

# ECW5410-L

## INDOOR ACCESS POINT



### INTRODUCTION

The ECW5410-L is a concurrent dual-band 802.11ac Wave 2 high-density access point. Featuring dual 4x4 Multi-User MIMO (MU-MIMO) radios, the ECW5410-L can simultaneously support up to 600 Mbps and 1.73 Gbps data rates for both 2.4GHz and 5GHz bands, far surpassing the throughput of the latest 802.11ac Wave 1 access points. It provides a Gigabit LAN port for Ethernet-capable network devices and a built-in Bluetooth Low Energy (BLE) beacon that can be used for targeted marketing campaigns. The combination 802.11ac Wave 2 MU-MIMO technology and 4x4 spatial streams makes the ECW5410-L a top choice for high-density environments such as stadiums, arenas, and conference rooms.

### HIGHLIGHTS

#### WI-FI

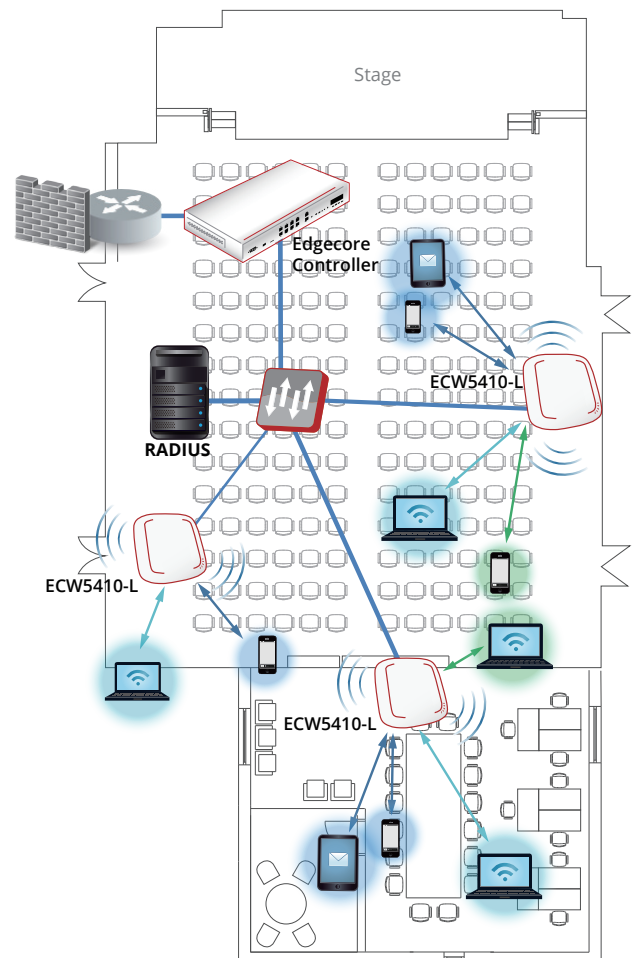
- Concurrent Dual-Band 2.4 & 5 GHz
- 802.11ac 4x4 MU-MIMO supporting up to 2.3 Gbps data rate
- Support up to 32 ESSIDs.
- Enterprise-Grade Wireless Security

#### PHYSICAL

- Wall and ceiling mountable
- High Density Wi-Fi deployment
- 802.3af PoE LAN 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**

<b>PHYSICAL</b>	
<b>Power</b>	<ul style="list-style-type: none"> <li>DC Input: 12V / 2.5A (Power adapter optional)</li> <li>PoE: 802.3at compliant (PoE injector optional)</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>19.0 cm (L) x 19.0 cm (W) x 3.3 cm (H)</li> </ul>
<b>Weight</b>	<ul style="list-style-type: none"> <li>0.61 kg (1.34 lbs)</li> </ul>
<b>Interfaces</b>	<ul style="list-style-type: none"> <li>Uplink: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 with 802.3at PoE</li> <li>LAN: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45</li> <li>Console: 1 x RJ-45 Port</li> <li>USB: 1 x USB 2.0 Port</li> </ul>
<b>LED Indicator</b>	<ul style="list-style-type: none"> <li>Power / 2.4G-WiFi / 5G-WiFi / ETH 1 (PoE) / ETH 2</li> </ul>
<b>Buttons</b>	<ul style="list-style-type: none"> <li>Restart / Reset</li> </ul>
<b>Environmental Conditions</b>	<ul style="list-style-type: none"> <li>Operating Temperature: 0°C (32°F) to 45°C (113°F)</li> <li>Operating Humidity: 5% to 95% non-condensing</li> </ul>
<b>Power Consumption</b>	<ul style="list-style-type: none"> <li>22.5W max.</li> </ul>
<b>Antenna</b>	<ul style="list-style-type: none"> <li>Type: 5 x Built-in PIFA (4 x 2.4 GHz &amp; 5 GHz, 1 x Bluetooth Low Energy)</li> <li>Gain: 3 dBi (2.4 GHz), 5 dBi (5 GHz), 3 dBi (BLE)</li> </ul>
<b>Mounting</b>	<ul style="list-style-type: none"> <li>Wall/Ceiling mount (Mounting kit included)</li> </ul>

