

Highlights

Radio Technology

- 5 GHz 2x2:2
- 2.4 GHz 2x2:2

Radio Modes - SDR

- 5 GHz / 2.4 GHz Fixed
- 5 GHz / 5 GHz - Dual 5 GHz

High Density Environments

- Delivers exceptional end-user experience even in dense user environments

WPA3 Support

- Includes the latest WPA3 Wi-Fi security standard delivering robust protections for users and IoT devices

Fully Functional over 802.3af

Smart Management

- ExtremeCloud[™] IQ delivers powerful, simple, and secure public or private cloud management capabilities



ExtremeWireless[™] AP305C/CX

Wi-Fi 6 certified (802.11ax) Indoor Access Point with integrated or external antenna options

The AP305C/AP305CX is based on new system-on-a-chip (SoC) with two built-in dual-band radios providing the best value with Wi-Fi 6 high-efficiency. Advanced radio technology delivers 802.11ax 2x2:2 data rates up to 2.4 Gbps concurrently on both the 2.4 GHz and 5 GHz radios or simultaneously on two 5 GHz radios using dual-5 GHz SDR technology.

Priced for the mid-market, this enterprise-grade access point is ideal for budget-conscious enterprises who do not want to sacrifice performance. It is also an environmentally-friendly AP made from recycled materials, and includes an integrated light sensor and power meter to help conserve power consumption.

Despite the exponential growth of users, BYOD devices, IoT, high-bandwidth applications and security threats straining the infrastructure, the AP305C combines performance, security services and insightful ML/AI management capabilities to deliver an enterprise class solution at a value price.



ExtremeWireless[™] AP305C/CX



Built to Suit Your Business Needs

Extreme Elements are the building blocks that allow you to tailor your network to your specific business environment, goals, and objectives. They enable the creation of an Autonomous Network that delivers the positive experiences and business outcomes most important to your organization.

Combining architecture, automation, and artificial intelligence, Extreme Elements enable you to ensure that your users get what they need — when and where they need it. Providing these superior user experiences is as simple as mixing and matching the right elements.

Learn more at extremenetworks.com/elements/.





SECURITY

The AP305C delivers the highest level of security services, beginning with support for the latest Wi-Fi Alliance WPA3 security certifications. Additionally, supporting a stateful L2-L7 DPI firewall for context-based access security, Private Pre-Shared Key (PPSK) and much more.



MANAGEMENT ANALYTICS

In conjunction with management system, cloud or on-premises, the AP305C provides a very rich set of data displayed via context driven widgets, representing historical data or a combination of historical and current data. This provides context-specific granularity with perspective views for locations, network, APs, individual client devices, as well as policy roles. In each context, administrators can adjust dashboards from widget library.



WI-FI 6 TECHNOLOGY

Prior generations of 802.11n, 802.11ac wave 1 and 2, can be considered generational improvements with an emphasis on faster speed. 802.11ax technology instead enhances Wi-Fi efficiency as well as speed, taking Wi-Fi networks to an entirely new level. To learn more about 802.11ax, go to: <https://www.extremenetworks.com/are-you-ready-for-802-11ax/>



RF MONITORING

Network managers will appreciate a powerful choice of RF management for their Wi-Fi networks, with Adaptive RF management with AI/ML-like functionality. Adaptive RF algorithms provide intelligent selection of the best channels and transmit power for unimpaired dual 5 GHz operation. Load balancing, band steering and many other attributes of the RF can all be automated.



PROGRAMMABLE RADIOS

Extreme launched the Industry's first software defined 802.11ax access point supporting not only a dual 5GHz capability but also three software programmable modes to optimally manage radios to provide the highest level of client performance. The AP305C intelligent monitoring of the software configurable radios enables network managers configure network RF topology based on user environment and configure the access points in different modes as required.



INTEGRATED BLE AND ZIGBEE

To support both IoT and Guest Engagement services the AP305C integrates Bluetooth to connect with IoT devices with Thread wireless or engage loyalty customers with Apple iBeacon. Enterprises can use Google Eddystone to send advertisements directly to shoppers, guests, and conference attendees. This makes it ideal for businesses to advertise their app download pages, captive portals, or site-specific information

Product Specifications

Radio Specifications

802.11a

- 5.150–5.850 GHz Operating Frequency
- Orthogonal Frequency Division Multiplexing (OFDM) Modulation
- Rates (Mbps): 54, 48, 36, 24, 18, 12, 9, 6 w/ auto fallback

802.11b

- 2.4–2.5 GHz Operating Frequency
- Direct-Sequence Spread-Spectrum (DSSS) Modulation
- Rates (Mbps): 11, 5.5, 2, 1 w/ auto fallback

802.11g

- 2.4–2.5 GHz Operating Frequency
- Orthogonal Frequency Division Multiplexing (OFDM) Modulation
- Rates (Mbps): 54, 48, 36, 24, 18, 12, 9, 6 w/ auto fallback

802.11n

- 2.4–2.5 GHz & 5.150–5.850 GHz Operating Frequency
- 802.11n Modulation
- Rates (Mbps): MCS0 - MCS15 (6.5Mbps - 300Mbps)
- 2x2 Multiple-In, Multiple-Out (MIMO) Radio
- HT20 High-Throughput (HT) Support (for both 2.4 GHz and 5 GHz)
- HT40 High-Throughput (HT) Support for 5 GHz
- A-MPDU and A-MSDU Frame Aggregation

