

AP 122 Family

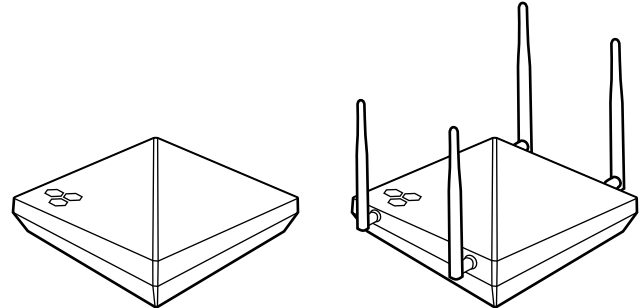


Enterprise-grade 2x2, 2-stream, 802.11n/ac access points
for medium-density environments,
as well as IoT and location-based services



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:

AP122:	AP122X:
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

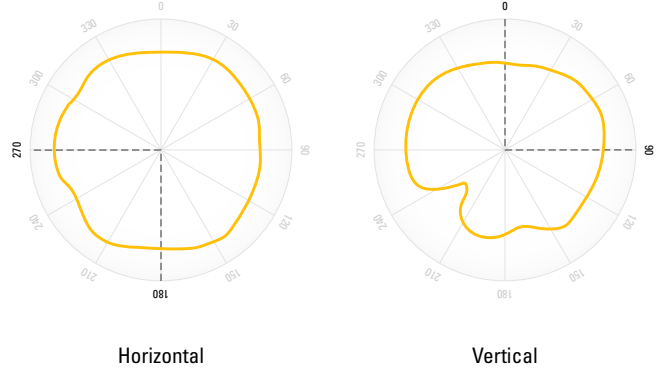
• FCC	• Canada	• CE
15.247	ISED 15.247	EN 300-328
15.407	ICES-003 Class B	EN 301-893
OET65 Supplement C	RSS-102	EN 301-489-1 / -17
UL60950-1	CSA C22.2 60950-1	EN 62311
		EN60950-1

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

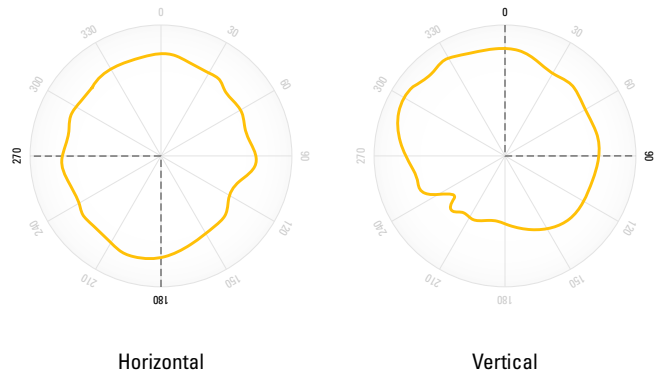
Radiation Patterns - 2.4 GHz Dual-Band



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