

DATA SHEET

AP 150W

Enterprise-grade, Indoor Wallplate, 802.11ac MU-MIMO, Wave 2 Dual-Radio 3x3:3 Access Point and Switch





AP150W transforms any existing Ethernet jack into a versatile and compact cloud-managed AP and Switch for connectivity ideal for hospitality, cruise ships, residential halls, or other multi-dwelling-unit deployments.

The **AP150W** is the industry's only wallplate 3x3:3 802.11ac Wave 2 Wi-Fi Access Point and wired Switch managed by Aerohive's next-generation HiveManager management system. It delivers high performance wireless access, with aggregate rates of up to 1.6 Gbps, integrated Bluetooth Low Energy and ZigBee for IoT connectivity, and 4 Gigabit Ethernet ports that can power digital phones, IoT sensors, or cameras.

The AP150W benefits from an AI-driven Wi-Fi architecture capable of self-organizing, self-learning, self-healing and self-optimizing in the most challenging environments. Cooperative Control eliminates single points of failure and bottlenecks, delivering bulletproof stability and unbridled performance, perfectly complementing the unrivalled capabilities of HiveOS - a stateful L2-L7 DPI firewall for context-based access security, advanced and customizable QoS for traffic optimization, intelligent meshing algorithms, Private Pre-Shared Key (PPSK) and much more.

All Aerohive APs can be centrally managed using Aerohive's out-of-band cloud network management system - *HiveManager*. HiveManager is an industry-leading and visionary approach to cloud-managed networking, built from the ground up to take full advantage of the SD-LAN and SD-WAN solution from Aerohive. Working in tandem with Aerohive's cutting-edge HiveOS, HiveManager leverages state-of-the-art cloud technology. Benefit from unified, full-stack management of Wi-Fi, switching and routing, centralized monitoring and configuration, real-time and historical reporting, simplified troubleshooting, integrated RF planner tools and much more.

HiveManager is available in two editions: *Connect* and *Select*. The Connect solution is bundled with Aerohive access points and switches and is free for the lifetime of the device. Connect is the perfect solution for those looking to provide robust, yet enterprise-grade connectivity, without having to invest in the full suite of management features. The optional upgrade to Select unlocks a slew of advanced features and capabilities that enhance network management, security and visibility.

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

802.11b

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

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

802.11n

- 2.4–2.5 GHz & 5.150–5.850 GHz Operating Frequency
- 802.11n Modulation
- 2.4 GHz: Rates (Mbps): MCS0 - MCS15 (6.5Mbps - 300Mbps)
- 5 GHz: Rates (Mbps): MCS0 - MCS15 (6.5Mbps - 450Mbps)
- 3x3 Multiple-In, Multiple-Out (MIMO) Radio for 5 GHz
- 2x2 Multiple-In, Multiple-Out (MIMO) Radio for 2.4 GHz
- HT20 High-Throughput (HT) Support for both 2.4 GHz and 5 GHz
- HT40 High-Throughput (HT) Support for 5 GHz

802.11ac

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

Power Consumption

- 802.3af Input: Typical 11.3W, Max 12.4W
- 802.3at Input: Typical 23.6W, Max 24.9W *(with 12W PoE Output Load)*
- 48VDC Input: Typical 26.9W, Max 28.2W *(with 15.4W PoE Output Load)*

Power Options

- IEEE 802.3af / 802.3at (PoE/PoE+)
 - With IEEE 802.3af PoE power, AP150W will power up and the Wi-Fi and Ethernet ports will operate in its full capacity. In this scenario, PoE budget on the down link port is not supported
 - With IEEE 802.3at PoE power, AP150W will power up and the Wi-Fi and Ethernet ports will operate in its full capacity. In this scenario, the available PoE budget on the downlink port is 12W.
- Power supply 48VDC, 0.75A *(sold as an accessory)*
 - With 48VDC input, AP150W will power up and the Wi-Fi and Ethernet ports will operate in its full capacity. In this scenario, the available PoE budget on the downlink port is 15.4W

Physical

- WxDxH: 4.2" x 1.1" x 6.9" (105.9mm x 29.2mm x 175mm)
- Weight: 0.86 lb / (0.39 kg)
- Wallplate Bracket Weight: 0.26 lb (0.1 kg)

