

Highlights

Radio Technology

- 5 GHz 3x3:3
- 2.4 GHz 3x3:3
- Integrated BLE (Bluetooth Low Energy) Radio for location services

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
- Automated client distribution between radios or neighboring access points
- Dynamic mesh backhaul

Management and Analytics with ExtremeCloud[™] IQ

- Automated deployments
- Simplified network operations
- Advanced reporting and network insights

Secure Network Access

- Broad range of authentication modes for all devices from Corporate to IoT
- Integrated enterprise protection mechanisms including WIPS and VPN



ExtremeWireless[™] AP250

Performance-Optimized Indoor 802.11ac Wave 2
Dual-Radio Dual 5 GHz 3x3:3 MIMO Access Point for High
Capacity Environments

The AP250 is an excellent choice to provide instant adaption to ever-changing capacity needs with its software-defined Dual 5 GHz radio technology, providing data rates up to 2.6 Gbps even while using 802.3af PoE infrastructure. Software-defined radios allow IT managers to enable 802.11ac performance on both radios to provide the best of coverage and capacity.

The AP250 benefits from an AI-driven Wi-Fi architecture capable of self-organizing, self-healing, and self-optimizing connectivity in the most challenging environments, helping eliminate single points of failure and data bottlenecks. Underlying the AP250 is a powerful operating system driving a stateful L2-L7 DPI firewall for context-based access security, advanced and customizable QoS for traffic optimization, intelligent meshing algorithms, Private Pre-Shared Key (PPSK) security, and much more. In addition, the integrated BLE radio and a USB interface in the access point opens up a multitude of deployment use-cases in IoT and proximity/location-oriented services.



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/.



Programmable Radios

Software-defined dual 5 GHz radios monitor and automatically adjust Wi-Fi performance to achieve the highest levels of client performance and network optimization in challenging and demanding environments. Further fine tune network health with a granular, customizable QoS engine that adjusts performance based on user, device, and application privileges.



Management Analytics

In conjunction with Extreme's management system, this access point provides a rich set of data displayed via context driven widgets, detailing historical data and real-time analytics. This provides context-specific granularity with perspective views for locations, network, network devices, individual client devices, as well as policy roles. In each context, administrators can adjust dashboards from the widget library.



Resilient Access

Distributed control Wi-Fi architecture delivers self-organizing, self-healing, and self-optimizing connectivity in the most challenging environments, eliminating single points of failure and bottlenecks, delivering bulletproof stability and unbridled performance, and offering unparalleled scale.



RF Monitoring

Adaptive RF algorithms provide intelligent selection of the best channels and transmit power for unimpaired network access. Load balancing, band steering and many other attributes of the RF can all be automated. In addition, administrators can view network health through Extreme's management system.



Advanced Security

This access point delivers the highest level of security services, including a fully stateful L2-L7 DPI firewall for context-based access security, Private Pre-Shared Key (PPSK) authentication, on-board RADIUS services, WIPS, VPN tunnelling, and much more.



Automated Deployments

Powered by cloud networking, this access point can easily be deployed alongside thousands of others in no time at all. Extreme's management system provides granular templates and auto provisioning to enable centralized enterprise plug-and-play rollouts.

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
- 20 dBm (100 mW) Transmit Power
- 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–MCS23 (6.5Mbps - 450Mbps)
- 3x3:3 Stream Multiple-In, Multiple-Out (MIMO) Radio
- HT20 High-Throughput (HT) Support for both 2.4 GHz and 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 - 1300Mbps), NSS = 1-3.
- 3x3:3 Stream Multiple-In, Multiple-Out (MIMO) Radio
- VHT20/VHT40/VHT80 support

Interfaces

- Two Autosensing 10/100/1000 BASE-T Ethernet ports. PoE/ PoE+ capability on one of the ports
- RJ-45 console port
- Standard USB port
- IEEE 802.3af PoE Power: Full 3x3:3 802.11ac MU-MIMO performance, BLE and Dual 5 GHz. No USB port, no 2nd Ethernet port.
- IEEE 802.3at PoE Power: full set of features (all of the above plus USB port and 2nd Ethernet port).
- 2.4 GHz typical power draw: 17 dBm, max 20 dBm
- 5 GHz typical power draw: 18 dBm, max 19 dBm

