

Aerohive AP250

High performance, general purpose 802.11ac Wave 2 Dual-Radio 3x3:3 access point with internal antennas.

As WLAN capacity requirements soar, AP250 is an excellent choice to provide instant adaption to ever-changing capacity needs. AP250 features dual radio, 3x3:3 MU MIMO, providing full 802.11ac technology performance with data rates up to 2.6 Gbps per access point using existing 802.3af PoE infrastructure. Software defined radio allows IT managers to enable 802.11ac performance on both radios to provide the best of coverage and capacity Wi-Fi design and protects the investment. Built-in BLE (Bluetooth Low-Energy) radio enables proximity, indoor location tracking and other location-based mobile engagement services.

AP250 is powerful enough to provide all the enterprise-grade features including built-in application visibility and control, RADIUS, DHCP, Captive Web Portal, location services and Spectrum analysis.

Key Benefits

- Best balance of coverage, capacity and performance with software selectable radio and RF-IQ technology.
- Managed from public or private cloud-based HiveManager management platform.
- Upgrading your network to 802.11ac Wave 2 does not require you to upgrade your existing PoE infrastructure. Our advancements in energy efficiency allow the AP250 full 3-stream, 2.4/5 GHz 802.11ac and 5/5 GHz performance while using existing 802.3af PoE infrastructure
- Integrated BLE (Bluetooth Low-Energy) and USB interface for IoT readiness
- Application Visibility and Control functionality, including reporting, stateful firewall, and powerful Aerohive Quality of Service (QoS) on the access point
- Enterprise software features including RADIUS, DHCP server, location services and spectrum analysis are combined with hardware assisted security and zero-touch deployment.

Features

Flexible Hardware Platform

- Wave 2 802.11ac Access Point with MU-MIMO capability
- RF-IQ antenna and radio technology
- Software configurable radios allowing either two 5 GHz 802.11a/n/ac radios (for High Density High Capacity deployments) or concurrent 802.11a/n/ac and 802.11b/g/n radios
- Full 3x3, 3 spatial streams in SU-MIMO and MU-MIMO and dual 5 GHz performance with IEEE 802.3af power
- Built-in Bluetooth Low Energy for iBeacon and other beacon technologies
- IoT readiness with USB port for other wireless technologies to connect seamlessly



Advanced Features

- Integrated application visibility and control (AVC)
- Advanced Automatic Channel Selection Protocol (ACSP) for optimum radio performance.
- On-device RADIUS Server with directory integration support (max 256 concurrent authentications), Captive Web Portal, DHCP server (max 512 DHCP clients per AP), and spectrum analysis
- Automatic or dedicated mesh backup

Security Features

- Trusted Platform Module (TPM)– Hardware-based key storage and encryption
- Wireless privacy & authentication Wi-Fi CERTIFIED WPA and WPA2, private PSK
- Granular user profile-based management defines traffic and security policies for groups of users or individual users
- Encryption: AES/CCMP, TKIP, and RC4 (WEP only)
- Classifying, Marking and Policing–WMM (802.11e) for wireless, 802.1p and/or DiffServ for wired
- WMM Certified
- WMM Power Save (U-APSD) Certified

Aerohive Access Point

Part Number	Description
AH-AP-250-AC-FCC	AP250, indoor rated, dual radio 3x3 802.11a/b/g/n/ac, 2 x 10/100/1000, FCC regulatory domain, without POE injector
AH-AP-250-AC-W	AP250, indoor rated, dual radio 3x3 802.11a/b/g/n/ac, 2 x 10/100/1000, configurable regulatory domain, without POE injector

Product Specifications

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

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

- 2.4–2.5 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

Radio Specifications—802.11n

- 2.4–2.5 GHz & 5.150–5.850 GHz Operating Frequency
- 802.11n Modulation
- Rates (Mbps): MCS0–MCS23 (6.5Mbps - 450Mbps)
- 3x3:3 Stream Multiple-In, Multiple-Out (MIMO) Radio
- HT20 High-Throughput (HT) Support (for both 2.4 GHz and 5 GHz)
- A-MPDU and A-MSDU Frame Aggregation

Radio Specifications—802.11ac

- 5.150–5.850 GHz Operating Frequency
- 802.11ac Modulation (256-QAM)
- Rates (Mbps): MCS0–MCS9 (6.5Mbps - 1300Mbps), NSS = 1-3.
- 3x3:3 Stream Multiple-In, Multiple-Out (MIMO) Radio
- VHT20/VHT40/VHT80 support

Included Mounting Options

- Wall Mount
- Ceiling Tile flush 15/16" and Wall Mount locking accessory included with AP

Mounting

- Desktop
- 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
- Plenum Mount sold as an accessory
- Silhouette and Interlude sold as an accessory

Antennas

- 6 + 2 internal Wi-Fi antennas for spatial and polarization diversity
- 1x BLE internal antenna

