

HiveAP 350

802.11n access point



The **Aerohive HiveAP 350** is a durable, enterprise-grade, high performance (3x3) three spatial stream MIMO 802.11n Access Point, capable of data rates of 450Mbps per radio.

AEROHIVE NETWORKS HiveAP 350 is a rugged, high performing and highly reliable 802.11n access point (AP). The HiveAP 350 provides high performance dual concurrent (2.4GHz and 5GHz) 802.11n (3x3) three spatial stream MIMO as well as dual 10/100/1000 Ethernet port service. With its extended temperature range, cast metal case and external antennas it is designed to be deployed in the most challenging of indoor environments.

The HiveAP 350 is a durable, enterprise-grade, (3x3) MIMO solution, designed for high bandwidth demand wireless enterprise environments. With multiple radios and the ability to provide service concurrently on both 2.4GHz and 5GHz bands, the HiveAP 350 can provide up to an aggregate data rate of 450 Mbps. The HiveAP 350 provides both mesh and support for legacy 802.11a, b, and g clients, through Aerohive's industry unique and resilient controller-less architecture.

Software Features

HiveOS

All HiveAPs 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

Network Management Solutions

Aerohive's HiveManager NMS is a central management solution for Aerohive HiveAPs. 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 in 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

Warranty and Support

Every Aerohive Networks HiveAP 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.

Contact us today to learn how your organization can benefit from an Aerohive wireless LAN architecture.



Product Specifications

Radio Specifications—802.11a

- 5.150–5.950 GHz Operating Frequency
- Orthogonal Frequency Division Multiplexing (OFDM) Modulation
- Rates (Mbps): 54, 48, 36, 24, 18, 12, 9, 6 w/auto fallback

Radio Specifications—802.11b

- 2.4–2.5GHz Operating Frequency
- Direct-Sequence Spread-Spectrum (DSSS) Modulation
- Rates (Mbps): 11, 5.5, 2, 1 w/auto fallback

Radio Specifications—802.11g

- 2.4–2.5GHz Operating Frequency
- Orthogonal Frequency Division Multiplexing (OFDM) Modulation
- Rates (Mbps): 54, 48, 36, 24, 18, 12, 9, 6 w/auto fallback

Radio Specifications—802.11n

- 2.4–2.5 GHz & 5.150–5.950 GHz Operating Frequency
- 802.11n Modulation
- Rates (Mbps): MCS0–MCS23 (6.5Mbps - 450Mbps)
- 3x3 Stream Multiple-In, Multiple-Out (MIMO) Radio
- HT20 and HT40 High-Throughput (HT) Support (for both 2.4 GHz and 5 GHz)
- A-MPDU and A-MSDU Frame Aggregation

Antennas

- 6xRP-SMA antenna connections for external antennas
- Articulated antennas available for ceiling or flexible mounting
- Non-articulated antennas available for wall mounting

Mounting

- Wall Mount – bracket included
- Ceiling Tile Clips 11/17" included, 9/16" sold as an accessory

Interfaces

- 2x autosensing 10/100/1000Base-T Ethernet Ports
- Link Aggregation supported via Ether channel (link aggregation at 10/100 only)
- 1x Serial RJ45 port (bits per second: 9600, data bits: 8, parity: none, stop bits: 1, flow control: none)
- USB 2.0 port (with power adapter only)
- 1x Reset Pinhole

Physical

- WxHxD: 8.5 x 1.25 x 8 in. (21.5 x 3.2 x 20.3 cm)
- 3lbs (1.36 kg)

Environmental

- Operating: -20 to +55°C, Storage: -40 to +80°C,
- Humidity: 95%

Environmental Compliance

- UL 2043

Power Options

- 802.3af and/or 802.3at Power over Ethernet (PoE) port
- 12V DC external power adapter (sold separately)

