Highlights

Advanced Radio Technology

Tri-Radio Design

- 5 GHz 4x4:4
- 2.4 GHz 2x2:2
- 2.4 GHz / 5 GHz / Sensor

Multiple Radio Modes - SSR

- 2.4 GHz / 5 GHz / Sensor (2.4 GHz/5GHz)
- 5 GHz / 5 GHz - Dual 5 GHz

High Density Environments

- Delivers exceptional end-user experience even in the densest user environments

WPA3 Support

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

Fully Functional over 802.3at

Designed for Harsh Environments

- IP67 Outdoor Rated
- Extended temp range- 40C to +60C

Smart Management Choices

- ExtremeCloud IQ delivers powerful, simple and secure public or private cloud management capabilities.
- ExtremeCloud Appliance is ideal for on-premises requirements

ExtremeWireless™ AP460C

Wi-Fi 6 Certified (802.11ax) Tri-Radio Outdoor Access

The AP460C is a Tri Radio based on advanced radio technology delivers 802.11ax and is designed for harsh environments; from hurricane force winds to sub-zero temperature. The AP460C is IP67 outdoor rated and extends Extreme's Wi-Fi 6 coverage outdoors in a sleek form factor with three different antenna models: AP460C is based on internal Omni antenna, AP460S6C is a internal 60° Sector, and the AP460S12C is based on a 120° Sector for the most challenging outdoor deployments.

The AP460C is based on WiFi 6 Tri-Radios design delivers 802.11ax 2x2:2 data rates on 2.4 GHz and 4x4:4 data rates on 5 GHz concurrently on both the 2.4 GHz and 5 GHz radios and a 3rd radio for a dedicated full time dual banded sensor. The Tri-Radio APs continue the Extreme tradition of software-selectable-radios (SSRs) capable of dual 5 GHz connectivity for outdoor harsh environments.

With more users, more devices, more things, more applications and more threats straining the infrastructure, the AP460 was engineered to meet those challenges. The AP460 combines powerful 802.11ax Wi-Fi 6 technology, advanced security and ML/AI management capabilities together into an enterprise class solution that allows you to deploy high speed, highly secure Wi-Fi into the toughest environments.

Ex Extreme Elements™

ExtremeWireless™ AP460C

Hu Human   **IQ** ExtremeCloud IQ   **Ap** AP300 Series

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 uses 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 AP460C 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 AP410C 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.

Programable Radios

Industry's first tri-radio 802.11ax access point with two software programmable modes to optimally manage radios to provide the highest level of client performance while simultaneously providing continuous RF monitoring for security threats. The AP460C 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 AP460 integrates Bluetooth to connect with IoT devices with Thread wireless or engage loyalty customers with Apple iBeacon. Enterprises can use API driven applications 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 – MCS31 (6.5MBps - 600Mbps)
    - 5G: 4x4 Multiple-In, Multiple-Out (MIMO) Radio
    - 2.4G: 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 – 3467Mbps), NSS = 1-4.
- 2x2:2 Stream Multiple-In, Multiple-Out (MIMO) Radio
- VHT20/VHT40/VHT80 support
- TxBF (Transmit Beamforming)

802.11ax (for 5 GHz Sensor)
- 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
- VHT20/VHT40/VHT80/VHT160 support
- TxBF (Transmit Beamforming)

802.11ax (for 5 GHz Radio)
- 5.150–5.850 GHz Operating Frequency
- 802.11ax Modulation (1024-QAM)
- Dual-Band OFDMA
- Rates (Mbps): HE0-HE11 (7.3 Mbps – 4800 Mbps), NSS = 1-4.
- 4x4:4 Stream Multiple-In, Multiple-Out (MIMO) Radio
- HE20/HE40/HE80/HE160 support
- TxBF (Transmit Beamforming)

Radios
- BLE 5 Radio Bluetooth® Low Energy (BLE) and IEEE® 802.15.4 compliant
- USB 2.0, Type A , 5V, .5A

Interfaces
- 100/1000/2500 Mbps auto-negotiation Ethernet port, RJ45 PoE (Power over Ethernet 802.3at) Port
- 10/100/1000 Mbps auto-negotiation Ethernet port, RJ45

Power Specifications
- IEEE 802.3at PoE Power

Power Options
- Power Draw: Typical: 11.5W; Max. 15.23W
- 802.3at 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

Antennas

AP460C - Internal OMNI Antennas
- (2) Integrated single band, 5.1-5.8 GHz omnidirectional antennas
- (4) Integrated dual band, 2.4-2.5 GHz and 5.1-5.8 GHz omnidirectional
- (1) Integrated single band, 2.4-2.5 GHz omnidirectional antennas for BLE

AP460S6C - Internal 60° Sector. Antennas
- (2) Integrated single band, 5.1-5.8 GHz sector antennas
- (4) Integrated dual band, 2.4-2.5 GHz and 5.1-5.8 GHz sector antennas
- (1) Integrated single band, 2.4-2.5 GHz omnidirectional antennas for BLE

