

# Aerohive AP121

## 802.11n Dual Radio access point

AEROHIVE NETWORKS AP121 access points provide 2x2:2 802.11n as well as optimized RF performance and enhanced receive sensitivity to provide a ground-breaking user experience for networks supporting multiple types of clients, including consumer-grade and bring-your-own devices (BYOD).



The **Aerohive Networks AP121** is a cost-effective, enterprise-grade (2x2) MIMO solution, ideal for education, healthcare and distributed enterprise environments.

The Aerohive AP121 is a cost-effective, enterprise-grade 2x2 MIMO solution, which is ideal for education, healthcare, and distributed enterprise environments. With two radios, concurrent 2.4Ghz and 5Ghz access, and security scanning across both bands, the AP121 provides top performance and security at an entry-level price point.

The AP121 also provides both automatic mesh redundancy and support for 802.11a, b, g and n clients, through Aerohive's industry unique and resilient Cooperative Control Architecture.

The Aerohive AP121 shares mounting kits and power supplies with the Aerohive AP330 and AP350, making sparing, re-ordering, stocking, and inventory management seamless.

### Software Features

#### HiveOS

All Aerohive APs support the feature-rich HiveOS service architecture. HiveOS is an implementation of Aerohive's Cooperative Control Architecture which enables multiple APs to organize into groups or "hives," that share control information enabling functions such as fast layer-2/ layer-3 roaming, cooperative RF management, security and mesh networking without requiring a dedicated system controller. The resulting feature-rich capability enables a next generation wireless LAN architecture, called a Cooperative Control Wireless LAN Architecture. This architecture provides the benefits of a controller-based implementation, yet has a lower deployment/ownership cost, is more reliable, more scalable, higher performing and more suitable for today's proliferation of wireless applications than controller-based architectures.

For product information on HiveOS, visit [aerohive.com/products/software-management/hiveos](http://aerohive.com/products/software-management/hiveos).

#### Network Management Solutions

Aerohive's HiveManager NMS is a central management solution for Aerohive APs. HiveManager supports simple policy creation, firmware upgrades, configuration updates, and centralized monitoring throughout the entire Aerohive deployment, whether building-wide, campus-wide, or global - all from a single console. Because the HiveManager is not actively involved in passing traffic or in making forwarding decisions, it eliminates the traffic bottlenecks and complexities of controller-based solutions, particularly in geographically distributed environments. As a result, control is distributed, while management is centralized. Essentially, the HiveManager solution delivers the benefits of both autonomous APs and controller-based solutions, without the drawbacks of either approach.

Aerohive's HiveManager NMS can be delivered two ways:

- HiveManager Online—a cloud-based management service from Aerohive
- HiveManager VMware virtual appliance—an on-premise VM management solution

For more information visit [aerohive.com/products/software-management/hivemanager](http://aerohive.com/products/software-management/hivemanager).

### Warranty and Support

Every Aerohive Networks device is backed by a limited lifetime hardware warranty. Extended product and technical support may be purchased separately and can include next day advanced replacement, 24x7 or 8x5 technical support, web and email support access, and software updates. For complete support terms go to [www.aerohive.com/support](http://www.aerohive.com/support).



## Product Specifications

### Mounting

- Desktop
- Wall Mount bracket included
- Ceiling Tile Clips 15/17" included, 9/16" sold as an accessory
- Suspend Mount sold as an accessory
- Plenum Mount sold as an accessory

### Physical Security

- Kensington security lock point

### Dual Concurrent Radios (b/g/n + a/n)

- 802.11a: 1,2,5,5 and 11Mbps
  - 5.150–5.850 GHz Operating Frequency
  - Orthogonal Frequency Division Multiplexing (OFDM) Modulation
  - 24 dBm Transmit Power
  - Rates (Mbps): 54, 48, 36, 24, 18, 12, 9, 6 w/ auto fallback
- 802.11b: 1,2,5,5 and 11Mbps
  - 2.4–2.5 GHz Operating Frequency
  - Direct-Sequence Spread-Spectrum (DSSS) Modulation
  - 20 dBm Transmit Power
  - Rates (Mbps): 11, 5.5, 2, 1 w/ auto fallback
- 802.11g: 6,9,12,18,24,36,48, and 54 Mbps
  - 2.4–2.5 GHz Operating Frequency
  - Orthogonal Frequency Division Multiplexing (OFDM) Modulation
  - 22 dBm (100 mW) Transmit Power
  - Rates (Mbps): 54, 48, 36, 24, 18, 12, 9, 6 w/ auto fallback
- 802.11n (HT20/HT40): MCS0–MCS7
  - 2.4–2.5 GHz & 5.150–5.950 GHz Operating Frequency
  - 802.11n Modulation
  - 24 dBm Transmit Power
  - Rates (Mbps): MCS0 – MCS15 (6.5Mbps – 300Mbps)
  - 2x2 Multiple-In, Multiple-Out (MIMO) Radio
  - HT40 High-Throughput (HT) Support

### Antennas

- 2x Integrated single band, 2.4–2.5 GHz Omni-directional, 4.0 dBi gain
- 2x Integrated single band, 5.1–5.8 GHz Omni-directional, 4.0 dBi gain

