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

## PHYSICAL

<table>
<thead>
<tr>
<th>Power</th>
<th>DC Input: 12V / 2.5A (Power adapter optional)</th>
<th>PoE: 802.3at compliant (PoE injector optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>19.0 cm (L) x 19.0 cm (W) x 3.3 cm (H)</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>0.61 kg (1.34 lbs)</td>
<td></td>
</tr>
<tr>
<td>Interfaces</td>
<td>Uplink: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 with 802.3at PoE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LAN: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Console: 1 x RJ-45 Port</td>
<td></td>
</tr>
<tr>
<td></td>
<td>USB: 1 x USB 2.0 Port</td>
<td></td>
</tr>
<tr>
<td>LED Indicator</td>
<td>Power / 2.4G-WiFi / 5G-WiFi / ETH 1 (PoE) / ETH 2</td>
<td></td>
</tr>
<tr>
<td>Buttons</td>
<td>Restart / Reset</td>
<td></td>
</tr>
<tr>
<td>Environmental Conditions</td>
<td>Operating Temperature: 0°C (32°F) to 45°C (113°F)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operating Humidity: 5% to 95% non-condensing</td>
<td></td>
</tr>
<tr>
<td>Power Consumption</td>
<td>22.5W max.</td>
<td></td>
</tr>
<tr>
<td>Antenna</td>
<td>Type: 5 x Built-in PIFA (4 x 2.4 GHz &amp; 5 GHz, 1 x Bluetooth Low Energy)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gain: 3 dBi (2.4 GHz), 5 dBi (5 GHz), 3 dBi (BLE)</td>
<td></td>
</tr>
<tr>
<td>Mounting</td>
<td>Wall/Ceiling mount (Mounting kit included)</td>
<td></td>
</tr>
</tbody>
</table>

## 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
- 4 x 4

### Spatial Streams
- 4; MU-MIMO support

### RF Output Power*1
- 2.4 GHz: Up to 24 dBm*2
- 5 GHz: Up to 24 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 – 140 (Japan)

### ESSIDs
- Up to 16 per radio (32 total)

### Certifications
- FCC (United States), CE (Europe)

## PERFORMANCE

### Physical Data Rate
- Up to 600 Mbps (2.4 GHz)
- Up to 1733 Mbps (5 GHz)

### Concurrent Users
- Up to 256 (128 on 2.4 GHz, 128 on 5 GHz)

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*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
  - WEP
  - WPA/WPA2 Mixed (TKIP/AES Mixed)
  - WPA2-Personal (AES)
  - WPA2-Enterprise (AES)
- VLAN Tagging (802.1Q)
- Station Isolation
- DHCP Snooping
- Layer-2 Firewall

MOBILITY/ROAMING
- Layer 2/Layer 3 Fast Roaming
- Hotspot 2.0

RECEIVE SENSITIVITY

<table>
<thead>
<tr>
<th>Operating Mode</th>
<th>Data Rate</th>
<th>Receive Sensitivity (dBm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>802.11b</td>
<td>1 Mbps</td>
<td>-97</td>
</tr>
<tr>
<td></td>
<td>11 Mbps</td>
<td>-89</td>
</tr>
<tr>
<td>802.11a</td>
<td>6 Mbps</td>
<td>-90</td>
</tr>
<tr>
<td></td>
<td>54 Mbps</td>
<td>-73</td>
</tr>
<tr>
<td>802.11g</td>
<td>6 Mbps</td>
<td>-91</td>
</tr>
<tr>
<td></td>
<td>54 Mbps</td>
<td>-74</td>
</tr>
<tr>
<td>802.11n (HT20)</td>
<td>MCS0</td>
<td>-90</td>
</tr>
<tr>
<td></td>
<td>MCS7</td>
<td>-70</td>
</tr>
<tr>
<td></td>
<td>MCS8</td>
<td>-90</td>
</tr>
<tr>
<td></td>
<td>MCS15</td>
<td>-70</td>
</tr>
<tr>
<td>802.11n (HT40)</td>
<td>MCS0</td>
<td>-87</td>
</tr>
<tr>
<td></td>
<td>MCS7</td>
<td>-68</td>
</tr>
<tr>
<td></td>
<td>MCS8</td>
<td>-87</td>
</tr>
<tr>
<td></td>
<td>MSC15</td>
<td>-68</td>
</tr>
<tr>
<td>802.11ac (VHT20)</td>
<td>MCS0</td>
<td>-90</td>
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<tr>
<td></td>
<td>MCS8</td>
<td>-67</td>
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<tr>
<td>802.11ac (VHT40)</td>
<td>MCS0</td>
<td>-87</td>
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<tr>
<td></td>
<td>MCS9</td>
<td>-61</td>
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<tr>
<td>802.11ac (VHT80)</td>
<td>MCS0</td>
<td>-84</td>
</tr>
<tr>
<td></td>
<td>MCS9</td>
<td>-58</td>
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