

DATA SHEET

ATOM™ AP 30

Industry-first Pluggable Enterprise Wi-Fi Access Point and Sensor



Type C 240V



Type A/B 110V



Type G 240V



Aerohive Atom AP30 revolutionizes the way Wi-Fi is designed, deployed, and RE-deployed, providing enterprise access, monitoring, and analytics in a new compact form factor. With a simple and intuitive design coupled with pain-free installation and automated over-the-air setup, Atom AP30 is the ideal choice for a variety of dynamic use cases including delivering instant network access, plugging RF holes, providing security and analytics, and remote VPN access.

Aerohive Atom AP30 is equipped with 802.11ac Wi-Fi and Bluetooth Low Energy (BLE) technology for connectivity and monitoring services. With multiple operating modes, the Atom AP30 can be used to extend Wi-Fi connectivity via existing Wi-Fi infrastructure, bridge IoT devices, or scan the RF environment for business and security applications.

Atom AP30 can be deployed as a complete access or sensor solution, or in combination with Aerohive's extensive Wi-Fi portfolio for high density networks. With client mode, Atom AP30 can even mesh to 3rd party networks.

Administrators can quickly deploy the Atom AP30 in any location that has connectivity requirements. No need to run new cables or ceiling-mount this access point, simply find a power outlet and plug it in. Once powered, Atom AP30 can be Ethernet connected to a neighboring data outlet, mesh to an existing network, or operate as an overlay sensor.

Aerohive Atom AP30 can help organizations quickly, easily, and more cost-effectively solve for all manner of use cases without having to install or re-position a ceiling-mounted access point, including, but not limited to:

- **Quickly eliminate Wi-Fi dead zones** – Aerohive Atom AP30 instantly extends coverage to dead zones. Aerohive Atom AP30 can be temporarily or permanently installed in minutes to eliminate dead zones in distant corners of the office, long hallways or passageways, staircases, break-rooms, storage rooms, etc., saving the time and money of pulling new cable or re-positioning existing ceiling-mounted access points.
- **Easily solve density issues in meeting spaces** – Aerohive Atom AP30 can augment overloaded ceiling-mounted access points in any-sized meeting space. Aerohive Atom AP30 can be temporarily or permanently

installed in minutes to mitigate overloaded ceiling-mounted access points in conference rooms, training rooms, cafeterias, lobby areas, waiting rooms, gymnasiums, etc.

- **Improve performance for 3rd party networks** – Aerohive Atom AP30 can connect to 3rd-party Wi-Fi networks to help compensate coverage or capacity challenges. With sensor mode equipped, Aerohive Atom AP30 may also be used to monitor 3rd-party networks for efficiency so that administrators can optimize their network accordingly.
- **Instantly extend secure corporate connectivity** – Aerohive Atom AP30 can instantly extend corporate connectivity to anywhere you can plug it in to a power socket and get an IP address. Aerohive Atom AP30's native VPN capability can instantly make your corporate SSID and security available for teleworkers, marketing events, sales demonstrations, offsite meetings, embedded employees consulting for other companies, temporary offices, and so on.
- **Simply connect the previously unconnected** – Aerohive Atom AP30 can quickly and easily bridge an IoT device to an Aerohive or 3rd-party network in any easy or hard-to-reach location. Aerohive Atom AP30 can act like an IoT hub and securely connect any Wi-Fi and/or Ethernet-based IoT device and sensor.
- **Cost-effective solution for MDU connectivity** – Aerohive Atom AP30's unique form factor and plug-ability makes it simple to install temporarily or permanently in an MDU, such as barracks, dormitories, hotels, motels, cruise ships, condominiums, apartments, etc.

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
- Rates (Mbps): MCS0 - MCS15 (6.5Mbps - 300Mbps)
- 2x2 Multiple-In, Multiple-Out (MIMO) Radio

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
- TxBF (Transmit Beamforming)

Interfaces

- 1x Gigabit Ethernet
- Built in BLE

Power Options

- Integrated Plug – Region-specific options including:
 - Type A/B 110V AC Power Adapter
 - Type C 240V AC Power Adapter
 - Type G 240V AC Power Adapter

Physical

- Dimensions:
 - US: 72mm x 72mm x 44mm
 - UK: 72mm x 72mm x 57.5mm
 - EU: 72mm x 72 mm x 67.8mm
- Weight:
 - US: .47lb (.21kg)
 - UK: .55lb (.25kg)
 - EU: .51lb (.23kg)

Antennas

- 2x Integrated single band, 2.4-2.5 GHz omnidirectional antennas
- 2x Integrated single band, 5.1-5.8 GHz omnidirectional antennas
- 1 x BLE internal antenna
- Antenna Gain:
 - 2.4 GHz: 1.9 dBi
 - 5 GHz: 5.5 dBi
- Max EIRP (dBm):
 - 2400 MHz to 2500 MHz: 19.9 dBm
 - 5150 MHz to 5250 MHz: 22.5 dBm
 - 5250 MHz to 5350 MHz: 22.5 dBm
 - 5470 MHz to 5725 MHz: 22.5 dBm
 - 5725 MHz to 5850 MHz :22.5 dBm