Power Specifications

- AC/DC power adapter:
 - Input: 100–240VAC
 - Output: 12V/2A
- PoE nominal input voltages: 48V, 0.35A, (802.3af) - 48V, 0.625A (802.3at)
- RJ-45 power in put pins: Wires 4,5,7,8 or 1,2,3,6
- 802.3af compliant with Cat-5 cable (14.5W max power draw)

Power & Sensitivity Table

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

| Rate | 2.4GHz | | 5GHz | |
|---------------------|----------|----------------|----------|----------------|
| | TX Power | RX Sensitivity | TX Power | RX Sensitivity |
| 802.11b | | | | |
| 1 Mbps | 23 | -100 | | |
| 11 Mbps | 21 | -92 | | |
| 802.11g/a | | | | |
| 6 Mbps | 23 | -96 | 23 | -95 |
| 54 Mbps | 20 | -81 | 20 | -80 |
| 802.11n HT20 | | | | |
| MCS0 | 23 | -96 | 23 | -95 |
| MCS7 | 20 | -81 | 20 | -80 |
| MCS8 | 23 | -94 | 22 | -93 |
| MCS15 | 20 | -79 | 19 | -78 |
| MCS16 | 22 | -93 | 21 | -92 |
| MCS23 | 19 | -77 | 18 | -73 |
| 802.11n HT40 | | | | |
| MCS0 | 22 | -93 | 22 | -92 |
| MCS7 | 19 | -78 | 18 | -77 |
| MCS8 | 22 | -91 | 21 | -90 |
| MCS15 | 19 | -74 | 18 | -75 |
| MCS16 | 21 | -90 | 21 | -89 |
| MCS23 | 18 | -73 | 18 | -70 |

Features & Benefits

Flexible Hardware Platform

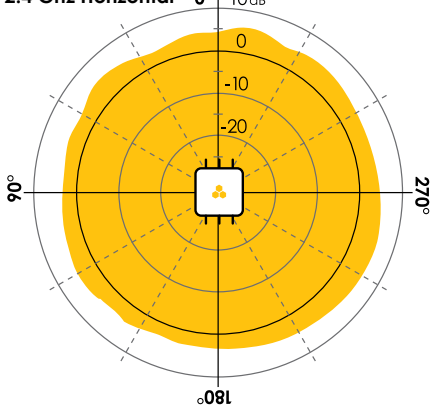
- Radios provide concurrent 802.11a/n & 802.11b/g/n connections without degradation in performance
- Automatic or dedicated mesh backup
- Dual Ethernet ports etherchannel or backup.
- Plenum Rated APs for indoor, office environments
- Supports 802.3af PoE or standard power adapter
- Hardware acceleration for iPsec services
- Extended Temperature Range
- USB interface for future 3G/4G services

Innovative Design

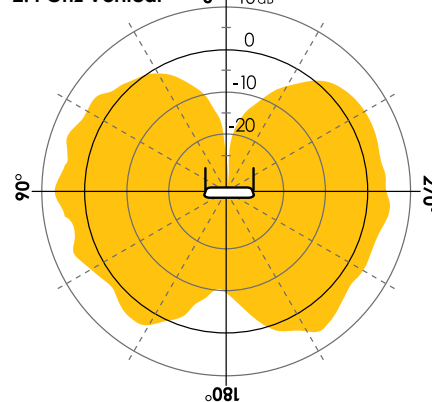
- Low profile design blends into an office environment
- Low-distraction indicator appear as gently glowing rather than bright blinking lights

