

# AP250

## High performance, general-purpose, 802.11ac Wave 2 dual-radio 3x3:3 Access Point

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.

While AP250 inherits the signature elements of Aerohive access points such as the powerful HiveOS and innovative distributed Cooperative Control architecture, it also includes new features such as built-in BLE and software-defined radio. Built-in BLE (Bluetooth Low-Energy) radio enables proximity, indoor location tracking and other location-based mobile engagement services. Software defined radio allows IT managers to enable 802.11ac performance on both radios to provide the best of coverage and capacity

AP250 is a key component 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

- 3x3 Wave 2 802.11ac technology with MU-MIMO capability and 3 spatial streams
- Software configurable radio for dual 5 GHz operation
- Built-in Bluetooth Low Energy for iBeacon/ other beacon technologies
- IoT readiness with USB port
- Full performance with IEEE 802.3af power
- Trusted Platform Module (TPM) – Hardware-based key storage and encryption
- RF-IQ antenna and radio technology



#### CLOUD MANAGEMENT

- Network Device and Client Monitoring
- Global Search and Filter function
- Auto-Provisioning Tools for quick and easy deployment
- Network Health View
- 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

### PRODUCT SKUs

SKU	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 SPECS

### 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)
- HT40 High-Throughput (HT) Support for 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 1.87cm) [plus .25", mounting hardware – 2.12" (5.4 cm) H 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).

### Power Options

- Power Draw: Typical PoE 11.75W, Max PoE 16.07W

### Certifications

- WPA/WPA2
- Voice-Enterprise

## TRANSMIT POWER TABLE

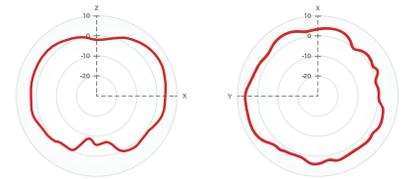
2.4 GHZ	DATA RATE	POWER (dBm)
11b	1,2,5,11	20
	54 Mbps	17
	48 Mbps	18
11g	36 Mbps	19
	6 Mbps	19
11n HT20	MCS7,15,23	17
	MCS6,14,22	18
	MCS5,13,21	19
	MCS0,1,2,3,4	19
	MCS8,9,10,11,12	19
	MCS16,17,18,19,20	19
5 GHZ	DATA RATE	POWER (dBm)
11a	54 Mbps	17
	48 Mbps	18
	36 Mbps	19
	6 Mbps	19
11n HT20	MCS7,15,23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

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

## RECEIVE SENSITIVITY TABLE

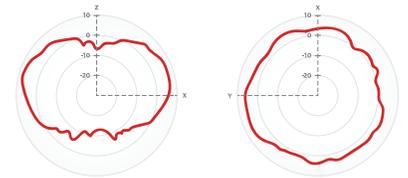
2.4 GHZ	DATA RATE	SENSITIVITY
11b	1 Mbps	-100
	11 Mbps	-93
	6 Mbps	-95
11g	36 Mbps	-86
	48 Mbps	-82
	54 Mbps	-80
11n HT20	MCS0,8,16	-95
	MCS5,13,21	-81
	MCS6,14,22	-79
	MCS7,15,23	-77
5 GHZ	DATA RATE	SENSITIVITY
11a	6 Mbps	-95
	36 Mbps	-86
	48 Mbps	-81
	54 Mbps	-80
11n HT20	MCS0,8,16	-91
	MCS5,13,21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

## RADIATION PATTERNS



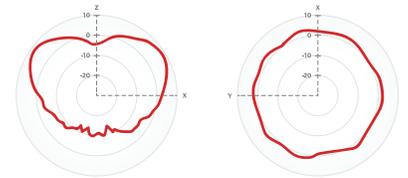
RADIO-0 VERTICAL  
2.4GHZ DUAL-BAND

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 HORIZONTAL  
5GHZ DUAL-BAND

## WARRANTY & SUPPORT

This Aerohive Networks device is backed by a limited lifetime hardware warranty. HiveCare Community Support is included with the Connect Access Point. Optional HiveCare Callback service may also be purchased.

For complete support terms go to [www.aerohive.com/support](http://www.aerohive.com/support).