Physical

- WxDxH: 7.25" x 7.25" x 1.87"(18.4 cm x 18.4 cm x 1.87cm) [plus .25", mounting hardware – 2.12" (5.4 cm) H total]
- Weight: 1.8 lb (0.81 kg)

Antennas

- 6 + 2 internal Wi-Fi antennas for spatial and polarization diversity
- 1x BLE internal antenna

Mounting

- Desktop
- Ceiling Tile Recessed 15/16", 3/8", 9/16" sold as an accessory
- Ceiling Tile flush 3/8", 9/16" sold as an accessory
- Suspend Mount sold as an accessory
- Plenum Mount sold as an accessory
- Silhouette and Interlude sold as an accessory
- TPM chip for added security

Environmental

- Operating: 0 to +40°C, Storage: -40 to +70°C
- Humidity: 95%

Environmental Compliance

- UL2043

Power and Sensitivity Tables

Power 2.4 GHz

Channel	Data Rate	Power (dBm)
11b	1, 2, 5.5, 11 Mbps	20
11g	54 Mbps	17
	48 Mbps	18
	36 Mbps	19
	6 Mbps	19
11n HT20	MCS7, 15, 23	17
	MCS6, 14, 22	18
	MCS5, 13, 21	19
	MCS0, 1, 2, 3, 4	19
	MCS8, 9, 10, 11, 12	19
	MCS16, 17, 18, 19, 20	19

Receive Sensitivity – 2.4 GHz

Channel	Data Rate	Sensitivity
11b	1 Mbps	-100
	11 Mbps	-93
11g	6 Mbps	-95
	36 Mbps	-86
	48 Mbps	-82
	54 Mbps	-80
11n HT20	MCS0, 8, 16	-95
	MCS5, 13, 21	-81
	MCS6, 14, 22	-79
	MCS7, 15, 23	-77

Power 5 GHz

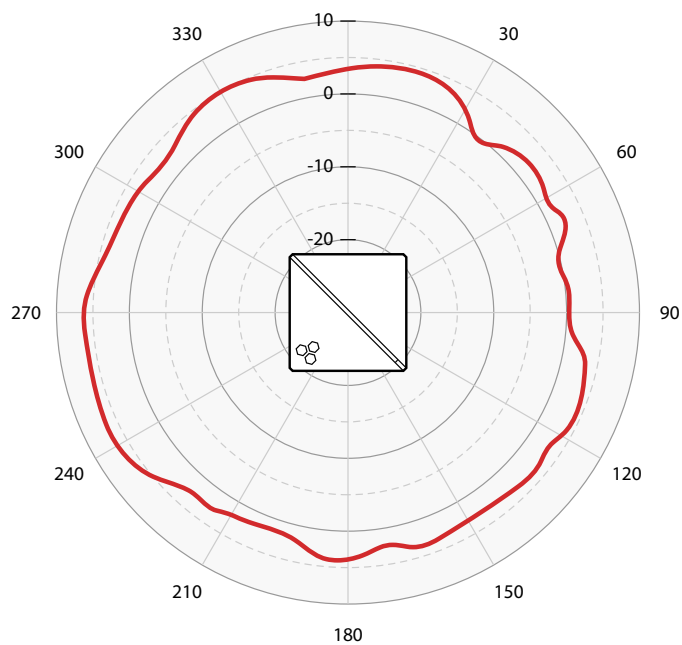
Channel	Data Rate	Power (dBm)
11a	54 Mbps	17
	48 Mbps	18
	36 Mbps	19
	6 Mbps	19
11n HT20	MCS7, 15, 23	17
	MCS6, 14, 22	18
	MCS5, 13, 21	19
	MCS0, 1, 2, 3, 4	19
	MCS8, 9, 10, 11, 12	19
	MCS16, 17, 18, 19, 20	19
11n HT40	MCS7, 15, 23	17
	MCS6, 14, 22	18
	MCS5, 13, 21	19
	MCS0, 1, 2, 3, 4	19
	MCS8, 9, 10, 11, 12	19
	MCS16, 17, 18, 19, 20	19
11ac VHT	256QAM @ 3/4 Code Rate	14
	256QAM @ 5/6 Code Rate	13

