, iBeacon, and other location-based services.

When used with an Edgecore controller, additional value-added applications such as bandwidth control, user authentication, and captive portals can be used to provide an ideal solution for all types of businesses. In addition, one AP can be associated to two controllers for redundancy purpose.
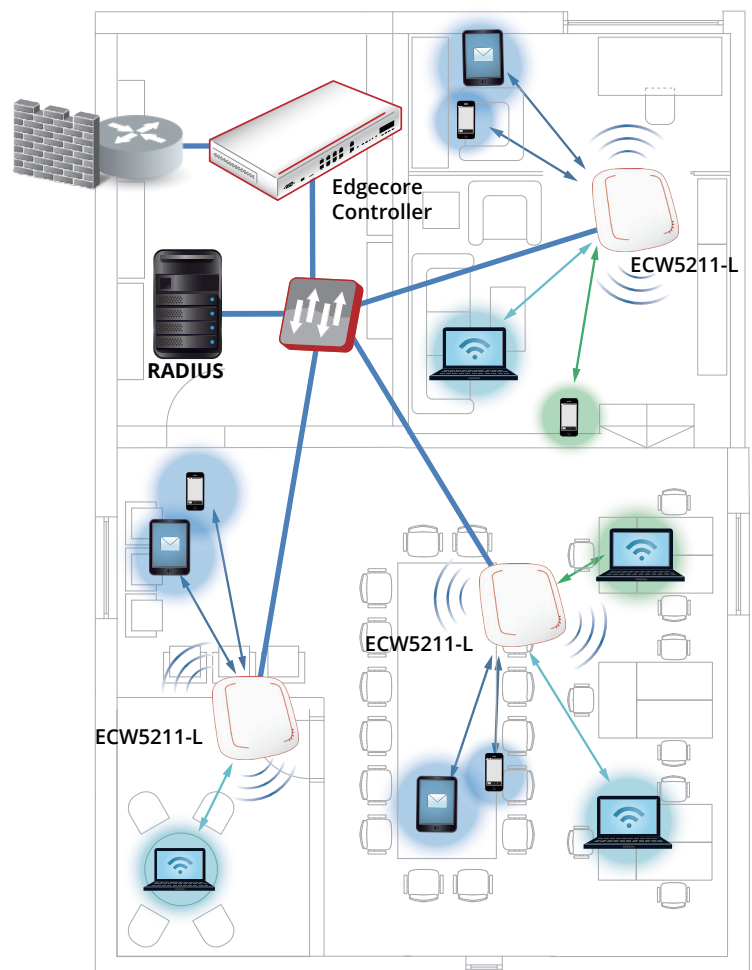
HIGHLIGHTS

WI-FI

- Concurrent Dual-Band 2.4 & 5 GHz
- 802.11ac 2x2 MU-MIMO supporting up to 1.2 Gbps data rate
- Support up to 32 ESSIDs.
- Enterprise-Grade Wireless Security

PHYSICAL

- Wall and ceiling mountable
- High Density Wi-Fi deployment
- 802.3af Power over Ethernet (PoE)
- Gigabit LAN Ethernet port
- Bluetooth Low Energy (BLE)

MANAGEMENT WITH CONTROLLER

- Captive Portal & Guest Provisioning
- Fast Layer 2/Layer 3 Roaming
- User-based Access Management
  - Bandwidth Control
  - Firewall Policies
  - Routing Policies
- Wi-Fi Monetization

