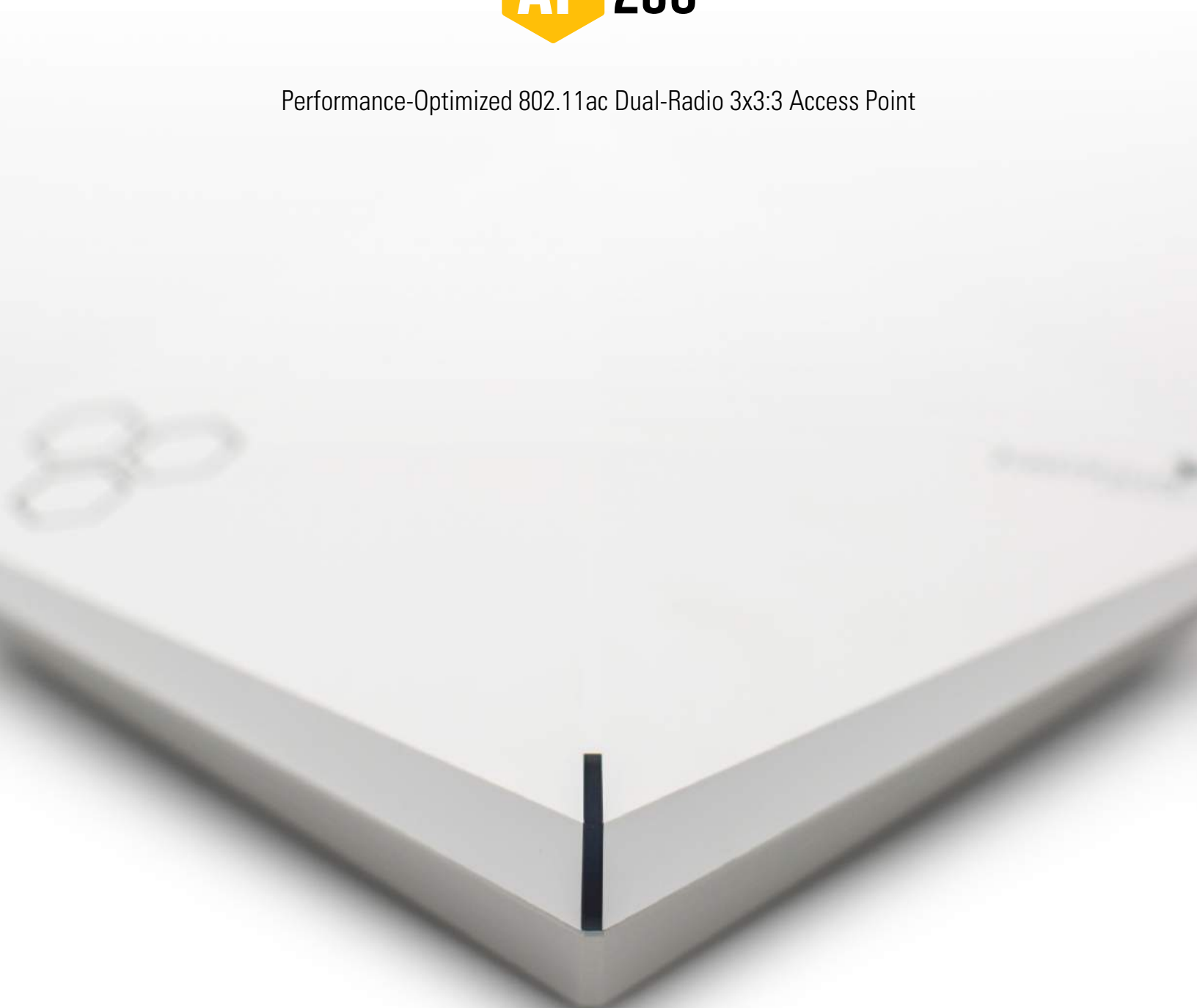


DATA SHEET

# AP 230

Performance-Optimized 802.11ac Dual-Radio 3x3:3 Access Point





**AP230 sets a new price-to-performance standard for 802.11ac APs. By combining the 3x3, 3-stream 802.11ac Gigabit Wi-Fi technology and advanced security and mobility management together into an economical package it allows you to deploy 802.11ac into every part of the network infrastructure – from corporate HQ to remote branches and to every campus and classroom.**