### Interfaces

- Autosensing 10/100/1000 Base-T Ethernet Port
- Power over Ethernet (PoE) capable (802.3af) Ethernet Port (Eth0)
- 1x Reset Pinhole
- USB 2.0 port reserved for future use
- RJ-45 console port

### Physical

- 6.69" W x 1.63" H x 6.69" D  
(170 mm W x 41 mm H x 170 mm D)
- 11.6 oz (0.36 kg)

### Environmental

- Operating: 0 to +40°C, Storage: -40 to +85°C
- Humidity: 95% RH (non-condensing)

### Environmental Compliance

- Plenum rated

### Power Options

- 802.3af Power over Ethernet (PoE) port
- 12V, 2A DC external power adapter (sold separately)

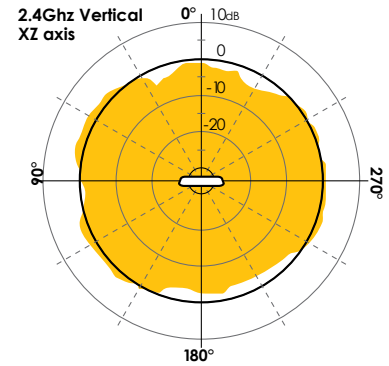
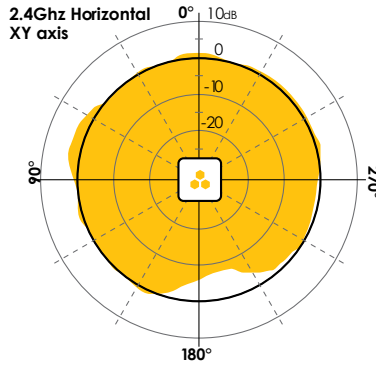
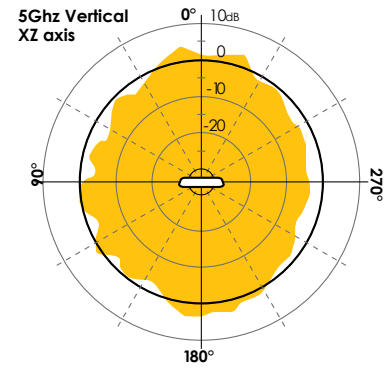
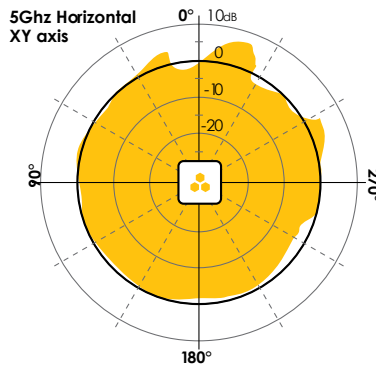
### Power Specifications

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

### Transmit Power and Receive Sensitivity

- See chart at right

## RF Coverage Maps



## Power and Sensitivity Table

|              | Rate    | 2GHz     |                | 5GHz     |                |
|--------------|---------|----------|----------------|----------|----------------|
|              |         | Tx Power | Rx Sensitivity | Tx Power | Rx Sensitivity |
| 802.11b      | 1 Mbps  | 21       | -100           | n/a      | n/a            |
| 802.11b      | 11 Mbps | 21       | -93            | n/a      | n/a            |
| 802.11g/a    | 6 Mbps  | 20       | -95            | 19       | -95            |
| 802.11g/a    | 54 Mbps | 16       | -80            | 14       | -80            |
| 802.11n HT20 | MCS0    | 20       | -95            | 19       | -91            |
| 802.11n HT20 | MCS7    | 14       | -77            | 14       | -74            |
| 802.11n HT20 | MCS8    | 20       | -95            | 19       | -91            |
| 802.11n HT20 | MCS15   | 14       | -77            | 17       | -74            |
| 802.11n HT40 | MCS0    | 19       | -92            | 19       | -88            |
| 802.11n HT40 | MCS7    | 14       | -74            | 14       | -71            |
| 802.11n HT40 | MCS8    | 19       | -92            | 19       | -88            |
| 802.11n HT40 | MCS15   | 14       | -74            | 14       | -71            |

| SKU                         | Description  |
|-----------------------------|--|
| <b>Aerohive APs</b>         |  |
| AH-AP-121-N-FCC             | Aerohive AP121, Plenum Rated, two 802.11a/b/g/n radio, one 10/100/1000 Ethernet (PoE), FCC regulatory domain w/o power supply          |
| AH-AP-121-N-W               | Aerohive AP121, Plenum Rated, two 802.11a/b/g/n radio, one 10/100/1000 Ethernet (PoE), configurable regulatory domain w/o power supply |
| <b>AP Accessories</b>       |  |
| AH-ACC-SERIAL-RJ45          | RJ45 to DB9 Serial Console Cable   |
| AH-ACC-PWR-24W-US, -UK, -EU | 24W power supply and US power plug for AP330, AP350, AP121, AP141  |
| AH-ACC-INJ-20W-US, -UK, -EU | 20W POE power injector for AP100 series for US, UK, EU   |