Antennas

- 2x Integrated single band, 2.4-2.5 GHz Omnidirectional antennas
- 3 x Integrated single band, 5.1-5.8 GHz Omnidirectional antennas
- 1 x BLE internal antenna
- 1 x ZigBee internal antenna

Mounting

- Wallplate *(included with the AP)*
- Desk mount *(sold as an accessory)*
- TPM chip for added security

Environmental

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

Power and Sensitivity Tables

Power - 2.4 GHz

CHANNEL	DATA RATE	POWER (DBM)
11b	1 - 11 Mbps	16
	6 Mbps	16
11g	54 Mbps	15
	MCS0, 8, 16	14
11n HT20	MCS7, 15, 23	14

Receive Sensitivity - 2.4 GHz

CHANNEL	DATA RATE	POWER (DBM)
11b	1 Mbps	15
	11 Mbps	15
11g	6 Mbps	15
	54 Mbps	14
11n HT20	MCS0, 8	15

Power - 5 GHz

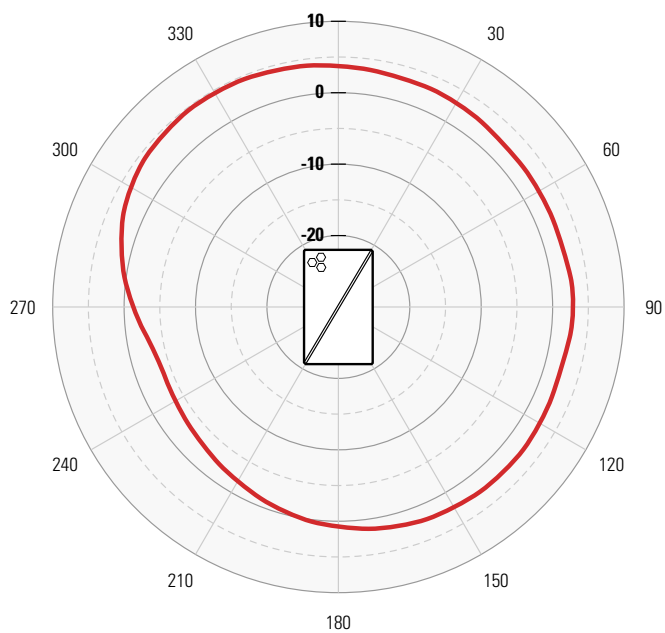
CHANNEL	DATA RATE	POWER (DBM)
11b	1 Mbps	15
	11 Mbps	15
11g	6 Mbps	15
	54 Mbps	14

Receive Sensitivity - 5 GHz

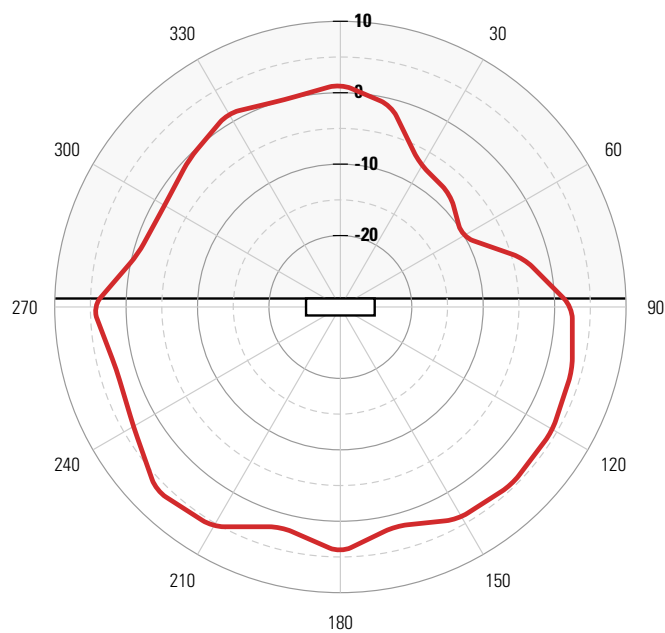
CHANNEL	DATA RATE	SENSITIVITY
11a	6 Mbps	-95
	54 Mbps	-74
11ac VH20	MCS0	-94
	MCS8	-70
11ac VHT40	MCS0	-91
	MCS8	-66
11ac VHT80	MCS0	-85
	MCS8	-62

