

# ECWO5211-L

## OUTDOOR ACCESS POINT



### INTRODUCTION

The ECWO5211-L is an enterprise-grade, concurrent dual-band 802.11ac Wave 2 outdoor access point, designed specifically to withstand harsh weather conditions with an IP68-rated, rust-resistant plastic housing for outdoor and industrial environments. The ECWO5211-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. The ECWO5211-L's integration with Bluetooth Low Energy (BLE) also enables new value-added applications such as location tracking, iBeacon, and other location-based services. Besides, with a built-in GPS receiver, IT administrators can easily keep track of the location of all ECWO5211-Ls deployed, simplifying the maintenance task and adding a new potential of location-related 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.

### HIGHLIGHTS

#### WI-FI

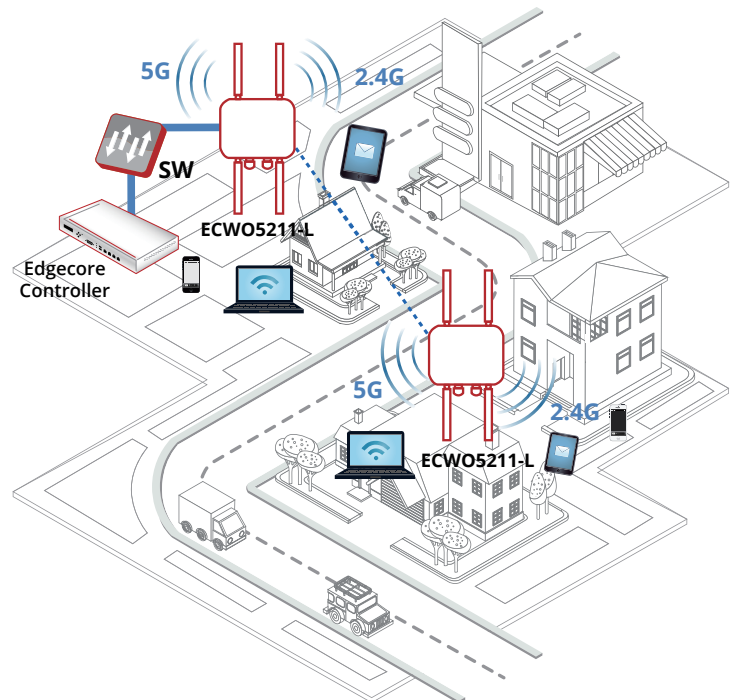
- Concurrent Dual-Band 2.4 & 5 GHz
- 802.11ac 2x2 MU-MIMO supporting up to 1.2 Gbps data rate
- Support up to 32 ESSIDs.
- Enterprise-Grade Wireless Security

#### PHYSICAL

- Wall, hose clamp, and uniaxial mountable
- IP68 weatherproof plastic housing
- Industrial Temperature Range
- 802.3at Power over Ethernet (PoE)
- Bluetooth Low Energy (BLE)
- Built-in Global Positioning System (GPS)

#### 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>• PoE: 802.3at compliant or 48V / 0.5A passive PoE injector (PoE injector optional)</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>• 25.0 cm (L) x 20.0 cm (W) x 8.0 cm (H)</li> </ul>
<b>Weight</b>	<ul style="list-style-type: none"> <li>• 1.53 kg (3.37 lbs) (Including antennas)</li> </ul>
<b>Interfaces</b>	<ul style="list-style-type: none"> <li>• LAN1: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 with 802.3at PoE</li> <li>• LAN2: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45</li> </ul>
<b>LED Indicator</b>	<ul style="list-style-type: none"> <li>• Power / LAN1/ LAN2 / 2.4 GHz / 5 GHz</li> </ul>
<b>Environmental Conditions</b>	<ul style="list-style-type: none"> <li>• Operating Temperature: -40°C (-40°F) to 65°C (149°F)</li> <li>• Operating Humidity: 10% to 95% non-condensing</li> </ul>
<b>Power Consumption</b>	<ul style="list-style-type: none"> <li>• 20W max.</li> </ul>
<b>Antenna</b>	<ul style="list-style-type: none"> <li>• Type: 4 x External N-type Connectors (2 x 2.4 GHz, 2 x 5 GHz), 1 x Built-in PIFA (1 x BLE), 1 x Built-in Patch (1 x GPS)</li> <li>• Gain: 5 dBi (2.4 GHz), 7 dBi (5 GHz), 2 dBi (BLE)</li> </ul>
<b>Mounting</b>	<ul style="list-style-type: none"> <li>• Pole mount hose clamp</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>• 2 x 2</li> </ul>
<b>Spatial Streams</b>	<ul style="list-style-type: none"> <li>• 2; MU-MIMO support</li> </ul>
<b>RF Output Power*1</b>	<ul style="list-style-type: none"> <li>• 2.4 GHz: Up to 23 dBm*2</li> <li>• 5 GHz: Up to 23 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), 100 – 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), NCC&amp;BSMI (Taiwan)</li> </ul>

<b>PERFORMANCE</b>	
<b>Physical Data Rate</b>	<ul style="list-style-type: none"> <li>• Up to 300 Mbps (2.4 GHz)</li> <li>• Up to 867 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)

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- DSCP (802.1p)

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- Airtime Fairness

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- Band Steering

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- Multicast to Unicast Conversion

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- Optimal Client Filtering

**MANAGEMENT**

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

**SECURITY**

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|------------------------------|--|
| <b>Wireless Security</b>     | <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> |
| <b>VLAN Tagging (802.1Q)</b> |  |
| <b>Station Isolation</b>     |  |
| <b>DHCP Snooping</b>         |  |
| <b>Layer-2 Firewall</b>      |  |

**MOBILITY/ROAMING**

- Layer 2/Layer 3 Fast Roaming

**RECEIVE SENSITIVITY**

Operating Mode	Data Rate	Receive Sensitivity (dBm)
802.11b	1 Mbps	-96
	11 Mbps	-90
802.11a	6 Mbps	-92
	54 Mbps	-75
802.11g	6 Mbps	-93
	54 Mbps	-71
802.11n (HT20)	MCS0	-93
	MCS7	-71
	MCS8	-93
	MCS15	-71
802.11n (HT40)	MCS0	-92
	MCS7	-70
	MCS8	-92
	MCS15	-70
802.11ac (VHT20)	MCS0	-92
	MCS8	-69
802.11ac (VHT40)	MCS0	-90
	MCS9	-65
802.11ac (VHT80)	MCS0	-86
	MCS9	-61