# ECWO5213-L

## OUTDOOR ACCESS POINT

## INTRODUCTION

The ECWO5213-L is an enterprise-grade, concurrent dual-band 802.11ac wave 2 outdoor access point, designed specifically to withstand harsh weather conditions by IP68 rated, rust-resistant plastic housing in outdoor and industrial environments. The ECWO5213-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. ECWO5213-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 ECWO5213-L deployed, simplifying the maintenance task and adding a new potential of location related services.

When ECWO5213-L is deployed and centrally managed by 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

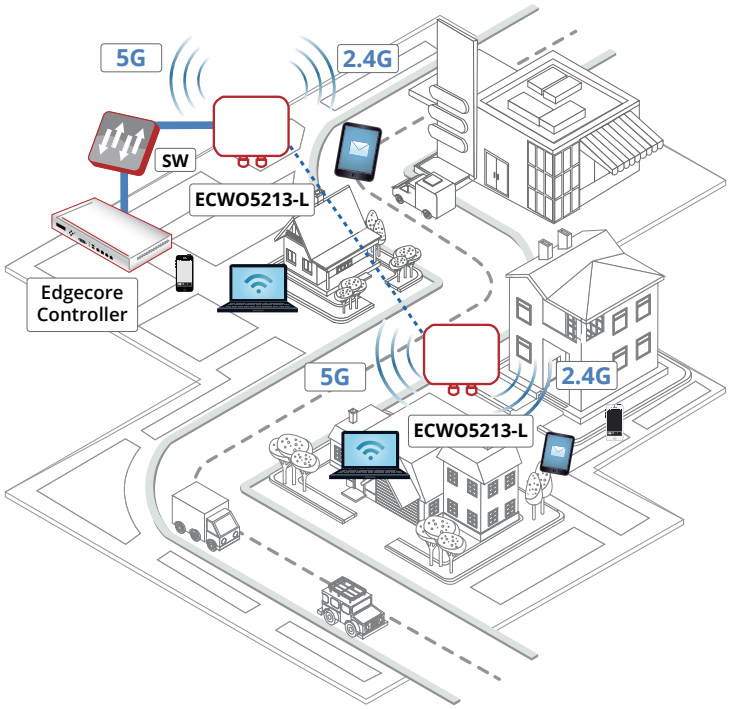
- Concurrent Dual-Band 2.4 & 5 GHz
- 802.11ac 2x2 MU-MIMO supporting up to 1.2 Gbps data rate
- Support up to 32 ESSIDs.
- Enterprise-Grade Wireless Security

### 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

| PHYSICAL | |
|---|---|
| Power | • PoE: 802.3at compliant or 48V / 0.5A passive PoE injector |
| Dimensions | • 25.0 cm (L) x 20.0 cm (W) x 8.0 cm (H) |
| Weight | • 1.23 kg (2.71 lbs) |
| Interfaces | • LAN: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 with 802.3at PoE<br>• LAN: 2 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 |
| LED Indicator | • Power / LAN1/ LAN2 / 2.4 GHz / 5 GHz |
| Environmental Conditions | • Operating Temperature: -40°C (-40°F) to 65°C (149°F)<br>• Operating Humidity: 10% to 95% non-condensing<br>• IP68 Rating |
| Power Consumption | • 20.0W max. |
| Internal Antenna | • Horizontal: 38° (2.4 GHz), 30° (5 GHz)<br>• Gain: 12 dBi (2.4 GHz), 12 dBi (5 GHz), 3 dBi (BLE), 4 dBi (GPS) |
| Mounting | • Pole mount hose clamp |
| Protective Vent Plug | |