802.11ac

- 5.150–5.850 GHz Operating Frequency
- 802.11ac Modulation (256-QAM)
- Rates (Mbps): MCS0-MCS9 (6.5Mbps - 867Mbps), NSS = 1-2.
- 2x2:2 Stream Multiple-In, Multiple-Out (MIMO) Radio
- VHT20/VHT40/VHT80 support
- TxBF (Transmit Beamforming)

802.11ax

- 5.150–5.850 GHz Operating Frequency
- 802.11ax Modulation (1024-QAM)
- Dual-band OFDMA
- Rates (Mbps): HE0-HE11 (8 Mbps - 1200 Mbps), NSS = 1-2.
- 2x2:2 Stream Multiple-In, Multiple-Out (MIMO) Radio
- HE20/HE40/HE80 support
- TxBF (Transmit Beamforming)

BLE/BT 5.0

Interfaces

- (1) Autosensing 10/100/1000 BASE-T Ethernet PoE (Power over Ethernet 802.3af) Port
- USB2.0, Type A, 1A

Power Specifications

- IEEE 802.3af PoE Power

Power Options

- Power Draw: Typical 14.98W w/USB, 9.98W w/o USB
Max 16.28W w/USB, 11.28 W w/o USB
- 802.3af Power over Ethernet (PoE) capable
Gigabit Ethernet port (RJ-45 power input pins:

Wires 4,5,7,8 or 1,2,3,6)

- 802.3af Power over Ethernet injector

Physical

- 5.2" x 5.2" x 1.3" (133mm x 133mm x 35mm)
- AP305C and AP305CX: .8 lbs (.38 kg)

Antennas

AP305C - Internal Antennas

- (2) Integrated single band, 2.4-2.5 GHz omnidirectional antennas
- (2) Integrated single band, 5.1-5.8 GHz omnidirectional antennas

AP305CX

- (4) RP SMA connectors

Mounting

- Wall Mount included as part of AP
- Built-in slot for Kensington type locks
- Ceiling Tile Recessed 15/16", 3/8", 9/16" sold as an accessory
- Ceiling Tile flush 3/8", 9/16" sold as an accessory

Environmental

- Operating: 0 to 40 °C, Storage: -40 to 70 °C
- Humidity: 10% to 95% (non-condensing)

Environmental Discharge

- +/-8 kV (contact discharge)/ +/-15 kV (Air Discharge)

Regulatory Compliance

Product Safety Certifications

- IEC 62368/60950-1, EN 62368/60950-1, USA 62368/60950-1, AS/NZS 62368/60950.1, Intertek NTRL
- RoHS Directive 2011/65/EU

Radio Approvals

- FCC CFR 47 Part 15, Class B, ICES-003 Class B, FCC Subpart C 15.247, FCC Subpart E 15.407, RSS247,
- AS/NZS4268 + CISPR32
- IEC/EN 60601-1-2,
- EN 62479: 2010
- EN 62311: 2008
- EN 50385: 2002
- EN 301 489-1 V2.1.1 (2017-02)
- EN 301 489-3 V2.1.1 (2019-03)
- EN 301 489-17 V3.1.1 (2017-02)
- EN 55032: 2015, (Class B)
- EN 55011:2009 +A1:2010 (Group 1, Class B)
- EN 55024: 2010 + A1:2015
- EN 60601-1-2:2015
- EN 61000-3-2: 2014
- EN 61000-3-3: 2013
- EN 300 328 V2.1.1 (2016-11)
- EN 301 893 V2.1.1 (2017-05)
- EN 300 440 V2.1.1 (2017-03)
- EN 50581:2012

Ordering Information

AP305C and AP305CX

SKU	Description
AP305C-FCC	ExtremeCloud IQ : Indoor WiFi6 AP, 2x2 radios with Dual 5GHz and 1x1GbE port. Integrated light/power sensors & BLE/Zigbee. AI/ML green mode. Internal antennas. Built-in ceiling mounts. Includes Connect. Domain : US
AP305C-CAN	ExtremeCloud IQ : Indoor WiFi6 AP, 2x2 radios with Dual 5GHz and 1x1GbE port. Integrated light/power sensors & BLE/Zigbee. AI/ML green mode. Internal antennas. Built-in ceiling mounts. Includes Connect. Domain : Canada
AP305C-WR	ExtremeCloud IQ : Indoor WiFi6 AP, 2x2 radios with Dual 5GHz and 1x1GbE port. Integrated light/power sensors & BLE/Zigbee. AI/ML green mode. Internal antennas. Built-in ceiling mounts. Includes Connect. Domain : EMEA, Rest of World
AP305CX-FCC	ExtremeCloud IQ : Indoor WiFi6 AP, 2x2 radios with Dual 5GHz and 1x1GbE port. Integrated light/power sensors & BLE/Zigbee. AI/ML green mode. External antenna support. Antennas sold separately. Includes Connect. Domain : US
AP305CX-CAN	ExtremeCloud IQ : Indoor WiFi6 AP, 2x2 radios with Dual 5GHz and 1x1GbE port. Integrated light/power sensors & BLE/Zigbee. AI/ML green mode. External antenna support. Antennas sold separately. Includes Connect. Domain : Canada
AP305CX-WR	ExtremeCloud IQ : Indoor WiFi6 AP, 2x2 radios with Dual 5GHz and 1x1GbE port. Integrated light/power sensors & BLE/Zigbee. AI/ML green mode. External antenna support. Antennas sold separately. Includes Connect. Domain : EMEA, Rest of World