AP 122

Enterprise-Grade 2x2, 2-Stream, 802.11n/ac Access Points for Medium-Density Environments, as well as IoT and Location-Based Services

AEROHIVE®
NETWORKS

AP122 provides the full breadth of Aerohive's enterprise-grade feature set and IoT readiness in medium density environments, achieving 802.11ac performance with data rates up to 867 Mbps, along with built-in BLE and USB port using existing 802.3af PoE infrastructure.

Powered by HiveOS and the innovative distributed Cooperative Control architecture, AP122 bringa the best of coverage and advanced 802.11ac technology. 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.

The AP122 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

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 - MCS15 (6.5Mbps - 300Mbps)
- 2x2 Multiple-In, Multiple-Out (MIMO) Radio

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)

Interfaces

- Autosensing 10/100/1000 BASE-T Ethernet PoE
  (Power over Ethernet 802.3af) Port
- RJ-45 console port
- Standard USB port

Power Specifications

- IEEE 802.3af PoE Power

Power Options

- Power Draw: Typical 10.5W, Max 12.9W
- 802.3af / 802.3at (PoE/PoE+)

Physical

- LxWxH 171x171x44.5 mm (6.75x6.75x1.75in). w/o mounting brackets
- Weight: 1.13 lb (0.51 kg)
- Shipping Physical Dimensions:

  WxDxH: 8" x 7" x 3" (194mm x 186mm x 70mm)

  Weight: 1.54 lbs (0.7 Kg)

Antennas

- 2x Integrated single band, 2.4-2.5 GHz omnidirectional antennas
- 2x Integrated single band, 5.1-5.8 GHz omnidirectional antennas
- 1 x BLE internal antenna
- Antenna Gain:

  2.4GHz: 3.7 dBi

  5GHz: 6 dBi
- Max EIRP (dBm):

  2400 MHz to 2500 MHz: 27 dBm

  5250 MHz to 5350 MHz: 30 dBm

  5725 MHz to 5875 MHz :30 dBm

Mounting

- Desktop
- Wall Mount
- Ceiling Tile flush 15/16"
- 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
- TPM chip for added security

Environmental

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

Environmental / Regulatory Compliance

- Environmental Compliance: UL2043
- Regulatory Model: AP122

• FCC	• Canada	• CE
15.247	ISED 15.247	EN 300-328
15.407	ICES-003 Class B	EN 301-893
OET65 Supplement C	RSS-102	EN 301-489-1 / -17
UL60950-1	CSA C22.2	EN 62311
	60950-1	EN60950-1

Power and Sensitivity Tables

Power - 2.4 GHz

CHANNEL	DATA RATE	POWER (dBm)
11b	1-11 Mbps	18
11g	6 Mbps	17
	54 Mbps	16
11n HT20	MCS 7, 15, 23	17

Receive Sensitivity - 2.4 GHz

CHANNEL	DATA RATE	SENSITIVITY
11b	1-11 Mbps	-99
11g	6 Mbps	-94
	54 Mbps	-77
11n HT20	MCS 7, 15, 23	-94

Power - 5 GHz

CHANNEL	DATA RATE	POWER (dBm)
11a	6 Mbps	17
	54 Mbps	16
11n HT20	MCS 0, 8, 16	17
	MCS 7, 15, 23	16
11n HT40	MCS 0, 8, 16	17
	MCS 7, 15, 23	14
11ac VHT 20	MCS0	17
	MCS9	16
11acVHT40	MCS0	17
	MCS9	16
11acVHT80	MCS0	15

Receive Sensitivity - 5 GHz

CHANNEL	DATA RATE	SENSITIVITY
11a	6 Mbps	-93
	54 Mbps	-75
11n HT20	MCS 0, 8, 16	-93
	MCS 7, 15, 23	-75
11n HT40	MCS 0, 8, 16	-90
	MCS 7, 15, 23	-72
11ac VHT 20	MCS0	-93
	MCS9	-70
11acVHT40	MCS0	-90
	MCS9	-64
11acVHT80	MCS0	-87