The aggregate speeds of up to 1.75Gbps, **AP230** provides high-performance, dual concurrent 2.4Ghz 802.11n/g/b radio and 5Ghz 802.11ac/n/a radio with beamforming and interoperates with the rest of the Aerohive Cooperative Control devices to provide a seamless enterprise-class experience for all connected users. With HiveOS at its core and the ability to provide full Wi-Fi functionality on legacy PoE infrastructure, the AP230 allows enterprises of all sizes to broadly deploy 802.11ac for their mobility future.

The AP230 benefits from an AI-driven Wi-Fi architecture capable of self-organizing, self-learning, self-healing and self-optimizing in the most challenging environments. Cooperative Control eliminates single points of failure and bottlenecks, delivering bulletproof stability and unbridled performance, perfectly complimenting the unrivalled capabilities of HiveOS - 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) and much more.

All Aerohive APs can be centrally managed using Aerohive's out-of-band cloud network management system - *HiveManager*. HiveManager is an industry-leading and visionary approach to cloud-managed networking, built from the ground up to take full advantage of the SD-LAN and SD-WAN solution from Aerohive. Working in tandem with Aerohive's cutting-edge HiveOS, HiveManager leverages state-of-the-art cloud technology. Benefit from unified, full-stack management of Wi-Fi, switching and routing, centralized monitoring and configuration, real-time and historical reporting, simplified troubleshooting, integrated RF planner tools and much more.

HiveManager is available in two editions: *Connect* and *Select*. The Connect solution is bundled with Aerohive access points and switches and is free for the lifetime of the device. Connect is the perfect solution for those looking to provide robust, yet enterprise-grade connectivity, without having to invest in the full suite of management features. The optional upgrade to Select unlocks a slew of advanced features and capabilities that enhance network management, security and visibility.

## Radio Specifications

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### 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

- 2.4–2.5GHz 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

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- Two Autosensing 10/100/1000 BASE-T Ethernet ports.  
PoE/PoE+ capability on one of the ports
- RJ-45 console port
- Standard USB port

## Power Specifications

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- AC/DC power adapter:  
Input: 100–240 VAC, Output: 12v/2.0A
- PoE nominal input voltages:  
48V, 0.35A, (802.3af) – 48V, 0.625A (802.3at)
- RJ-45 power input pins: Wires 4,5,7,8 or 1,2,3,6
- Power Draw : Typical 11.41W, Max 16.7W

## Power Options

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- 802.3af (minimum required) and/or 802.3at Power over Ethernet PoE Injector
- 12v DC external power adapter (*sold as an accessory*)
- Aerohive switch products

## Physical

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- 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: 1.6 lb ( 0.73 kg)

## Antennas

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- 3x Integrated single band, 2.4-2.5 GHz omnidirectional antennas
- 3x Integrated single band, 5.1-5.8 GHz omnidirectional antennas

## Mounting

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- 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

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

## Environmental Compliance

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- UL2043

## Power and Sensitivity Tables

## Power - 2.4 GHz

CHANNEL	DATA RATE	POWER (dBm)
11b	1,2,5,5,11	21
	6-24 Mbps	20
11g	36 Mbps	18
	48 Mbps	17
	54 Mbps	16
	MCS0, 8, 16	20
11n HT20	MCS5,13,21	18
	MCS6, 14, 22	17
	MCS7, 15, 23	16

## Receive Sensitivity - 2.4 GHz

CHANNEL	DATA RATE	SENSITIVITY
11b	1 Mbps	-98
	11 Mbps	-91
11g	6 Mbps	-87
	36 Mbps	-84
	48 Mbps	-80
	54 Mbps	-78
11n HT20	MCS0, 8, 16	-89
	MCS5,13,21	-77
	MCS6, 14, 22	-74
	MCS7, 15, 23	-74

