ECW5212
802.11ac Dual-Band Adaptive MIMO (A-MIMO) Smart Antenna Wireless Stand-alone Access Point

Product Overview

The ECW5212 is an indoor 802.11a/b/g/n/ac dual-band, dual-radio enterprise AP with A-MIMO smart antenna technology. The AP is suitable for high-density and noisy environments, providing better coverage, improved throughput, and more stable connectivity. The ECW5212 supports 802.3af PoE, which enables the AP to be powered remotely by a PoE switch. An AC power adapter option is also included for locations where PoE is not available.
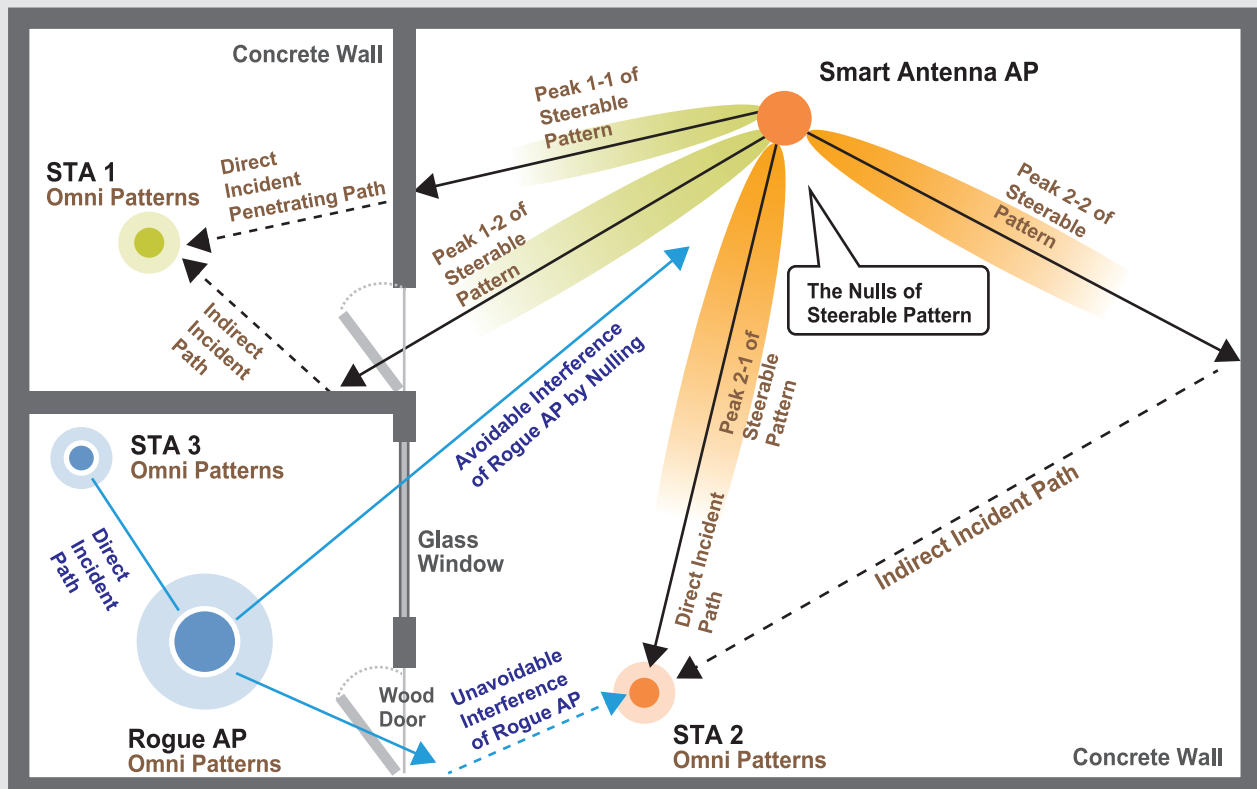
Key Features and Benefits

Wireless 802.11ac Technology

Through its adaptive-MIMO smart antenna array, the ECW5212 can create up to 512 pattern combinations per band that steer peaks and nulls over a hemispherical coverage area. This significantly improves coverage and throughput at the network edge, while also increasing interference rejection. The result is a stable wireless network with consistent air-link quality and improved connection reliability.

