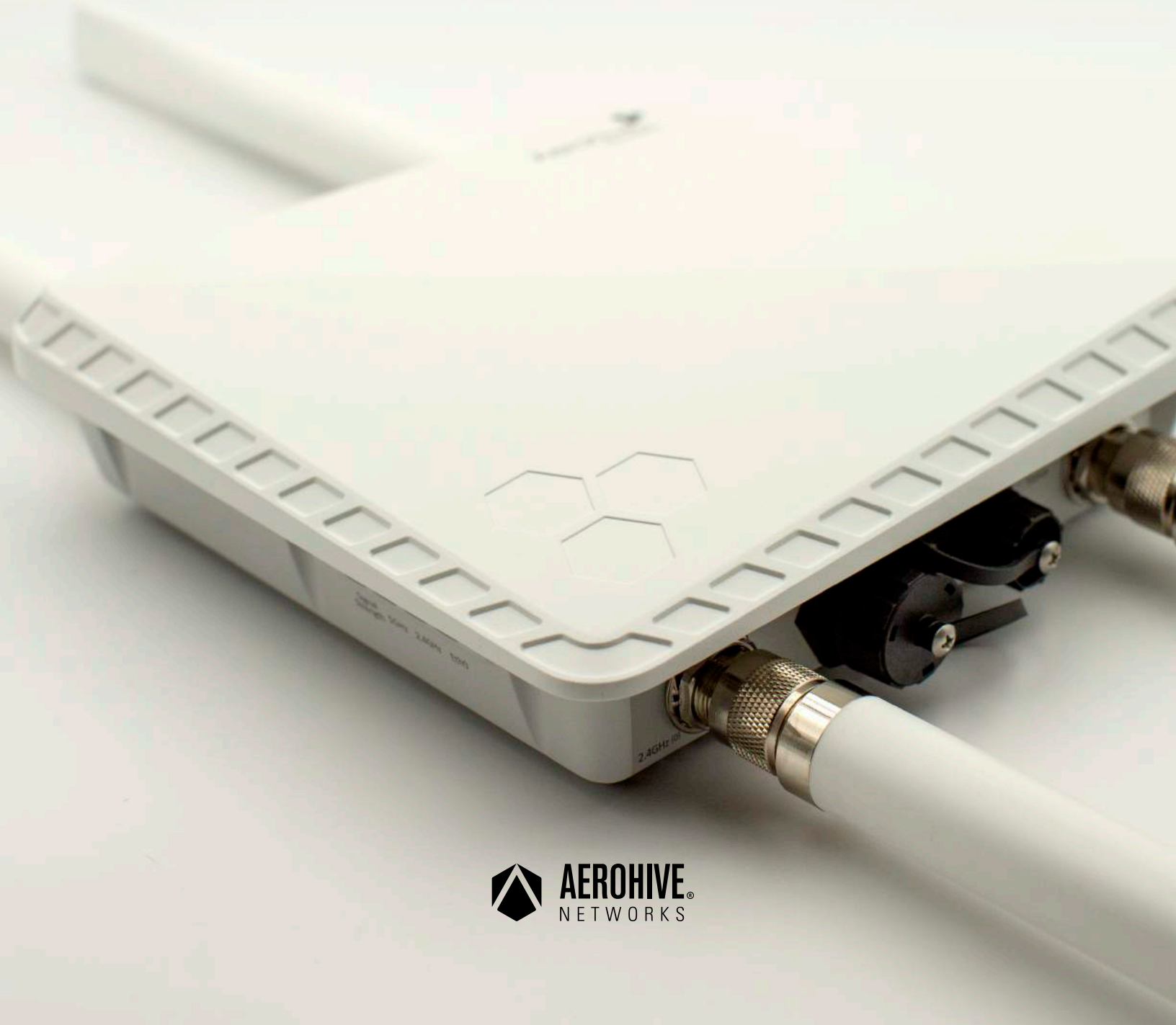


DATA SHEET

# AP 1130

Enterprise-Grade, High Performance, Rugged 2x2:2 802.11ac MIMO Solution,  
Especially Designed for Outdoor High-Bandwidth-Demand Wireless Deployments in Harsh Environments





