AEROHIVE AP550

Performance optimized indoor 802.11ac Wave 2 Dual-Radio 4x4:4 MIMO access point with internal antenna

AP550 is powerful enough to provide important enterprise-grade features – including built-in application visibility and control, RADIUS, DHCP, Captive Web Portal, WIPS, Location services and Spectrum analysis.

Many bandwidth-hungry critical business applications are accessed over wireless networks; Wi-Fi infrastructures are expected to provide required speed and capacity, and user experience is measured beyond jitter and latency. Number and types of mobile devices that are connecting to Wi-Fi is exponential, and large numbers of new devices that do not require human intervention are joining wireless networks every day.

AP550 is engineered for these very demanding environments– featuring 802.11ac Wave 2 dual-radio, 4x4:4 MIMO with the software defined radio that allows IT managers to enable 802.11ac 5 Ghz performance on both radios. Built-in BLE (Bluetooth Low-Energy) radio enables indoor proximity and location tracking.

KEY BENEFITS

- High performance with software-selectable radio and RF-IQ antenna technology for instant adaptation to the capacity needs

- Managed from public or private cloud -based HiveManager management platform

- 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

- 4x4 Wave 2 802.11ac Access Point with MU-MIMO capability and four spatial streams

- 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

- Automatic or dedicated mesh failover

- Built-in Bluetooth Low Energy for Beacon and other applications

- IoT readiness with USB port for other wireless technologies

- PoE redundancy between the two Ethernet ports for high availability

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, Captive, Web Portal and DHCP server

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

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
• 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
• Rates (Mbps): MCS0–MCS23 (6.5Mbps - 300Mbps)
• 4x4 4-Stream Multiple-In, Multiple-Out (MIMO) Radio
• HT20 High-Throughput (HT) Support for 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 – 1733Mbps), NSS = 1-4.
• 4x4 4-Stream Multiple-In, Multiple-Out (MIMO) Radio
• VHT20/VHT40/VHT80 support

Included Mounting Options
• Wall Mount
• Ceiling Tile flush 15/16"

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
• 12x WiFi internal antennas
  (4x 2.4 GHz antennas and 8x 5 GHz antennas)
• 1x BLE internal antenna

Interfaces
• Two Autosensing 10/100/1000 Base-T Ethernet ports. PoE (Power over Ethernet 802.3af) capability on both ports for redundancy and high availability
• RJ-45 console port
• Standard USB port

Physical
• WxDxH: 8.15" x 8.15" x 2.17" *(208mm x 208mm x 55mm)*
• Weight: 2.4 lbs *(1.1 Kg)*

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

Environmental Compliance
• UL2043

Power Specifications
• IEEE 802.3at PoE+ Power required for full 4x4:4 MU-MIMO, dual 5 GHz, USB, BLE and 2 Ethernet ports to operate*

Power Options
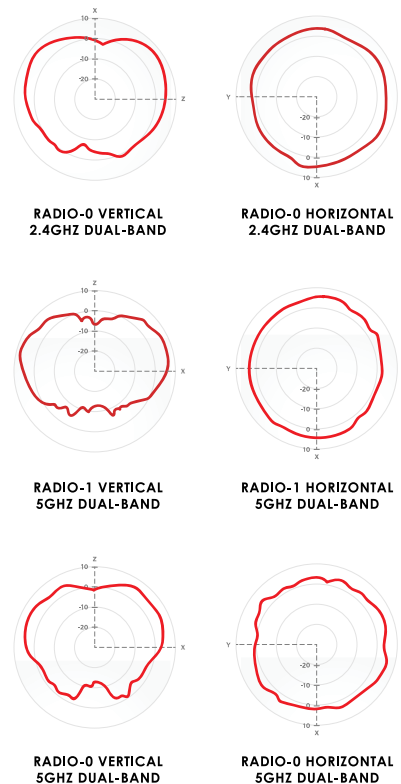• *Power Draw:* Typical 10.5W, Max 12.9W
  Typical DC 16.9W, Max DC 21.6W

TRANSMIT POWER TABLE

2.4 GHZ	DATA RATE	POWER (dBm)
11b	1-11 Mbps	21
11g	6 Mbps	20
	36 Mbps	18
	48 Mbps	17
	54 Mbps	16
11n HT20	MCS7,15,23	16
	MCS6,14,22	17
	MCS5,13,21	18
	MCS0-4, 8-12, 16-20	20

5 GHZ	DATA RATE	POWER (dBm)
11a	6 Mbps	19
	36 Mbps	18
	48 Mbps	16
	54 Mbps	15
11n HT20	MCS7,15,23	15
	MCS6,14,22	16
	MCS5,13,21	18
	MCS0-4, 8-12, 16-20	19
11n HT40	MCS7,15,23	14
	MCS6,14,22	16
	MCS5,13,21	18
	MCS0-4, 8-12, 16-20	19
11ac VHT	256QAM@3/4 Code Rate	12
	256QAM@5/6 Code Rate	11

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
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
	MCS7,15,23	-71
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

PRODUCT SKUs

SKU	DESCRIPTION
AH-AP-550-AC-FCC	AP550 Indoor plenum rated, 2 radio 4x4:4 802.11a/b/g/n/ac Access Point, MU-MIMO, 2 10/100/1000 Ethernet ports, FCC regulatory domain, w/o power supply *(Antennas sold separately)*
AH-AP-550-AC-CAN	AP550 Indoor plenum rated, 2 radio 4x4:4 802.11a/b/g/n/ac Access Point, MU-MIMO, 2 10/100/1000 Ethernet ports, Canadian regulatory domain, w/o power supply *(Antennas sold separately)*
AH-AP-550-AC-W	AP550 Indoor plenum rated, 2 radio 4x4:4 802.11a/b/g/n/ac Access Point, MU-MIMO, 2 10/100/1000 Ethernet ports, FCC regulatory domain, w/o power supply *(Antennas sold separately)*

WARRANTY & 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**.