AP460S12C - Internal 120° Sector. Antennas
- (2) Integrated single band, 5.1-5.8 GHz sector antennas
- (4) Integrated dual band, 2.4-2.5 GHz and 5.1-5.8 GHz sector antennas
- (1) Integrated single band, 2.4-2.5 GHz omnidirectional antennas for BLE

Environmental
- Operating: AP460i/e: -40 to 60 C°
- Storage: -40 to 70 °C
- Humidity: 0% to 95% (non-condensing)

Environmental Discharge
- +/- 8KV contact and +/- 15 KV air

Environmental Compliance
- Housing: IP67 rated outdoor use

Regulatory Compliance
Product Safety Certifications
- IEC 60950-1, EN 60950-1, UL 60950-1, CSA 22.2 No.60950-1-03 AS/NZS 60950.1,
- 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, EN 301 893, EN 300 328, EN 301 489 1 & 17, EN 50385, EN 55032 (CISPR 32), EN 60601-1-2,
- AS/NZS4268 + CISPR32

Ordering Information

AP460 SKUs

SKU	Description
AP460C-FCC	ExtremeCloud IQ: Outdoor Tri Radio WiFi6 AP, 2.4 GHz, 5GHz, and Sensor w/ Dual 5GHz and Mulitrate Port. Environmentally friendly, Light, power sensors, BLE/Zigbee. AI/ML green mode. ONMI antennas. Included (AH-ACC-BKT-AX-TB). NA
AP460C-CAN	ExtremeCloud IQ: Outdoor Tri Radio WiFi6 AP, 2.4 GHz, 5GHz, and Sensor w/ Dual 5GHz and Mulitrate Port. Environmentally friendly, Light, power sensors, BLE/Zigbee. AI/ML green mode. ONMI antennas. T-Bar, Incl Mt (AH-ACC-BKT-AX-TB). Canada
AP460C-WR	ExtremeCloud IQ: Outdoor Tri Radio WiFi6 AP, 2.4 GHz, 5GHz, and Sensor w/ Dual 5GHz and Mulitrate Port. Environmentally friendly, Light, power sensors, BLE/Zigbee. AI/ML green mode. ONMI antennas. T-Bar, Incl Mt (AH-ACC-BKT-AX-TB). Rest of World
AP460S6C-FCC	ExtremeCloud IQ: Outdoor Tri Radio WiFi6 AP, 2.4 GHz, 5GHz, and Sensor w/ Dual 5GHz and Mulitrate Port. Environmentally friendly, Light, power sensors, BLE/Zigbee. AI/ML green mode. Internal 60 ° Sector. Included (AH-ACC-BKT-AX-TB). NA
AP460S6C-CAN	ExtremeCloud IQ: Outdoor Tri Radio WiFi6 AP, 2.4 GHz, 5GHz, and Sensor w/ Dual 5GHz and Mulitrate Port. Environmentally friendly, Light, power sensors, BLE/Zigbee. AI/ML green mode. Internal 60 ° Sector. Included (AH-ACC-BKT-AX-TB). Canada
AP460S6C-WR	ExtremeCloud IQ: Outdoor Tri Radio WiFi6 AP, 2.4 GHz, 5GHz, and Sensor w/ Dual 5GHz and Mulitrate Port. Environmentally friendly, Light, power sensors, BLE/Zigbee. AI/ML green mode. Internal 60 ° Sector. Included (AH-ACC-BKT-AX-TB). Rest of World
AP460S12C-FCC	ExtremeCloud IQ: Outdoor Tri Radio WiFi6 AP, 2.4 GHz, 5GHz, and Sensor w/ Dual 5GHz and Mulitrate Port. Environmentally friendly, Light, power sensors, BLE/Zigbee. AI/ML green mode. Internal 120 ° Sector. Included (AH-ACC-BKT-AX-TB). NA
AP460S12C-CAN	ExtremeCloud IQ: Outdoor Tri Radio WiFi6 AP, 2.4 GHz, 5GHz, and Sensor w/ Dual 5GHz and Mulitrate Port. Environmentally friendly, Light, power sensors, BLE/Zigbee. AI/ML green mode. Internal 120 ° Sector. Included (AH-ACC-BKT-AX-TB). Canada
AP460S12C-FCC	ExtremeCloud IQ: Outdoor Tri Radio WiFi6 AP, 2.4 GHz, 5GHz, and Sensor w/ Dual 5GHz and Mulitrate Port. Environmentally friendly, Light, power sensors, BLE/Zigbee. AI/ML green mode. Internal 120 ° Sector. Included (AH-ACC-BKT-AX-TB). Rest of World

Accessories

SKU	Description
AH-ACC-STRP-MRN	Marine grade Metal Hose Strap for 3-15 in diameter pole (Larger Pole)
AH-ACC-BKT-ASM	Mounting Bracket Assembly
AH-ACC-MRN-KIT	Marine grade accessory kit. All items are marine grade. Includes screw pack, mounting brackets, locking screw for mounting bracket, 1-2.75" metal hose strap

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