**AP1130 is designed for extended temperature range and a watertight chassis making it suitable for the toughest environments. The AP1130 provides high-performance dual band concurrent (2.4 GHz and 5 GHz) 802.11ac (2x2:2) MIMO.**

**AP1130** can be easily installed in hard-to-reach places like rooftops and poles by a single person. It also features intuitive LEDs which indicate the AP status and backhaul connections either over Ethernet or wireless (mesh backhaul). Additionally, AP1130 enables accurate tuning of directional antennas for long range point-to-point mesh connections, providing a visual and audio mechanism to accurately identify the most suitable orientation for antennas, such that the mesh link is formed at the highest possible negotiated rate, leading to improved user experience.

The AP1130 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

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### 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
- Rates (Mbps): MCS0 - MCS15 (6.5Mbps - 300Mbps)
- 2x2 Multiple-In, Multiple-Out (MIMO) Radio
- HT20 High-Throughput for 2.4 GHz and 5 GHz
- HT40 High Throughput for 5 GHz
- A-MPDU and A-MSDU Frame Aggregation

### 802.11ac

- 5.150–5.850 GHz Operating Frequency
- 802.11ac Modulation (256-QAM)
- Rates (Mbps): MCS0–MCS9 (6.5Mbps - 867Mbps), NSS = 1-2.
- 2x2:2 Stream Multiple-In, Multiple-Out (MIMO) Radio
- VHT20/VHT40/VHT80 support

## Interfaces

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- Autosensing 10/100/1000 BASE-T Ethernet PoE (Power over Ethernet 802.3at) Port

## Power Specifications

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- IEEE 802.3at PoE Power
- 12 V DC input

## Physical

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- LxWxH: 7.71x7.71x2.12in (*196x196x54mm*) without brackets and antennas
- 2.6 lbs (*1.079 Kg*), without brackets and antennas

## Antennas

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- 4x N-type jack antenna connections for external antennas
- Antennas sold as accessory

## Included Mounting Options

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- Wall Mounted
- Pole mounted – 1-2.75inch pole strap included

## Environmental

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

## Environmental Compliance

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- IP 67

## Power Options

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- 802.3at Power over Ethernet (PoE) port

## Power and Sensitivity Tables

## Power - 2.4 GHz

CHANNEL	DATA RATE	POWER (dBm)
11b	1,2,5,5,11 Mbps	23
	6 - 24 Mbps	21
11g	36 Mbps	20
	48 Mbps	19
	54 Mbps	18
	MCS0-4, 8-12	22
11n HT20	MCS5, 13	21
	MCS6, 14	19
	MCS7,15	18

## Receive Sensitivity - 2.4 GHz

CHANNEL	DATA RATE	SENSITIVITY
11b	1 Mbps	-98
	11 Mbps	-90
11g	6 - 24 Mbps	-94, -85
	36 Mbps	-82
	48 Mbps	-77
	54 Mbps	-76
11n HT20	MCS0 - 4, 8 - 12	-93, -80
	MCS5,13	-76
	MCS6,14	-74
	MCS7,15	-73

## Power - 5 GHz

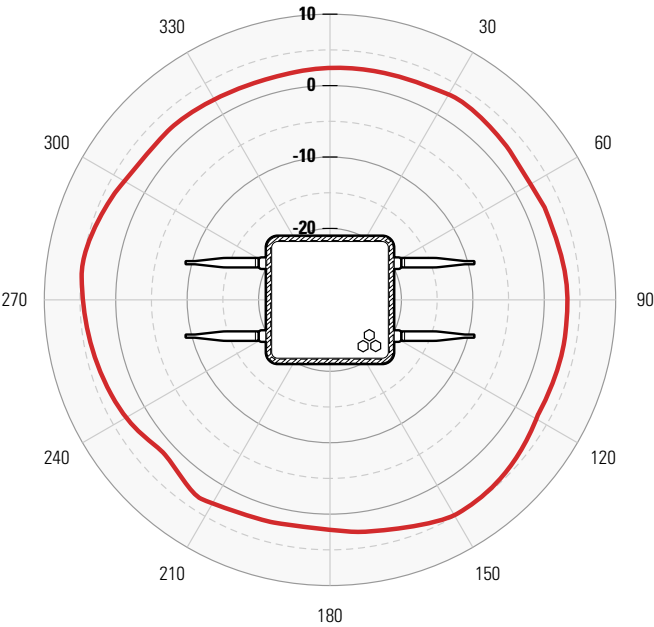
CHANNEL	DATA RATE	POWER (dBm)
11a	6 - 24 Mbps	21
	36 Mbps	19
	48 Mbps	18
	54 Mbps	17
11n HT20	MCS0 - 4, 8 - 12	21
	MCS5, 13	19
	MCS6, 14	18
	MCS7, 15	17
11n HT40	MCS0 - 4, 8 - 12	20
	MCS5, 13	19, 18
	MCS6, 14	18, 17
	MCS7, 15	17, 16
11ac VHT	256QAM @ 3/4 Code Rate	16
	256QAM @ 5/6 Code Rate	15