## Power - 5 GHz

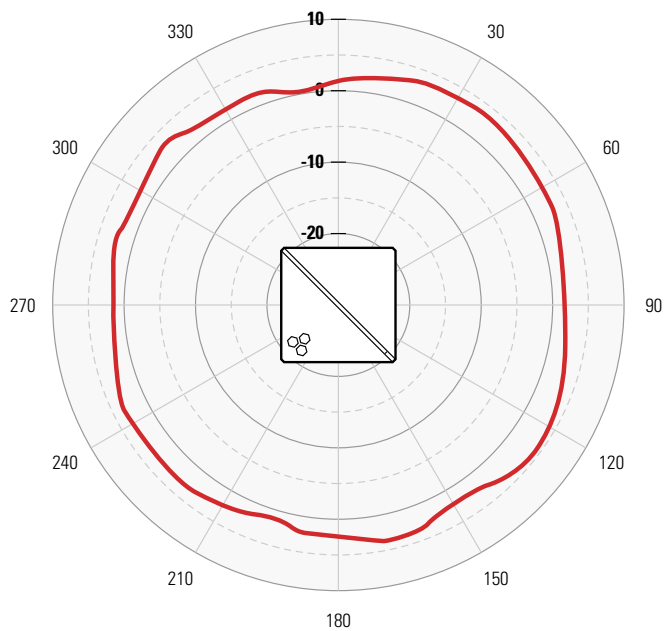
CHANNEL	DATA RATE	POWER (dBm)
11a	6-24 Mbps	20
	36 Mbps	18
	48 Mbps	16
	54 Mbps	15
11n HT20	MCS0, 8, 16	20
	MCS5,13,21	18
	MCS6, 14, 22	17
	MCS7, 15, 23	16
11n HT40	MCS0, 8, 16	19
	MCS5,13,21	18
	MCS6, 14, 22	16
	MCS7, 15, 23	15
11ac VHT	256QAM @ 3/4 Code Rate	13
	256QAM @ 5/6 Code Rate	12

## Receive Sensitivity - 5 GHz

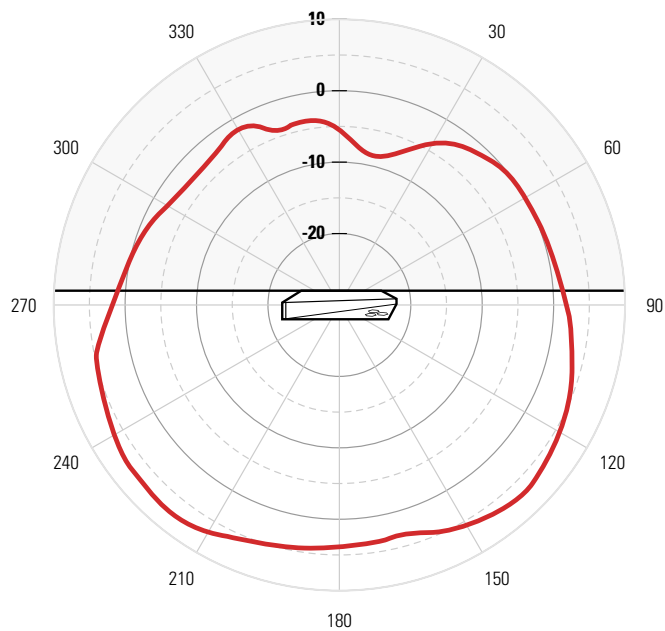
CHANNEL	DATA RATE	SENSITIVITY
11a	6-24 Mbps	-90
	36 Mbps	-82
	48 Mbps	-78
	54 Mbps	-77
11n HT20	MCS0, 8, 16	-87
	MCS5,13,21	-77
	MCS6, 14, 22	-75
	MCS7, 15, 23	-73
11n HT40	MCS0, 8, 16	-93
	MCS5,13,21	-79
	MCS6, 14, 22	75
	MCS7, 15, 23	-71
11ac HT20	256QAM @ 3/4 Code Rate	-70
11ac HT40	256QAM @ 3/4 Code Rate	-67
	256QAM @ 5/6 Code Rate	-65
11ac HT80	256QAM @ 3/4 Code Rate	-64
	256QAM @ 5/6 Code Rate	-62