Mounting

- AC Pluggable Access Point - Connects directly to power outlet
- Optional security bracket or security cable (sold as an accessory)
- TPM chip for added security

Environmental

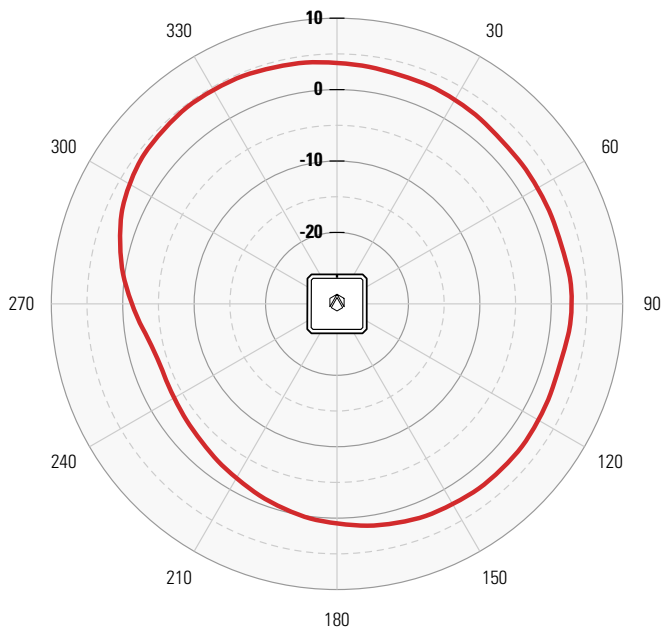
- Operating: 0 to 35 °C, Storage: -40 to 70 °C
- Humidity: 95% RH (*non-condensing*)
- MTBF: 662,000 Hours