A-MIMO Smart Antenna Key Benefits

- Coverage-edge throughput improvement
- Coverage-variety for high density multi-user throughput improvement
- Reduction of blind/dead spots
- Provides stable and consistent air-link quality – connection reliability
- Cost-effective solution with competitive-edge performance

Differentiated Features of Adaptive MIMO (A-MIMO) Smart Antenna Usage

Features

Physical Features
One 10/100/1000BASE-T Gigabit Ethernet (RJ-45) port with 802.3af-compliant Power-over-Ethernet (PoE) support
Four LEDs: System/Power, Ethernet/PoE, WLAN1 (2.4 GHz), WLAN2 (5 GHz)
One reset button
One DC-in jack

Standards
IEEE 802.11n 2.4 GHz and 5 GHz
IEEE 802.11a/ac 5 GHz
IEEE 802.11b/g 2.4 GHz
IEEE 802.3, IEEE 802.3u, IEEE 802.3ab
IEEE 802.3af Power over Ethernet (PoE)
IEEE 802.11h Regulatory Domain Selection
IEEE 802.11i wireless security

Wireless Frequency
802.11b/g/n:
2.4 ~ 2.4835 GHz (US, Canada, ETSI)
802.11a/n/ac:
5.15 ~ 5.25 GHz (lower band) US/Canada, Europe
5.25 ~ 5.35 GHz (middle band) US/Canada, Europe
5.725 ~ 5.825 GHz (upper band) US/Canada
5.5 ~ 5.7 GHz Europe

Radio Interface
Bandwidth: 20, 40, and 80 MHz (11ac only)
Modulation: BPSK, QPSK, 16QAM, 64QAM, and 256QAM (11ac only)

Antenna
2.4 GHz
Type: Internal 2x2 MIMO (2 streams, 2T2R), 10 element array
Frequency: 2.4 ~ 2.4835 GHz
Peak Gain: 5 dBi
5 GHz
Type: Internal 2x2 MIMO (2 streams, 2T2R), 10 element array
Frequency: 5.15 ~ 5.85 GHz
Peak Gain: 6 dBi

Regulatory Compliance
FCC: FCC Part 15, Subpart B
CE: EN 55022+24:2010 Class B, EN 301 489-1 V1.9.2, EN 301 489-17 V2.1.1

Radio Signal Certification
FCC
2.4 GHz: FCC part 15C 15.247
5 GHz: FCC part 15C 15.247 (Band 4) + part 15E 15.407 (Band 1/2/3)
DFS (software dependent)
CE
2.4 GHz: EN 300 328 V1.8.1
5 GHz: EN301 489 V1.7.1
DFS (software dependent)

Safety
UL/IEC 60950-1

Mechanical
Dimensions: (L x W x H) 19.6 x 19.0 x 5.3 cm (7.7 x 7.4 x 2 in)
Weight: 554.2 g (1.22 lb)

Power
AC Adapter Input: 100 to 240 VAC @ 50/60 Hz
AC Adapter Output: 12 VDC, 1.0 A
PoE: IEEE 802.3af PoE PD (RJ-45 LAN port only)

Environmental Specification
Operating: Temperature: 0°C to 45°C
Humidity: 5% – 95% RH
Storage: Temperature: -40°C to 70°C
Humidity: 5% – 95% RH

RF Transmitter Power
2.4 GHz (dBm per chain, measured at U.FL connector at under 25°C)

Legacy		HT20		HT40	
802.11b 1~11 Mbps	25	802.11n MCS0	25	802.11n MCS0	24
802.11g 6 Mbps	25	802.11n MCS7	22	802.11n MCS7	22
802.11g 54 Mbps	22				

5 GHz (dBm per chain, measured at U.FL connector at under 25°C)

802.11a		VHT20		VHT40		VHT80	
6 Mbps	26	802.11n MCS0	26	802.11n MCS0	25	802.11ac MCS0	25
54 Mbps	21	802.11n MCS7	21	802.11n MCS7	21	802.11n MCS7	21
		802.11ac MCS8	20	802.11ac MCS8	20	802.11ac MCS8	20
				802.11ac MCS9	20	802.11ac MCS9	20

RF Receiver Power
2.4 GHz (dBm per chain, measured at U.FL connector at under 25°C)

Legacy		HT20		HT40	
802.11b 1~11 Mbps	-90	802.11n MCS0	-87	802.11n MCS0	-85
802.11g 6 Mbps	-88	802.11n MCS7	-72	802.11n MCS7	-69
802.11g 54 Mbps	-74				

5 GHz (dBm per chain, measured at U.FL connector at under 25°C)

802.11a		VHT20		VHT40		VHT80	
6 Mbps	-93	802.11n MCS0	-92	802.11n MCS0	-90	802.11ac MCS0	-86
54 Mbps	-76	802.11n MCS7	-72	802.11n MCS7	-70	802.11n MCS7	-66
		802.11ac MCS8	-68	802.11ac MCS8	-66	802.11ac MCS8	-62
				802.11ac MCS9	-64	802.11ac MCS9	-60

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Features

Warranty

Please check www.edge-core.com for the warranty terms in your country.

For More Information

To find out more about Edgecore Networks Corporation products and solutions, visit www.edge-core.com.

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