

ECW5211-L

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

The TIP open ECW5211-L AP hardware is pre-installed with TIP's Open AP software, saving time and hassle from software installation, but at the same time reserve the flexibility for further changes. From SMB to MDUs to larger venues, the TIP open ECW5211-L is a flexible hardware platform for the different network use cases and requirements.





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)



SPECIFICATIONS

PHYSICAL	
CPU	+ IPQ4018
Flash	* NOR: 32MB
	• NAND: 256MB
Mamany	
Memory	
Power	 DC Input: 12V / 1.0A (Power adapter included) PoE: 802.3af compliant (PoE injector optional)
Dimensions	
	+ 14.7 cm (L) x 14.7 cm (W) x 3.6 cm (H)
Weight	* 0.36 kg (0.79 lbs)
Interfaces	Uplink: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 with 802.3af PoE LANK 1 x 10/100/1000Base T Ethernet, Auto MDIX, RJ-45
	LAN: 1 x 10/100/1000Base-T Ethernet, Auto MDIX, RJ-45 LIGD: 1 x LIGD 2 0 Ports
LED to Protess	USB: 1 x USB 2.0 Port
LED Indicator	Power / 2.4G-WiFi / 5G-WiFi / Eth1 / Eth2
Buttons	Restart / Reset
Environmental Conditions	Operating Temperature: 0°C (32°F) to 50°C (122°F)
	Operating Humidity: 5% to 95% non-condensing
Power Consumption	* 11W max.
Antenna	Type: 3 x Built-in PIFA (2 x 2.4 GHz & 5 GHz, 1 x Bluetooth Low Energy)
	Gain: 3 dBi (2.4 GHz), 5 dBi (5 GHz), 3 dBi (BLE)
Mounting	Wall Mount/ T-bar Mount (Mounting kit included)/Ceiling mount (Mounting kit
	optional)
	Anti-theft: 1 Kensington Lock hole on the metal part of housing
ESD	IEC-61000-4-2 +/-4KV for contact discharge, +/-8KV for Air discharge (criteria B)
WI-FI	
Standards	* 802.11 ac Wave 2/a/b/g/n
	Concurrent dual-band 2.4 & 5 GHz
	+ 802.11b: 1, 2, 5.5, 11 Mbps
	* 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps
	 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11n: 6.5 – 144 Mbps (20 MHz)
Supported Data Rates	 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)
Supported Data Rates	 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)
Supported Data Rates	 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)
	 802.11a/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	 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) 2 x 2
	 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) 2 x 2 2; MU-MIMO support
Radio Chains Spatial Streams	 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) 2 x 2 2; MU-MIMO support 2.4 GHz: Up to 21 dBm*²
Radio Chains	 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) 2 x 2 2; MU-MIMO support 2.4 GHz: Up to 21 dBm*² 5 GHz: Up to 20 dBm*²
Radio Chains Spatial Streams RF Output Power*1	 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) 2 x 2 2; MU-MIMO support 2.4 GHz: Up to 21 dBm*² 5 GHz: Up to 20 dBm*² 20 MHz
Radio Chains Spatial Streams	 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) 2 x 2 2; MU-MIMO support 2.4 GHz: Up to 21 dBm*² 5 GHz: Up to 20 dBm*² 20 MHz 40 MHz
Radio Chains Spatial Streams RF Output Power*1	 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) 2 x 2 2; MU-MIMO support 2.4 GHz: Up to 21 dBm*² 5 GHz: Up to 20 dBm*² 20 MHz 40 MHz 80 MHz
Radio Chains Spatial Streams RF Output Power*1	 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) 2 x 2 2; MU-MIMO support 2.4 GHz: Up to 21 dBm*² 5 GHz: Up to 20 dBm*² 20 MHz 40 MHz 80 MHz 2.412 - 2.472 GHz
Radio Chains Spatial Streams RF Output Power*1 Channelization	 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) 2 x 2 2; MU-MIMO support 2.4 GHz: Up to 21 dBm*² 5 GHz: Up to 20 dBm*² 20 MHz 40 MHz 80 MHz 2.412 – 2.472 GHz 5.180 – 5.825 GHz
Radio Chains Spatial Streams RF Output Power*1 Channelization	 * 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) * 2 x 2 * 2; MU-MIMO support * 2.4 GHz: Up to 21 dBm*² * 5 GHz: Up to 20 dBm*² * 20 MHz * 40 MHz * 80 MHz * 2.412 - 2.472 GHz * 5.180 - 5.825 GHz * 2.4 GHz: 1 - 11 (US), 1 - 13 (Europe), 1 - 13 (Japan)
Radio Chains Spatial Streams RF Output Power*1 Channelization Frequency Band Operating Channels	 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) 2 x 2 2; MU-MIMO support 2.4 GHz: Up to 21 dBm*² 5 GHz: Up to 20 dBm*² 20 MHz 40 MHz 80 MHz 2.412 - 2.472 GHz 5.180 - 5.825 GHz 2.4 GHz: 1 - 11 (US), 1 - 13 (Europe), 1 - 13 (Japan) 5 GHz*³: 36 - 165 (US), 36 - 140 (Europe), 36 - 144 (Japan)
Radio Chains Spatial Streams RF Output Power*1 Channelization Frequency Band	 * 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) * 2 x 2 * 2; MU-MIMO support * 2.4 GHz: Up to 21 dBm*² * 5 GHz: Up to 20 dBm*² * 20 MHz * 40 MHz * 80 MHz * 2.412 - 2.472 GHz * 5.180 - 5.825 GHz * 2.4 GHz: 1 - 11 (US), 1 - 13 (Europe), 1 - 13 (Japan)

^{*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



PERFORMANCE	
Physical Data Rate	Up to 300 Mbps (2.4 GHz)
	Up to 867 Mbps (5 GHz)
FIRMWARE	
TIP Open WiFi Ready	
PART NUMBER	
ECW5211-L (T-US)	* FI2EC5211400S-C
ECW5211-L (T-EU)	• FI2EC5211201S-C
ECW5211-L (T-UK)	• FI2EC5211301S-C

Contact Us

For more information, please contact us: openwifi@edge-core.com

EC Open Wi-Fi Page

https://wifi.edge-core.com/openwifi

EC Open Wi-Fi User Forum

https://openwifi.edge-core.com/

EC_DS_210924