Environmental / Regulatory Compliance

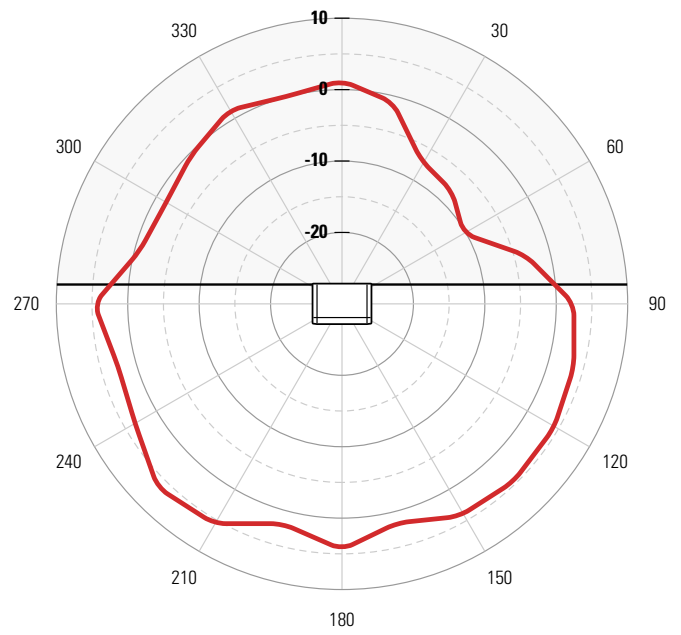
- Environmental Compliance: UL2043

Radiation Patterns – Azimuth & Elevation

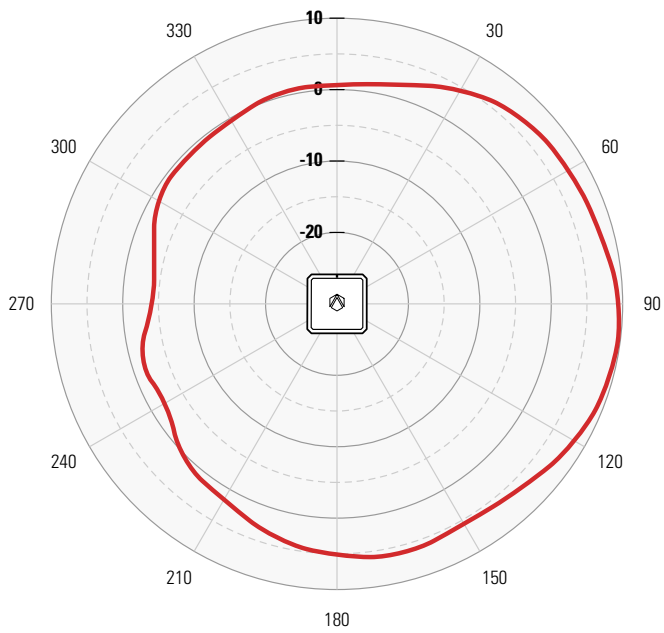
Azimuth - 2.4 GHz



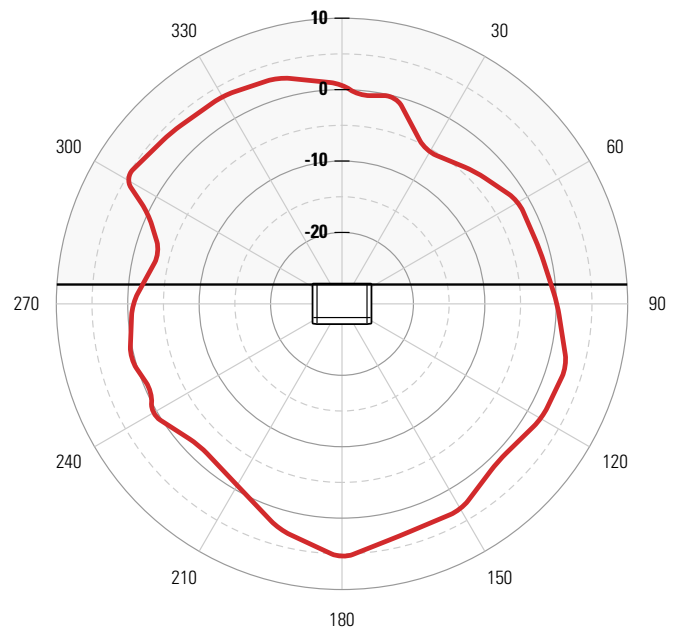
Elevation - 2.4 GHz



Azimuth - 5 GHz



Elevation - 5 GHz



Power - 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
	MCS7, 15	14
11n HT40	MCS0, 8	15
	MCS7, 15	14

Receive Sensitivity - 2.4 GHz

CHANNEL	DATA RATE	SENSITIVITY
11b	1 Mbps	-96
	11 Mbps	-89
11g	6 Mbps	-93
	54 Mbps	-75
11n HT20	MCS0	-92
	MCS7	-73
11n HT40	MCS0	-90
	MCS7	-70

Power - 5 GHz

CHANNEL	DATA RATE	POWER (DBM)
11a	6 Mbps	14
	54 Mbps	12
11n HT20	MCS0	14
	MCS7	12
11n HT40	MCS0	14
	MCS7	12
11ac VHT80	MCS0	14
	MCS9	11

Receive Sensitivity - 5 GHz

CHANNEL	DATA RATE	SENSITIVITY
11a	6 Mbps	-92
	54 Mbps	-74
11n HT20	MCS0	-91
	MCS7	-73
11n HT40	MCS0	-89
	MCS7	-70
11ac VHT80	MCS0	-86
	MCS9	-61

ATOM AP30 - SKUs

SKU	DESCRIPTION
AH-ATOM-3PK-FCC	3 pack Atom AP30 access/mesh points, dual radio 802.11ac/n with client mode support, 1GE for backhaul/bridge, BLE, integrated Type A/B US-Compatible power plug. FCC regulatory domain. Includes HiveManager Connect and HiveCare Community.
AH-ATOM-3PK-W	3 pack Atom AP30 access/mesh points, dual radio 802.11ac/n with client mode support, 1GE for backhaul/bridge, BLE, integrated Type A/B US-Compatible power plug. Configurable regulatory domain. Includes HiveManager Connect and HiveCare Community.
AH-ATOM-3PK-CAN	3 pack Atom AP30 access/mesh points, dual radio 802.11ac/n with client mode support, 1GE for backhaul/bridge, BLE, integrated Type A/B US-Compatible power plug. CAN regulatory domain. Includes HiveManager Connect and HiveCare Community.
AH-ATOM-W-UK	Atom AP30 access/mesh point, dual radio 802.11ac/n with client mode support, 1GE for backhaul/bridge, BLE, integrated Type G UK-compatible power plug. Configurable regulatory domain. Includes HiveManager Connect and HiveCare Community.
AH-ATOM-W-EU	Atom AP30 access/mesh point, dual radio 802.11ac/n with client mode support, 1GE for backhaul/bridge, BLE, integrated Type C EU-compatible power plug. Configurable regulatory domain. Includes HiveManager Connect and HiveCare Community.
AH-ATOM-CE-UK	Atom AP30 access/mesh point, dual radio 802.11ac/n with client mode support, 1GE for backhaul/bridge, BLE, integrated Type G UK-compatible power plug. CE regulatory domain. Includes HiveManager Connect and HiveCare Community.
AH-ATOM-CE-EU	Atom AP30 access/mesh point, dual radio 802.11ac/n with client mode support, 1GE for backhaul/bridge, BLE, integrated Type C EU-Compatible power plug. CE regulatory domain. Includes HiveManager Connect and HiveCare Community.
AH-ACT-ATOM	Activation for 3 pack of ATOM. Not required in all countries.

ATOM AP30 - MISCELLANEOUS SKUs

SKU	DESCRIPTION
AH-ACC-ATOM-BRKT	Atom AP30 Anti-Theft Security Bracket for the Atom Type A/B Plug (US). Includes two screws
AH-ACC-ATOM-3BRKT	3 pack of Atom AP30 Anti-Theft Security Brackets for the Atom Type A/B Plug (US). Includes six screws
AH-ACC-ATOM-SEC	Atom AP30 Anti-Theft Security Cable for all Atom AP30 variants. Includes a screw.