RF Coverage Maps

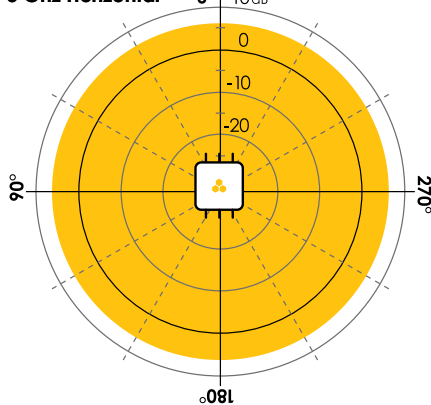
2.4 Ghz Horizontal 0° 10dB



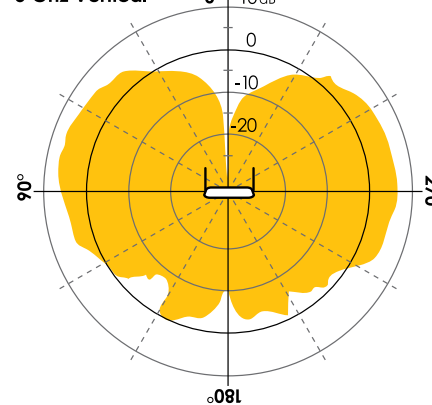
2.4 Ghz Vertical 0° 10dB



5 Ghz Horizontal 0° 10dB



5 Ghz Vertical 0° 10dB



| SKU | Description |
|---------------------------------|---|
| AH-AP-350-N-FCC | HiveAP 350, Plenum Rated, one 802.11b/g/n radio, one 802.11a/n radio, two 10/100/1000 Ethernet (PoE), mounting bracket, FCC regulatory domain without power supply |
| AH-AP-350-N-W | HiveAP 350, Plenum Rated, one 802.11b/g/n radio, one 802.11a/n radio, two 10/100/1000 Ethernet (PoE), mounting bracket, configurable regulatory domain without power supply |
| Accessories | |
| AH-ACC-350-ANT-KIT | HiveAP 350 articulated indoor antenna kit (3x2.4Ghz 4dBi and 3x5Ghz 4dBi antennas) |
| AH-ACC-350-ANT-2G 2.4Ghz | RP-SMA female indoor 4dBi articulated antenna for AP 350 |
| AH-ACC-350-ANT-5G 5Ghz | RP-SMA female indoor 4dBi articulated antenna for AP 350 |
| AH-ACC-350-ANT-NART-KIT | HiveAP 350 non-articulated indoor wall antenna kit (3x2.4Ghz 2dBi and 3x5Ghz 2dBi antennas) |
| AH-ACC-350-ANT-NART-2G | 2.4Ghz RP-SMA female indoor 2dBi non-articulated antenna for wall-mount deployment for AP 350 |
| AH-ACC-350-ANT-NART-5G | 5Ghz RP-SMA female indoor 2dBi non-articulated antenna for wall-mount deployment for AP 350 |
| AH-ACC-PWR-12V-US, -EU, -UK -AU | 24W power supply for HiveAP 330 and 350 with US, EU, UK, AU power plug |
| AH-ACC-SEC-BIT-330-350-3PK | HiveAP 330/350 security screw bit (3pk) |
| AH-ACC-BKT-330-350 | HiveAP 330/350 wall mounting bracket |
| AH-ACC-9-16-CLIP-330-350 | HiveAP 330/350 9/16" ceiling mount brackets for recessed and non-recessed ceiling tiles |
| AH-ACC-15-16-CLIP-330-350 | HiveAP 330/350 15/16" ceiling mount brackets for recessed and non-recessed ceiling tiles |
| AH-ACC-Serial-RJ45 | RJ45 to DB9 Serial Console Cable |

Hardware Assisted Features

Security

- Trusted Platform Module (TPM)–Hardware-based key storage and encryption
- Wireless privacy & authentication Wi-Fi CERTIFIED™ WPA™ and WPA2™, 802.11i, WEP, 802.1x, PSK
- Granular user profile-based management defines QoS, mobility policies, and security policies for each user that enters the network
- Encryption: AES:CCMP, TKIP, and RC4 (WEP only)

Anti-theft

- Designed to work with Kensington-style locks
- Tamper-proof security screw (with bracket option)

Hardware QoS Features

- Marking and policing–WMM™ (802.11e) for wireless, 802.1p and/or DiffServ
- Wi-Fi CERTIFIED WMM, WMM power save (U-APSD)