Receive Sensitivity – 5 GHz

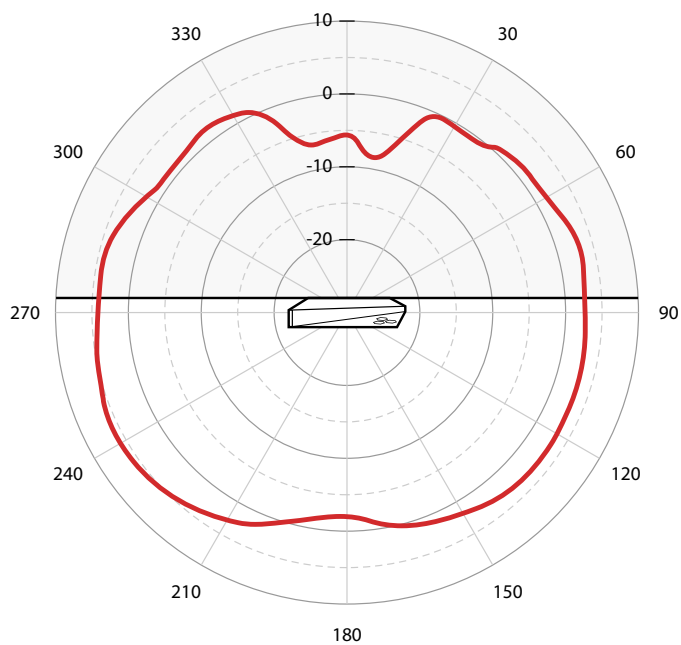
Channel	Data Rate	Sensitivity
11a	6 Mbps	-95
	36 Mbps	-86
	48 Mbps	-81
	54 Mbps	-80
11n HT20	MCS0, 8, 6	-91
	MCS5, 13, 21	-78
	MCS6, 14, 22	-76
	MCS7, 15, 23	-74
11n HT40	MCS0, 8, 16	-88
	MCS5,13,21	-75
	MCS6, 14, 22	-73
11ac HT20	MCS7, 15, 23	-71
	Code Rate 3/4	-65
	Code Rate 5/6	-63
11ac HT40	Code Rate 3/4	-62
	Code Rate 5/6	-60
11ac HT80	Code Rate 3/4	-59
	Code Rate 5/6	-57