## Receive Sensitivity - 5 GHz

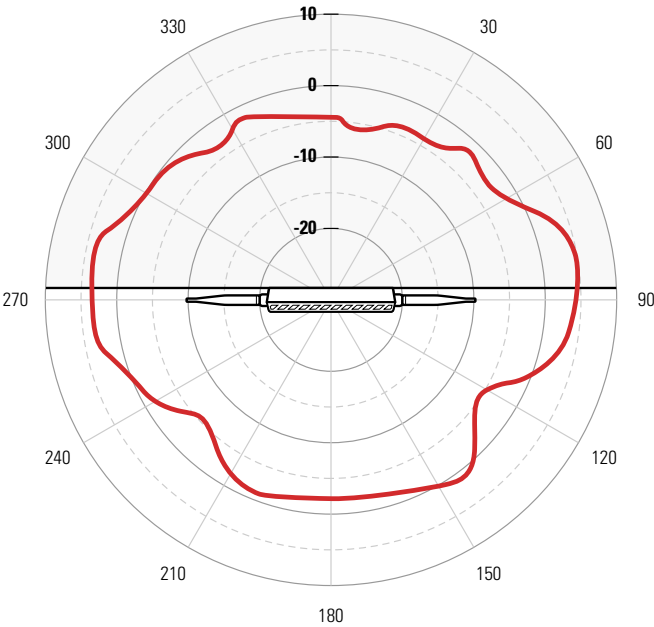
CHANNEL	DATA RATE	SENSITIVITY
11a	6 - 24 Mbps	-94, -86
	36 Mbps	-82
	48 Mbps	-78
	54 Mbps	-77
11n HT20	MCS0 - 4, 8 - 12	-93, -81
	MCS5,13	-76
	MCS6,14	-75
	MCS7,15	-73
11n HT40	MCS0 - 4, 8 - 12	-93 to -81, -90 to -78
	MCS5,13	-77, -74
	MCS6,14	-75, -72
	MCS7,15	-74, -71
11ac HT20	256QAM @ 3/4 Code Rate	-69
11ac HT40	256QAM @ 3/4 Code Rate	-66
	256QAM @ 5/6 Code Rate	-64
11ac HT80	256QAM @ 3/4 Code Rate	-63
	256QAM @ 5/6 Code Rate	-61