# Radiation Patterns – Azimuth & Elevation

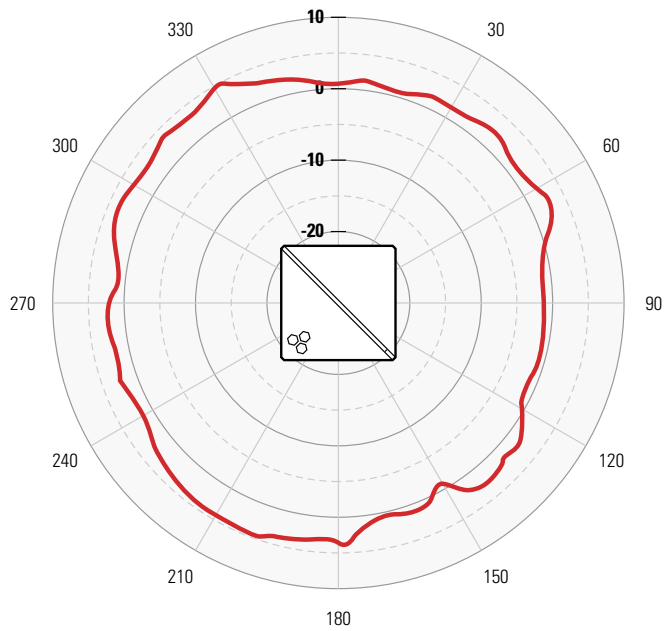
**Azimuth - 2.4 GHz**



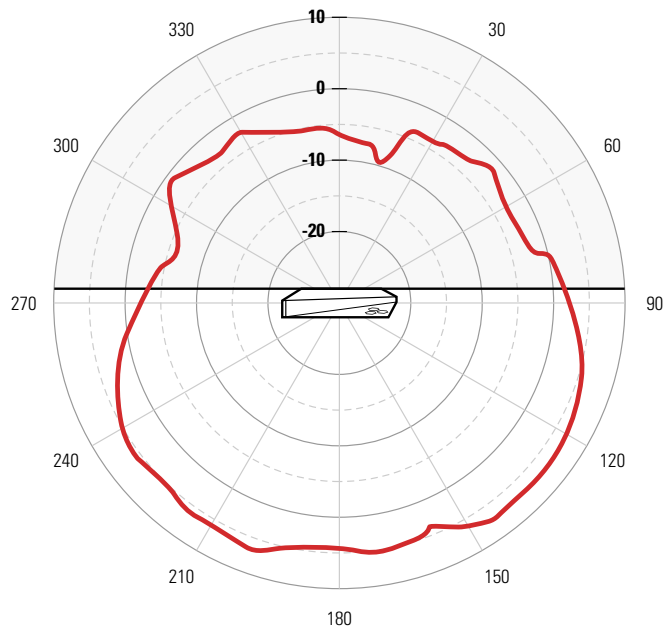
**Elevation - 2.4 GHz**



**Azimuth - 5 GHz**



**Elevation - 5 GHz**



AP230 - SKUs

SKU	DESCRIPTION
AH-AP-230-AC-XX	AP230, indoor plenum rated, 2 radio 3x3:3 802.11a/b/g/n/ac, 2 10/100/1000, USB, without power supply (Internal Antenna only). Includes HiveManager Connect & HiveCare Community. (Regulatory Domains available: FCC, CE, W (World))

AP230 - 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-PWR-24W-AU	24W power supply and AU power adaptor for AP230
AH-ACC-PWR-24W-EU	24W power supply and EU power adaptor for AP230
AH-ACC-PWR-24W-UK	24W power supply and UK power adaptor for AP230
AH-ACC-PWR-24W-US	24W power supply and US power plug for AP230
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