Radiation Patterns - Azimuth and Elevation

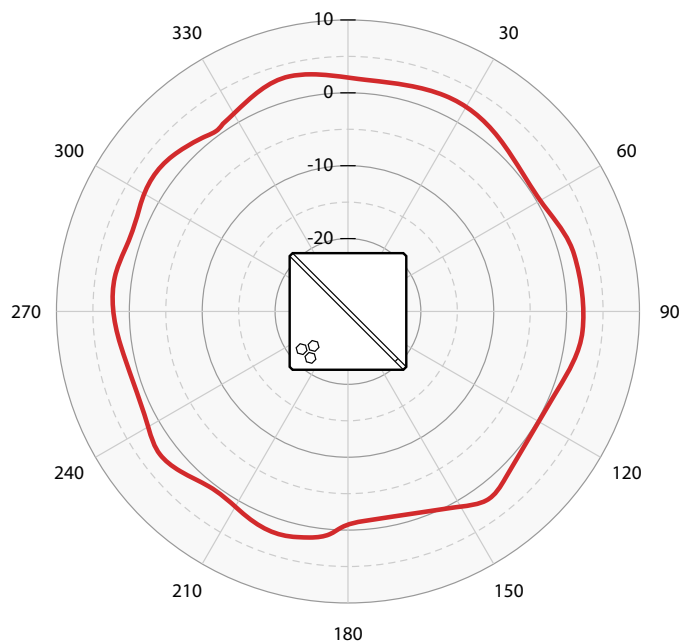
Azimuth 2.4 GHz



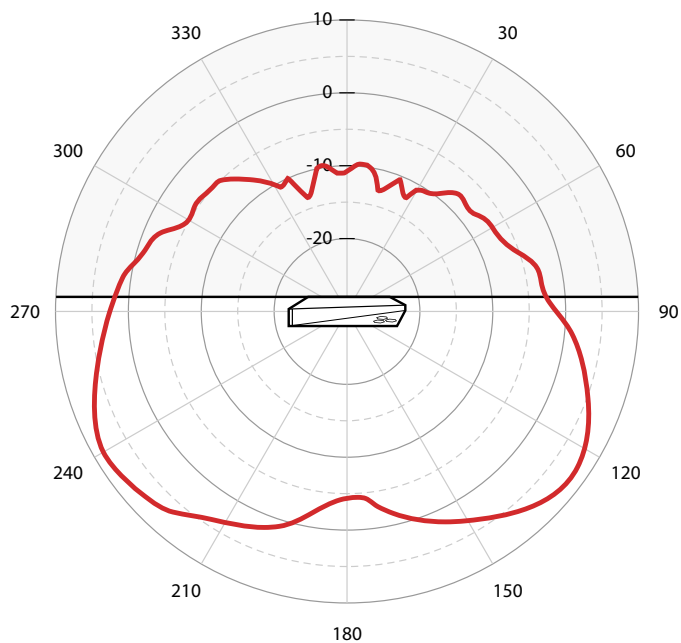
Elevation 2.4 GHz



Azimuth 5 GHz



Elevation 5 GHz



AP250 – Miscellaneous SKUs

SKU	Description
AH-AP-250-AC-XX	AP250 Indoor plenum rated Access Point, 2 radio 3x3:3 802.11a/b/g/n/ac MU-MIMO, 2 10/100/1000 Ethernet ports, without power supply (Internal Antenna only). Includes HiveManager Connect & HiveCare Community. (Regulatory Domains available: FCC, CE, W (World), CAN (Canada))

AP250 – Miscellaneous SKUs

SKU	Description
AH-ACC-INJ-30W-UK	30W POE power injector with UK power cord for AP122,AP122X,AP130, AP200 series,AP550,AP630,AP650 and AP650X
AH-ACC-INJ-30W-US	30W POE power injector with US power cord for AP122,AP122X,AP130, AP200 series,AP550,AP630,AP650 and AP650X
AH-ACC-PLENUM-KIT	AP130,AP230, AP245X, AP250, AP550 Plenum Bracket Kit
AH-ACC-RBR-FT	Rubber feet for AP130/AP200 series/AP550
AH-ACC-SEC-BIT-3PK	AP122,AP122X,AP130,AP230, AP245X, AP250, AP550 security screw bit (3pk)
AH-ACC-SEC-KIT	Security bracket, screws and security screw bit for AP122,AP122X, AP130, AP230, AP245x, AP250
AH-ACC-BKT-916-KIT	AP122, AP122X, AP130, AP200 series/AP500 series 9/16" ceiling mount brackets for recessed and flush ceiling tiles
AH-ACC-BKT-AC-KIT	AP122, AP122X, AP130, AP200 series/AP500 series 15/16" ceiling mount brackets for recessed and non-recessed ceiling tiles
AH-ACC-BKT-AC-WALL	AP122, AP122X, AP130/AP230/AP245X/AP250,AP550 wall mounting and 15/16" ceiling mount bracket
AH-ACC-BKT-SILINT-KT	AP122, AP122X, AP130,AP230/AP245X/AP250 ,AP550 Mounting bracket kit for Silhouette and Interlude ceiling types
AH-ACC-BKT-SU-KIT	AP122,AP122X,AP130,AP230,AP245X, AP250, AP550 Suspend Bracket Kit
AH-ACC-BKT-WP-KIT	Wall plate bracket kit for AP122, AP122X, AP130, AP230, AP245X, AP250,AP550 Includes the bracket and security screws
AH-ACC-INJ-30W-AU	30W POE power injector with Australia/New Zealand power cord for AP122,AP122X,AP130, AP200 series,AP550,AP630,AP650 and AP650X
AH-ACC-INJ-30W-EU	30W POE power injector with EU power cord for AP122,AP122X,AP130, AP200 series,AP550,AP630,AP650 and AP650X