SPECIFICATIONS

PHYSICAL	
Power	• DC Input: 12V / 1.0A (Power adapter optional) • PoE: 802.3af compliant (PoE injector optional)
Dimensions	• 14.7 cm (L) x 14.7 cm (W) x 3.6 cm (H)
Weight	• 0.36 kg (0.79 lbs)
Interfaces	• Uplink: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 with 802.3af PoE • LAN: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 • USB: 1 x USB 2.0 Port
LED Indicator	• Power / 2.4G-WiFi / 5G-WiFi / Eth1 / Eth2
Buttons	• Restart / Reset
Environmental Conditions	• Operating Temperature: 0°C (32°F) to 50°C (122°F) • Operating Humidity: 5% to 95% non-condensing
Power Consumption	• 11W max.
Antenna	• Type: 3 x Built-in PIFA (2 x 2.4 GHz & 5 GHz, 1 x Bluetooth Low Energy) • Gain: 3 dBi (2.4 GHz), 5 dBi (5 GHz), 3 dBi (BLE)
Mounting	• Wall/Ceiling mount (Mounting kit included) • Anti-theft: 1 Kensington Lock hole on the metal part of housing
WI-FI	
Standards	• 802.11a/b/g/n/ac ; Wave 2 • Concurrent dual-band 2.4 & 5 GHz
Supported Data Rates	• 802.11b: 1, 2, 5.5, 11 Mbps • 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps • 802.11n: 6.5 – 144 Mbps (20 MHz) • 802.11n: 13.5 – 300 Mbps (40 MHz) • 802.11ac: 6.5 – 173.4 Mbps (20 MHz) • 802.11ac: 13.5 – 400 Mbps (40 MHz) • 802.11ac: 29.3 – 866.6 Mbps (80 MHz)
Radio Chains	• 2 x 2
Spatial Streams	• 2; MU-MIMO support
RF Output Power[1]	• 2.4 GHz: Up to 21 dBm[2] • 5 GHz: Up to 20 dBm[2]
Channelization	• 20 MHz • 40 MHz • 80 MHz
Frequency Band	• 2.412 – 2.472 GHz • 5.180 – 5.825 GHz
Operating Channels	• 2.4 GHz: 1 – 11 (US), 1 – 13 (Europe), 1 – 13 (Japan) • 5 GHz[3]: 36 – 165 (US), 36 – 140 (Europe), 36 – 144 (Japan)
ESSIDs	• Up to 16 per radio (32 total)
Certifications	• Wi-Fi CERTIFIED (Wi-Fi Alliance), FCC (United States), CE (Europe)
PERFORMANCE	
Physical Data Rate	• Up to 300 Mbps (2.4 GHz) • Up to 867 Mbps (5 GHz)
Concurrent Users	• Up to 256 (128 on 2.4 GHz, 128 on 5 GHz)

[1]: RF output power aggregates across MIMO chains and doesn't contain antenna gain
[2]: Maximum power is limited by local regulatory requirements
[3]: Some channels are restricted by local regulatory requirements

QUALITY OF SERVICE

Wireless QoS (802.11e/WMM)
DSCP (802.1p)
Airtime Fairness
Band Steering
Multicast to Unicast Conversion
Optimal Client Filtering

MANAGEMENT

Deployment	• Standalone • Tunneled management by Controller • IPv4 & IPv6 compatible • LLDP
Configuration	• Web User Interface (HTTP/HTTPS) • SNMP v1, v2c, v3

SECURITY

Wireless Security	• 802.11i • WEP • WPA/WPA2 Mixed (TKIP/AES Mixed) • WPA2-Personal (AES) • WPA2-Enterprise (AES)

32 VLANs in 802.1Q (VLAN ID 1~4000)
Station Isolation
DHCP Snooping
Layer-2 Firewall

MOBILITY/ROAMING

Layer 2/Layer 3 Fast Roaming
Hotspot 2.0

RECEIVE SENSITIVITY

Operating Mode	Data Rate	Receive Sensitivity (dBm)
802.11b	1 Mbps	-95
	11 Mbps	-86
802.11a	6 Mbps	-87
	54 Mbps	-70
802.11g	6 Mbps	-89
	54 Mbps	-72
802.11n (HT20)	MCS0	-88
	MCS7	-67
	MCS8	-88
	MCS15	-67
802.11n (HT40)	MCS0	-85
	MCS7	-66
	MCS8	-85
	MSC15	-66
802.11ac (VHT20)	MCS0	-86
	MCS8	-64
802.11ac (VHT40)	MCS0	-83
	MCS9	-61
802.11ac (VHT80)	MCS0	-81
	MCS9	-57

EC_DS_210924