Interfaces

- Two Autosensing 10/100/1000 Base-T Ethernet ports. PoE/PoE+ capability on one of the ports
- RJ-45 console port
- Standard USB port

Physical

- WxDxH: 7.25" x 7.25" x 1.87" (18.4 cm x 18.4 cm x 1.87 cm) tall (plus .25" for the mounting hardware) – 2.12" (5.4 cm) high total
- Weight: 1.8 lb (0.81 kg)

Environmental

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

Environmental Compliance

- UL2043

Power Specifications

- IEEE 802.3af PoE Power: Full 3x3:3 802.11ac MU-MIMO performance, BLE and Dual 5 GHz. No USB port, no 2nd Ethernet port.
- IEEE 802.3at PoE Power: full set of features (all of the above plus USB port and 2nd Ethernet port).
- 2.4 GHz typical power draw 17 dBm, max 22 dBm
- 5 GHz typical power draw 18 dBm, max 23dBm

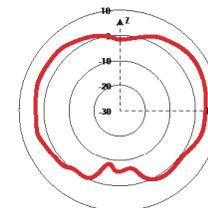
Transmit Power Table

2.4 GHz	Data Rate	Power dBm
11b	1,2,5,11	20
11g	54 Mbps	17
	48 Mbps	18
	36 Mbps	19
	6 Mbps	19
11n HT20	MCS7,15,23	17
	MCS6,14,22	18
	MCS5,13,21	19
	MCS0,1,2,3,4	19
	MCS8,9,10,11,12	
MCS16,17,18,19,20		
5 GHz	Data Rate	Power dBm
	54 Mbps	17
	48 Mbps	18
	36 Mbps	19
	6 Mbps	19
11a	MCS7,15,23	17
	MCS6,14,22	18
	MCS5,13,21	19
	MCS0,2,3,4,8,9,10,11	19
	MCS12,16,17,18,19,20	
11n HT20	MCS7,15,23	17
	MCS6,14,22	18
	MCS5,13,21	19
	MCS0,1,2,3,4,8	19
	MCS9,10,11,12,16	
MCS17,18,19,20		
11n HT40	MCS7,15,23	17
	MCS6,14,22	18
	MCS5,13,21	19
	MCS0,1,2,3,4,8	19
	MCS9,10,11,12,16	
MCS17,18,19,20		
11ac VHT	256QAM@3/4 Code Rate	14
	256QAM@5/6 Code Rate	13

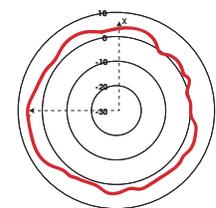
Receive Sensitivity Table

2.4 GHz	Data Rate	Sensitivity
11b	1 Mbps	-100
	11 Mbps	-93
11g	6 Mbps	-95
	36 Mbps	-86
	48 Mbps	-82
	54 Mbps	-80
11n HT20	MCS0, 8, 16	-95
	MCS5,13, 21	-81
	MCS6,14, 22	-79
	MCS7, 15, 23	-77
5 GHz	Data Rate	Sensitivity
	6 Mbps	-95
	36 Mbps	-86
	48 Mbps	-81
	54 Mbps	-80
11a	MCS0, 8, 16	-91
	MCS5, 13, 21	-78
	MCS6, 14, 22	-76
	MCS7, 15, 23	-74
11n HT20	MCS0, 8, 16	-88
	MCS5, 13, 21	-75
	MCS6, 14, 22	-73
11n HT40	MCS0,7, 15, 23	-71
	Code Rate 3/4	-65
11ac HT20	Code Rate 5/6	-63
	Code Rate 3/4	-62
11ac HT40	Code Rate 5/6	-60
	Code Rate 3/4	-59
11ac HT80	Code Rate 5/6	-57
	Code Rate 3/4	-57

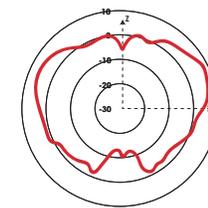
Radiation Patterns



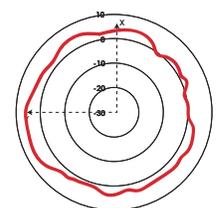
Radio-0 Vertical
2.4GHz Dual-band



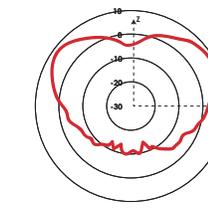
Radio-0 Horizontal
2.4GHz Dual-band



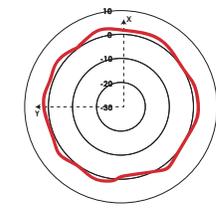
Radio-1 Vertical
5GHz Dual-band



Radio-1 Horizontal
5GHz Dual-band



Radio-0 Vertical
5GHz Dual-band



Radio-0 Vertical
5GHz Dual-band

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 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.