

# ECW5211-L (TH)

## 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, ECW5211-L's integrated Bluetooth Low Energy (BLE) also enables new value-added applications such as indoor location tracking, iBeacon, and other location-based services.

When used with the 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.

### HIGHLIGHTS

#### WI-FI

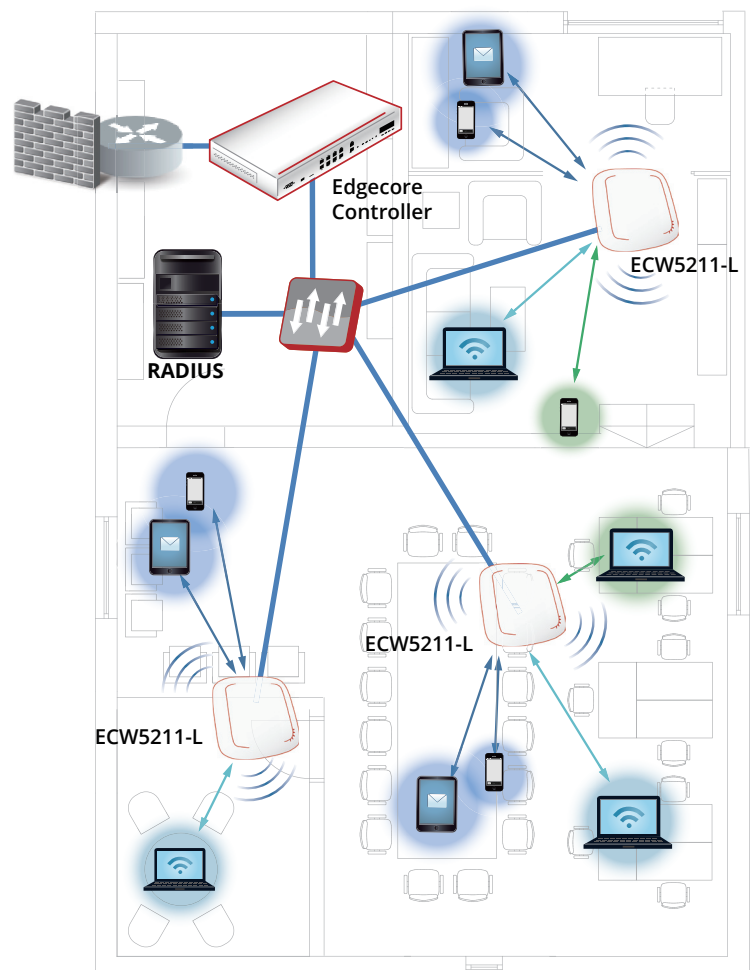
- Concurrent Dual-Band 2.4 & 5 GHz
- 802.11ac 2x2 MU-MIMO supporting up to 1.2 Gbps data rate
- Support up to 32 ESSIDs.
- Enterprise-Grade Wireless Security

#### 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
- Automatic firmware update when connected to EWS1000 controller



**SPECIFICATIONS**

| <b>PHYSICAL</b>          |   |
|--------------------------|---|
| Power                    | <ul style="list-style-type: none"> <li>DC Input: 12V / 1.0A (Power adapter optional)</li> <li>PoE: 802.3af compliant (PoE injector optional)</li> </ul>   |
| Dimensions               | <ul style="list-style-type: none"> <li>14.7 cm (L) x 14.7 cm (W) x 3.5 cm (H)</li> </ul>  |
| Weight                   | <ul style="list-style-type: none"> <li>0.36 g (0.78 lbs)</li> </ul>   |
| Interfaces               | <ul style="list-style-type: none"> <li>Uplink: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 with 802.3af PoE</li> <li>LAN: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45</li> <li>USB: 1 x USB 2.0 Port</li> </ul> |
| LED Indicator            | <ul style="list-style-type: none"> <li>Power / 2G-WiFi / 5G-WiFi / LAN</li> </ul>   |
| Buttons                  | <ul style="list-style-type: none"> <li>Reset / Restart</li> </ul>   |
| Environmental Conditions | <ul style="list-style-type: none"> <li>Operating Temperature: 0°C (32°F) to 50°C (122°F)</li> <li>Operating Humidity: 5% to 95% non-condensing</li> </ul>   |
| Power Consumption        | <ul style="list-style-type: none"> <li>9.0W max.</li> </ul>   |
| Antenna                  | <ul style="list-style-type: none"> <li>Type: 3 x Built-in PIFA (2 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>                                  |
| Mounting                 | <ul style="list-style-type: none"> <li>Wall/Ceiling mount (Mounting kit included)</li> <li>Anti-theft: 1 Kensington Lock hole on the metal part of housing</li> </ul>   |