| WI-FI | |
|---|---|
| Standards | • 802.11a/b/g/n/ac ; Wave 2<br>• Concurrent dual-band 2.4 & 5 GHz |
| Supported Data Rates | • 802.11b: 1, 2, 5.5, 11 Mbps<br>• 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps<br>• 802.11n: 6.5 – 144 Mbps (20 MHz)<br>• 802.11n: 13.5 – 300 Mbps (40 MHz)<br>• 802.11ac: 6.5 – 173.4 Mbps (20 MHz)<br>• 802.11ac: 13.5 – 400 Mbps (40 MHz)<br>• 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 18 dBm*2<br>• 5 GHz: Up to 18 dBm*2 |
| Channelization | • 20 MHz<br>• 40 MHz<br>• 80 MHz |
| Frequency Band | • 2.412 – 2.472 GHz<br>• 5.180 – 5.825 GHz |
| Operating Channels | • 2.4 GHz: 1 – 11 (US), 1 – 13 (Europe), 1 – 13 (Japan)<br>• 5 GHz*3: 36 – 165 (US), 36 – 140 (Europe), 100 – 140 (Japan) |
| ESSIDs | • Up to 16 per radio (32 total) |
| Certifications | • FCC (United States), CE (Europe) |

| PERFORMANCE | |
|---|---|
| Physical Data Rate | • Up to 300 Mbps (2.4 GHz)<br>• 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<br>• Tunneled management by Edgecore Controller<br>• IPv4 & IPv6 compatible<br>• LLDP |
| Configuration | • Web User Interface (HTTP/HTTPS)<br>• SNMP v1, v2c, v3 |

## SECURITY

| | |
|---|---|
| Wireless Security | • WEP<br>• WPA/WPA2 Mixed (TKIP/AES Mixed)<br>• WPA2-Personal (AES)<br>• WPA2-Enterprise (AES) |

- VLAN Tagging (802.1Q)
- Station Isolation
- DHCP Snooping
- Layer-2 Firewall

## MOBILITY/ROAMING

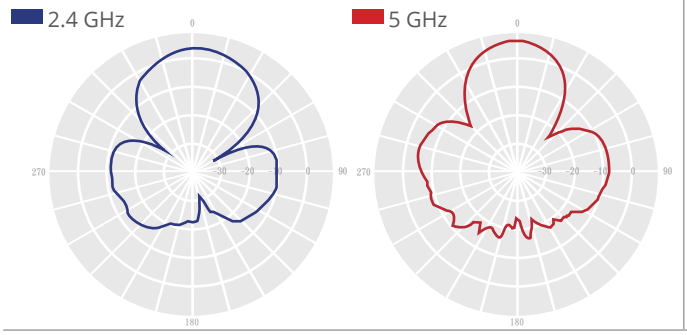
- Layer 2/Layer 3 Fast Roaming
- Hotspot 2.0

## RECEIVE SENSITIVITY

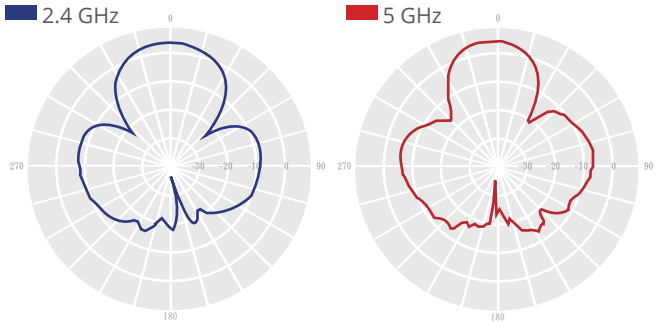
| Operating Mode | Data Rate | Receive Sensitivity (dBm) |
|---|---|---|
| 802.11b | 1 Mbps | -96 |
| | 11 Mbps | -90 |
| 802.11a | 6 Mbps | -92 |
| | 54 Mbps | -75 |
| 802.11g | 6 Mbps | -93 |
| | 54 Mbps | -71 |
| 802.11n (HT20) | MCS0 | -93 |
| | MCS7 | -71 |
| | MCS8 | -93 |
| | MCS15 | -71 |
| 802.11n (HT40) | MCS0 | -92 |
| | MCS7 | -70 |
| | MCS8 | -92 |
| | MSC15 | -70 |
| 802.11ac (VHT20) | MCS0 | -92 |
| | MCS8 | -69 |
| 802.11ac (VHT40) | MCS0 | -90 |
| | MCS9 | -65 |
| 802.11ac (VHT80) | MCS0 | -86 |
| | MCS9 | -61 |

## SIGNAL COVERAGE PATTERN

H-plane (Horizontal)




E-plane (Vertical)

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