# Radiation Patterns – Azimuth & Elevation

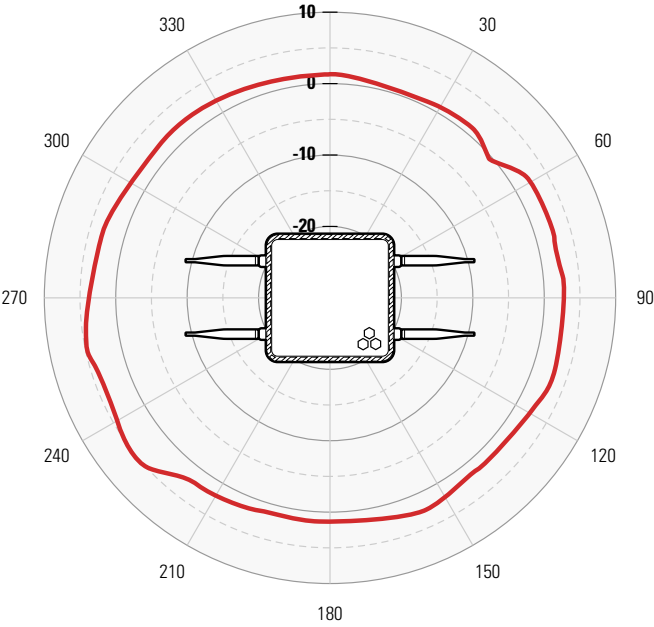
**Azimuth - 2.4 GHz**



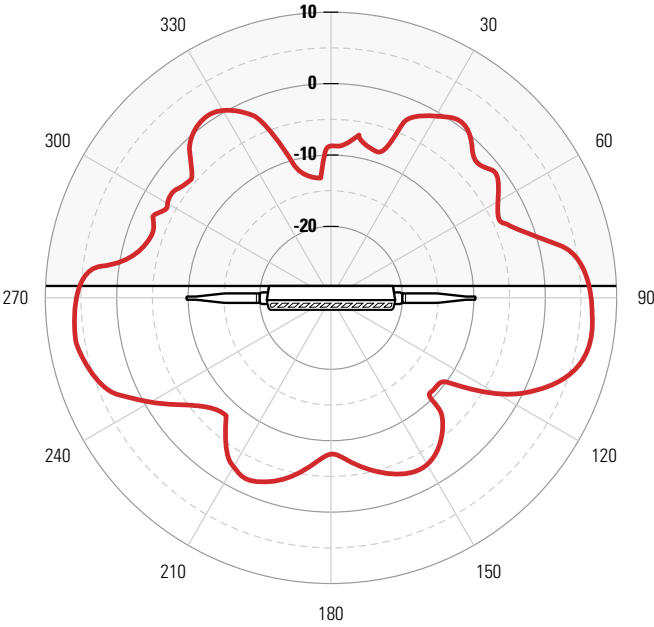
**Elevation - 2.4 GHz**



**Azimuth - 5 GHz**



**Elevation - 5 GHz**



## AP1130 - SKUs

SKU	DESCRIPTION
<b>AH-AP-1130-AC-XX</b>	AP1130, outdoor rated, 2 radio 2x2 802.11a/b/g/n/ac, 1 10/100/1000, configurable regulatory domain, without power supply. Includes HiveManager Connect & HiveCare Community. (Regulatory Domains available: FCC, CE, W (World))

## AP1130 - MISCELLANEOUS SKUs

SKU	DESCRIPTION
<b>AH-ACC-1130-ANT-5G</b>	5 GHz N-Plug outdoor 5dBi antenna for AP1130
<b>AH-ACC-1130-ANT-2G</b>	2.4 GHz N-Plug outdoor 5dBi antenna for AP1130
<b>AH-ACC-1130-ANT-18</b>	5 GHz 18-dBi Outdoor Directional Antenna with N-connectors for AP1130
<b>AH-ACC-ANT-KIT</b>	AP1130 outdoor antenna kit (2x2.4 GHz 5dBi and 2x5 GHz 5dBi)
<b>AH-ACC-ANT-SEC</b>	120 degree dual band 2x2 sector antenna for AP1130. 4 x N connectors. Kit includes coaxial cables and mounting assembly.
<b>AH-ACC-BKT-ASM</b>	AP1130 Mounting Bracket Assembly
<b>AH-ACC-GND-STRP</b>	AP1130 7ft GND Strap
<b>AH-ACC-MRN-KIT</b>	AP1130 Marine grade accessory kit. All items are marine grade. Includes screw pack, mounting brackets, locking screw for mounting bracket, 1-2.75" metal hose strap.
<b>AH-ACC-RJ45-PLG</b>	AP1130 Waterproof Ethernet Plug
<b>AH-ACC-SCW-PACK</b>	AP1130 Screw Pack (1 bag of 4x wall mount screws and 1 bag of 5x pole mount screws)
<b>AH-ACC-STR-3-15</b>	AP1130 Metal Hose Strap for 3-15 in diameter pole (Larger Pole)
<b>AH-ACC-STRP-1-2</b>	AP1130 Metal Hose Strap for 1-2.75 in diameter pole

