

# AP 122 Family

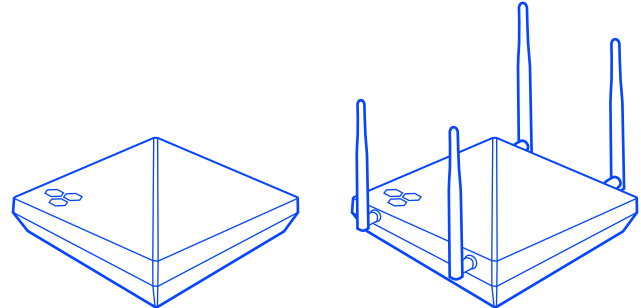


Enterprise-grade 2x2, 2-stream, 802.11n/ac access points  
for medium-density environments,  
as well as IoT and location-based services



# AP122 Family

**AP122 and AP122X provide 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.**



Running powerful HiveOS coupled with innovative distributed Cooperative Control architecture, AP122 and AP122X bring 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.

**AP122 and AP122X are key components of the Aerohive Connect solution.** Connect provides cloud-managed connectivity built on Aerohive’s industry-first cooperative control Wi-Fi focused on optimizing speed and resilience. Connect is centrally managed from the cloud, allowing for simple, fast, and powerful management.

## Aerohive Connect Components



### Enterprise Connectivity

- Optimized for medium density general purpose deployments
- Built-in Bluetooth Low Energy for iBeacon/other beacon technologies
- IoT readiness with USB port
- Trusted Platform Module (TPM) – Hardware-based key storage and encryption
- Encryption: AES/CCMP, TKIP, and RC4 (WEP only)
- Flexibility of integrated antennas (AP122) or external antennas (AP122X)



### Cloud Management

- Network Device and Client Monitoring
- Global Search and Filter function
- Auto-Provisioning Tools for quick and easy deployment
- Versatile RF Planning
- Guided Network Configuration Setup
- 802.1X and PSK Secured Networks
- Guest Access functionality with configurable Captive Web Portal



### HiveCare™ Support

- HiveCare Community Support: forum-based interactive support
- HiveCare Connect CallBack service: optional
- Wide array of online resources and tools

## 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

- 2.4–2.5GHz 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 - 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:

<b>AP122:</b>	<b>AP122X:</b>
2.4GHz: 3.7 dBi	2.4GHz: 4 dBi
5GHz: 6 dBi	5GHz: 4 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

## Environmental

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

## Environmental Compliance

- UL2043

## Regulatory Compliance

- **Regulatory Model:** AP122

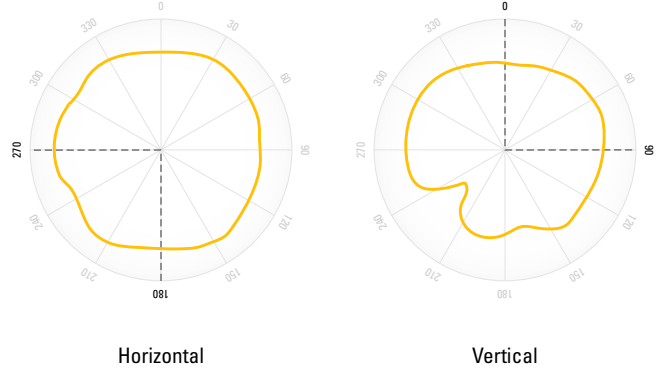
• FCC	• Canada	• CE
15.247	ISED 15.247	EN 300-328
15.407	ICES-003 Class B	EN 301-893
OET65 Supplement C	RSS-102	EN 301-489-1 / -17
UL60950-1	CSA C22.2 60950-1	EN 62311
		EN60950-1

## Performance Tables & Radiation Patterns

Transmit Power Table - 2.4 GHz

	DATA RATE	POWER (dBm)	SENSITIVITY
11b	1-11 Mbps	18	-99
11g	6 Mbps	17	-94
	54 Mbps	16	-77
11n HT20	MCS 0, 8, 16	17	-94
	MCS 7, 15, 23	16	-75