| <b>WI-FI</b>         |   |
|----------------------|---|
| Standards            | <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>   |
| Supported Data Rates | <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> |
| Radio Chains         | <ul style="list-style-type: none"> <li>2 x 2</li> </ul>   |
| Spatial Streams      | <ul style="list-style-type: none"> <li>2; MU-MIMO support</li> </ul>  |
| E.I.R.P              | <ul style="list-style-type: none"> <li>2.4 GHz: 20 dBm</li> <li>5 GHz: 23 dBm</li> </ul>  |
| Channelization       | <ul style="list-style-type: none"> <li>20 MHz</li> <li>40 MHz</li> <li>80 MHz</li> </ul>  |
| Frequency Band       | <ul style="list-style-type: none"> <li>2.412 – 2.472 GHz</li> <li>5.180 – 5.350 GHz</li> </ul>  |
| ESSIDs               | <ul style="list-style-type: none"> <li>Up to 16 per radio (32 total)</li> </ul>   |

| <b>PERFORMANCE</b> |  |
|--------------------|--|
| Physical Data Rate | <ul style="list-style-type: none"> <li>Up to 300 Mbps (2.4 GHz)</li> <li>Up to 867 Mbps (5 GHz)</li> </ul> |
| Concurrent Users   | <ul style="list-style-type: none"> <li>Up to 256 (128 on 2.4 GHz, 128 on 5 GHz)</li> </ul>                 |

## 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>♦ CAPWAP Tunnel</li> <li>♦ IPv4 &amp; IPv6 compatible</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>♦ 802.11i</li> <li>♦ WEP</li> <li>♦ WPA/WPA2 Mixed (TKIP/AES Mixed)</li> <li>♦ WPA2-Personal (AES)</li> <li>♦ WPA2-Enterprise (AES)</li> </ul> |
| 32 VLANs in 802.1Q (VLAN ID 1~4000) |   |
| Station Isolation                   |   |
| DHCP Snooping                       |   |
| Layer-2 Firewall                    |   |

## MOBILITY/ROAMING

|                              |
|------------------------------|
| Layer 2/Layer 3 Fast Roaming |
|------------------------------|

## 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                       |
|                  | MCS15     | -66                       |
| 802.11ac (VHT20) | MCS0      | -86                       |
|                  | MCS8      | -64                       |
| 802.11ac (VHT40) | MCS0      | -83                       |
|                  | MCS9      | -61                       |
| 802.11ac (VHT80) | MCS0      | -81                       |
|                  | MCS9      | -57                       |

## FEATURES HIGHLIGHTS

- ♦ CAPWAP protocol is used for the tunnel between the AP and EWS1000 controller
- ♦ Supports at least 32 VLANs in the IEEE 802.1Q standard with VLAN ID between 1 (one) and 4000 (four thousand); each SSID can be associated with a VLAN ID independently
- ♦ Automatic firmware upgrade when connected to WLAN controller
- ♦ Fully supports the IEEE802.11i, WPA2, WPA and AES protocols
- ♦ Supports at least 64 (up to 128 on 2.4G and up to 128 on 5G) clients connected to an AP simultaneously
- ♦ Able to distribute clients on separate channels, thereby mitigating channel congestion
- ♦ The number of customers per AP is not limited or restricted by licenses