<b>WI-FI</b>	
<b>Standards</b>	<ul style="list-style-type: none"> <li>802.11a/b/g/n/ac ; Wave 2</li> <li>Concurrent dual-band 2.4 &amp; 5 GHz</li> </ul>
<b>Supported Data Rates</b>	<ul style="list-style-type: none"> <li>802.11b: 1, 2, 5.5, 11 Mbps</li> <li>802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps</li> <li>802.11n: 6.5 – 144 Mbps (20 MHz)</li> <li>802.11n: 13.5 – 300 Mbps (40 MHz)</li> <li>802.11ac: 6.5 – 173.4 Mbps (20 MHz)</li> <li>802.11ac: 13.5 – 400 Mbps (40 MHz)</li> <li>802.11ac: 29.3 – 866.6 Mbps (80 MHz)</li> </ul>
<b>Radio Chains</b>	<ul style="list-style-type: none"> <li>4 x 4</li> </ul>
<b>Spatial Streams</b>	<ul style="list-style-type: none"> <li>4; MU-MIMO support</li> </ul>
<b>RF Output Power*1</b>	<ul style="list-style-type: none"> <li>2.4 GHz: Up to 24 dBm*2</li> <li>5 GHz: Up to 24 dBm*2</li> </ul>
<b>Channelization</b>	<ul style="list-style-type: none"> <li>20 MHz</li> <li>40 MHz</li> <li>80 MHz</li> </ul>
<b>Frequency Band</b>	<ul style="list-style-type: none"> <li>2.412 – 2.472 GHz</li> <li>5.180 – 5.825 GHz</li> </ul>
<b>Operating Channels</b>	<ul style="list-style-type: none"> <li>2.4 GHz: 1 – 11 (US), 1 – 13 (Europe), 1 – 13 (Japan)</li> <li>5 GHz*3: 36 – 165 (US), 36 – 140 (Europe), 36 – 140 (Japan)</li> </ul>
<b>ESSIDs</b>	<ul style="list-style-type: none"> <li>Up to 16 per radio (32 total)</li> </ul>
<b>Certifications</b>	<ul style="list-style-type: none"> <li>FCC (United States), CE (Europe)</li> </ul>

<b>PERFORMANCE</b>	
<b>Physical Data Rate</b>	<ul style="list-style-type: none"> <li>Up to 600 Mbps (2.4 GHz)</li> <li>Up to 1733 Mbps (5 GHz)</li> </ul>
<b>Concurrent Users</b>	<ul style="list-style-type: none"> <li>Up to 256 (128 on 2.4 GHz, 128 on 5 GHz)</li> </ul>

\*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	<ul style="list-style-type: none"> <li>♦ Standalone</li> <li>♦ Tunneled management by Controller</li> <li>♦ IPv4 &amp; IPv6 compatible</li> <li>♦ LLDP</li> </ul>
Configuration	<ul style="list-style-type: none"> <li>♦ Web User Interface (HTTP/HTTPS)</li> <li>♦ SNMP v1, v2c, v3</li> </ul>

## SECURITY

- |                       |  |
|-----------------------|--|
| Wireless Security     | <ul style="list-style-type: none"> <li>♦ WEP</li> <li>♦ WPA/WPA2 Mixed (TKIP/AES Mixed)</li> <li>♦ WPA2-Personal (AES)</li> <li>♦ WPA2-Enterprise (AES)</li> </ul> |
| VLAN Tagging (802.1Q) |  |
| 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	-97
	11 Mbps	-89
802.11a	6 Mbps	-90
	54 Mbps	-73
802.11g	6 Mbps	-91
	54 Mbps	-74
802.11n (HT20)	MCS0	-90
	MCS7	-70
	MCS8	-90
	MCS15	-70
802.11n (HT40)	MCS0	-87
	MCS7	-68
	MCS8	-87
	MCS15	-68
802.11ac (VHT20)	MCS0	-90
	MCS8	-67
802.11ac (VHT40)	MCS0	-87
	MCS9	-61
802.11ac (VHT80)	MCS0	-84
	MCS9	-58