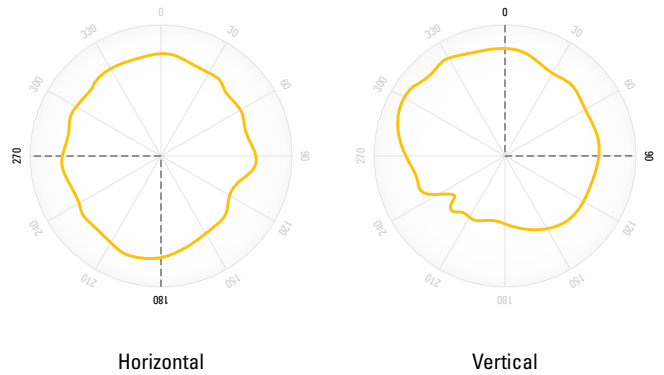
Radiation Patterns - 2.4 GHz Dual-Band



Transmit Power Table - 5 GHz

	DATA RATE	POWER (dBm)	SENSITIVITY
11a	6 Mbps	17	-93
	54 Mbps	16	-75
11n HT20	MCS 0, 8, 16	17	-93
	MCS 7, 15, 23	16	-75
11n HT40	MCS 0, 8, 16	17	-90
	MCS 7, 15, 23	14	-72
11ac VHT 20	MCS0	17	-93
	MCS9	16	-70
11acVHT40	MCS0	17	-90
	MCS9	14	-64
11acVHT80	MCS0	16	-87
	MCS9	12	-61

Radiation Patterns - 5 GHz Dual-Band



Note: Power shown is the power per chain and is the maximum power that the radio is capable of. Power limits will be limited by local radio regulations.

**AP122 - SKUs**

SKU	DESCRIPTION
AH-AP-122-AC-FCC	AP122, 2 radio 2x2:2 802.11a/b/g/n/ac Access Point, 1 10/100/1000 Ethernet port, FCC regulatory domain, without power supply (internal antenna only). Includes HiveManager Connect & HiveCare Community.
AH-AP-122-AC-W	AP122, 2 radio 2x2:2 802.11a/b/g/n/ac Access Point, 1 10/100/1000 Ethernet port, World regulatory domain, without power supply (internal antenna only). Includes HiveManager Connect & HiveCare Community.
AH-AP-122-AC-CAN	AP122, 2 radio 2x2:2 802.11a/b/g/n/ac Access Point, 1 10/100/1000 Ethernet port, Canada regulatory domain, without power supply (internal antenna only). Includes HiveManager Connect & HiveCare Community.

**AP122X - SKUs**

SKU	DESCRIPTION
AH-AP-122X-AC-FCC	AP122X Indoor, 2 radio 2x2:2 802.11a/b/g/n/ac Access Point, external antennas, 1 10/100/1000 Ethernet port, FCC regulatory domain, without power injector (Antenna sold separately). Includes HiveManager Connect & HiveCare Community.
AH-AP-122X-AC-CAN	AP122X Indoor, 2 radio 2x2:2 802.11a/b/g/n/ac Access Point, external antennas, 1 10/100/1000 Ethernet port, Canada regulatory domain, without power injector (Antenna sold separately). Includes HiveManager Connect & HiveCare Community.
AH-AP-122X-AC-CE	AP122X Indoor, 2 radio 2x2:2 802.11a/b/g/n/ac Access Point, external antennas, 1 10/100/1000 Ethernet port, CE regulatory domain, without power injector (Antenna sold separately). Includes HiveManager Connect & HiveCare Community.
AH-AP-122X-AC-W	AP122X Indoor, 2 radio 2x2:2 802.11a/b/g/n/ac Access Point, external antennas, 1 10/100/1000 Ethernet port, World regulatory domain, without power injector (Antenna sold separately). Includes HiveManager Connect & HiveCare Community.

**AP122X - Antenna SKUs**

SKU	DESCRIPTION
AH-ACC-ANT-4-KIT	Articulated male indoor antenna kit (2x2.4Ghz 4dBi and 2x5Ghz 4dBi antennas)
AH-ACC-ANT-4-2G	2.4Ghz RP-SMA male indoor 4dBi articulated antenna
AH-ACC-ANT-4-5G	5Ghz RP-SMA male indoor 4dBi articulated antenna