Radiation Patterns – Azimuth & Elevation

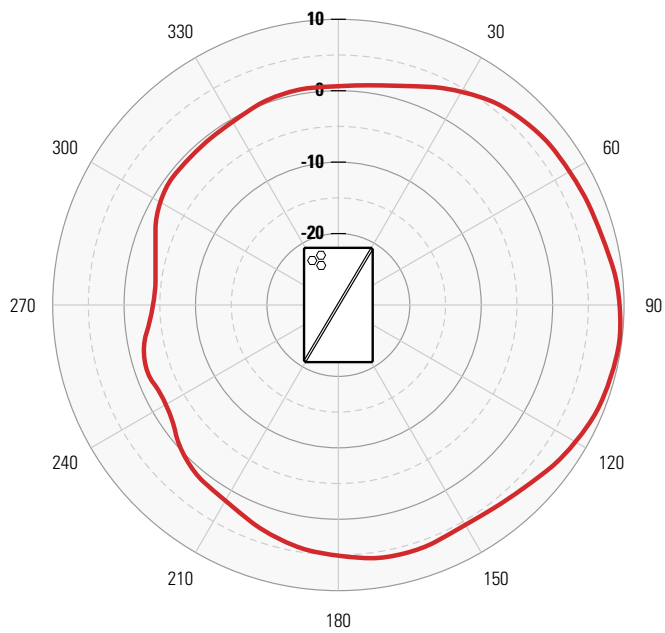
Azimuth - 2.4 GHz



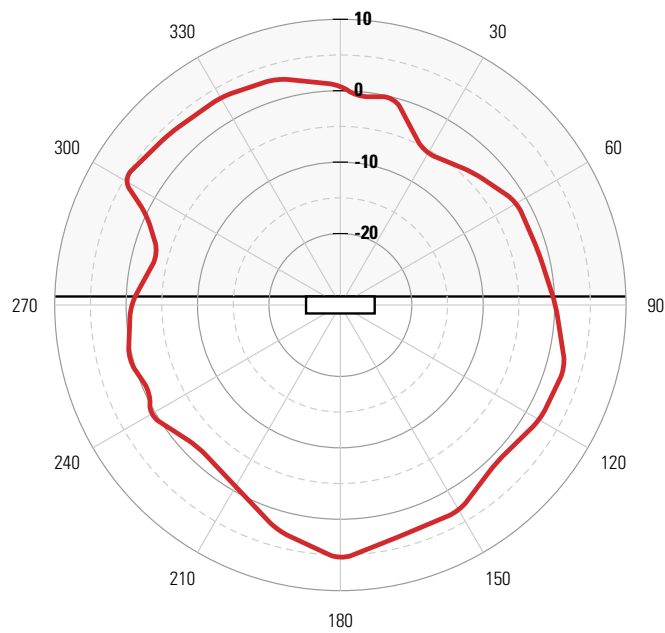
Elevation - 2.4 GHz



Azimuth - 5 GHz



Elevation - 5 GHz



AP150W- SKUs

SKU	DESCRIPTION
AH-AP-150W-AC-XX	AP150W, indoor wall plate access point, 2 radio 3x3:3 802.11ac, MU-MIMO, 4 10/100/1000 Ethernet ports, BLE, PoE, Includes HiveManager Connect & HiveCare Community. (Regulatory Domains available: FCC, CE, W (World), CAN (Canada))

AP150W - MISCELLANEOUS SKUs

SKU	DESCRIPTION
AH-ACC-PWR-36WL6-US	36W Level 6 power supply with US power plug for AP150W.
AH-ACC-PWR-36WL6-UK	36W Level 6 power supply with UK power plug for AP150W.
AH-ACC-PWR-36WL6-EU	36W Level 6 power supply with EU power plug for AP150W.
AH-ACC-PWR-36WL6-AU	36W Level 6 power supply with AU power plug for AP150W.
AH-ACC-PWR-36WL6-KR	36W Level 6 power supply with Korea power plug for AP150W.
AH-ACC-DSKSTD	Desk Mount stand for AP150W. Includes screws.
AH-ACC-CBL5PK-150W	AP150W in-box accessory sold as a spare : Flat male-male Ethernet cable, 100mm. Qty 5