Radiation Patterns – Azimuth & Elevation

Azimuth - 2.4 GHz
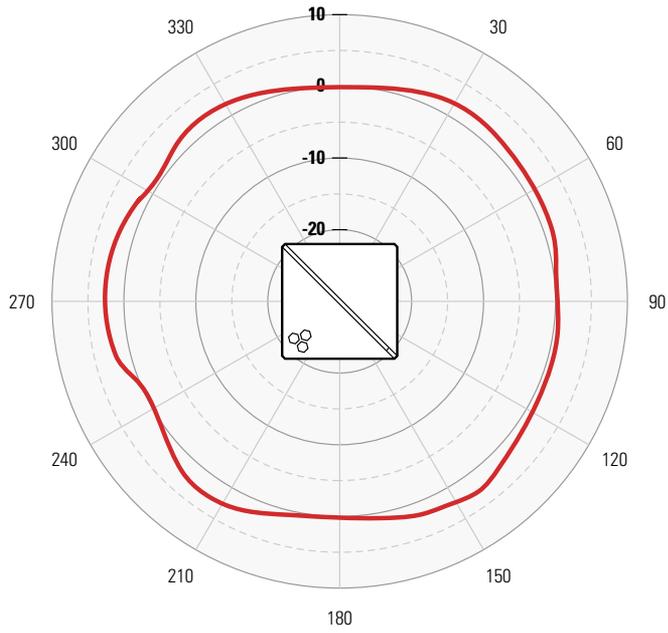
Elevation - 2.4 GHz
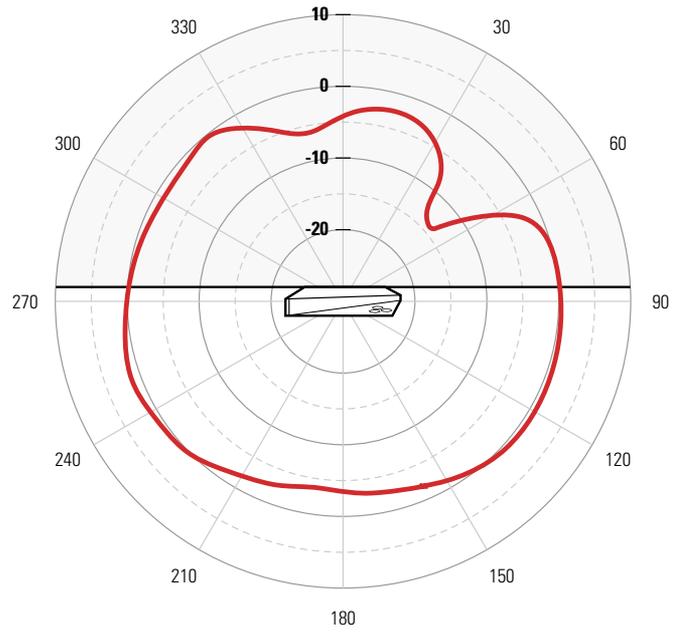
Azimuth - 5 GHz
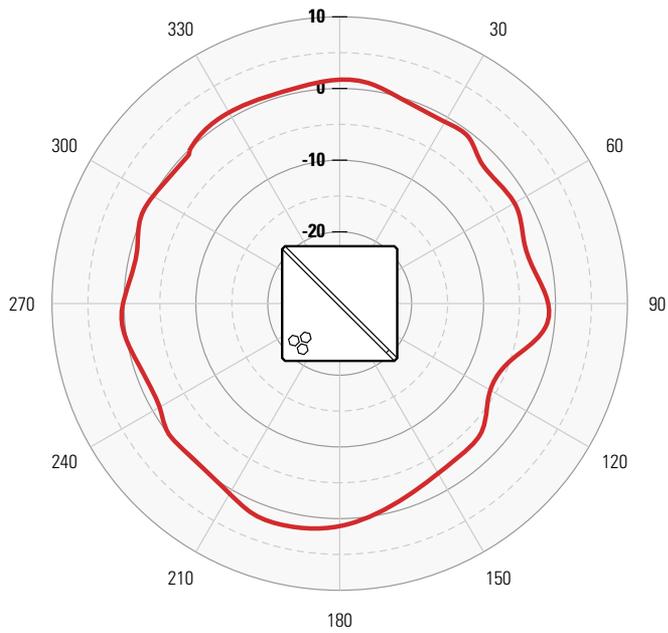
Elevation - 5 GHz
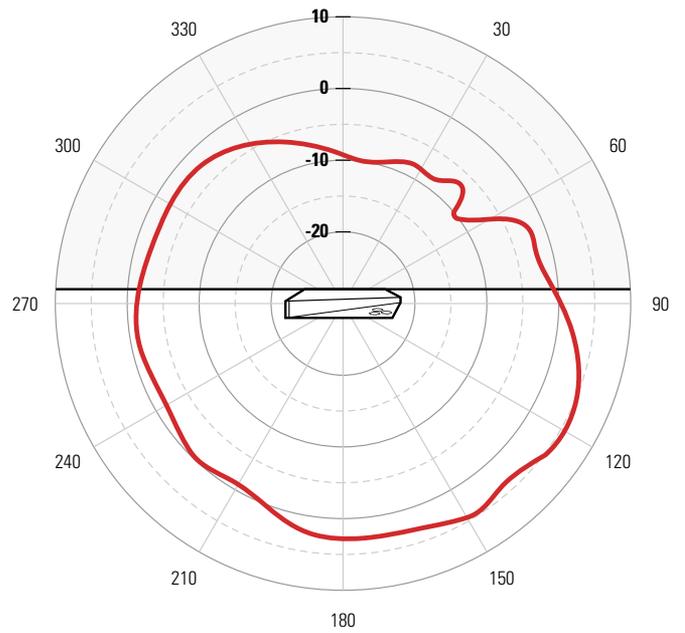
AP122- SKUs

SKU	DESCRIPTION
AH-AP-122-AC-XX	AP122, 2 radio 2x2:2 802.11a/b/g/n/ac AP, 1 10/100/1000 Ethernet port, w/o power supply (Internal Antenna only).AP natively supports 15/16" mount and wall mount. Includes HiveManager Connect & HiveCare Community (Regulatory Domains available: FCC, W (World), CAN (Canada), CE)

AP122 - 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-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-SERIAL-RJ45	RJ45 to DB9 serial console cable
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