Atom AP30 Hardware User Guide

Read about and view specifications and compliance information for the Atom AP30 in this topic. Install the Atom AP30 using this topic.

Atom AP30 is an 802.11ac wireless access point with plug-and-play installation. Atom AP30 draws its power from a standard wall socket and provides network connectivity through a single Ethernet port to neighboring wired devices as well as BLE for IoT applications.

The Atom AP30 is shipped in packs of three (SKU: AH-ATOM-3PK-FCC).

For more information about Aerohive APs and products in general, see "Introduction to Aerohive APs".

For regulatory and compliance information, see "Regulatory Compliance Statements".

Safety Guidelines

Safety Guidelines

The information in this section applies to Atom AP30 devices.

The following safety icons are used in these guidelines to identify the type of precaution:

	This icon indicates a general caution. Failure to comply with a caution notification can result in damage to equipment.
	This icon indicates an electrical caution. Failure to comply with an electrical notification can result in serious injury or death, and extensive damage to equipment.
	This icon indicates a laser caution. Failure to comply with a laser caution can result in serious injury.
The following table lists the safety precautions you should follow when installing your Atom AP30 devices.	
	Aerohive devices must be installed by a professional installer who is certified to install these types of devices and to ensure that they are properly grounded and meet applicable local and national electrical codes.
	These devices are intended for indoor use only.
	Do not install the device in an environment where the operating ambient temperature might exceed the recommended ranges.
	For products available in the USA/Canada market, for the 2.4 GHz band, only channels 1-11 can be operated. Selection of other channels is not possible.
	Changes or modifications made to this device that are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
	Use only attachments and accessories specified by Aerohive.
	These devices are not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities, or with lack of experience of knowledge unless they are given supervision or instruction concerning use of the devices by a person who is responsible for their safety. Children should be supervised ensure that they do not play with the devices.
	Electrostatic discharge (ESD) can damage equipment and impair electrical circuitry. ESD damage occurs when electronic components are improperly handled and can result in complete or intermittent failures. Be sure to follow ESD-prevention procedures when handling electronic components and equipment.
	To meet federal radiation exposure requirements, these devices should be installed at a minimum distance 8" (20 cm) from people or animals.

Install the Atom AP30

To install the Atom AP30, simply plug it into a standard wall outlet. The device can also be installed using a security bracket (ordered separately). For more information, contact your Aerohive representative.

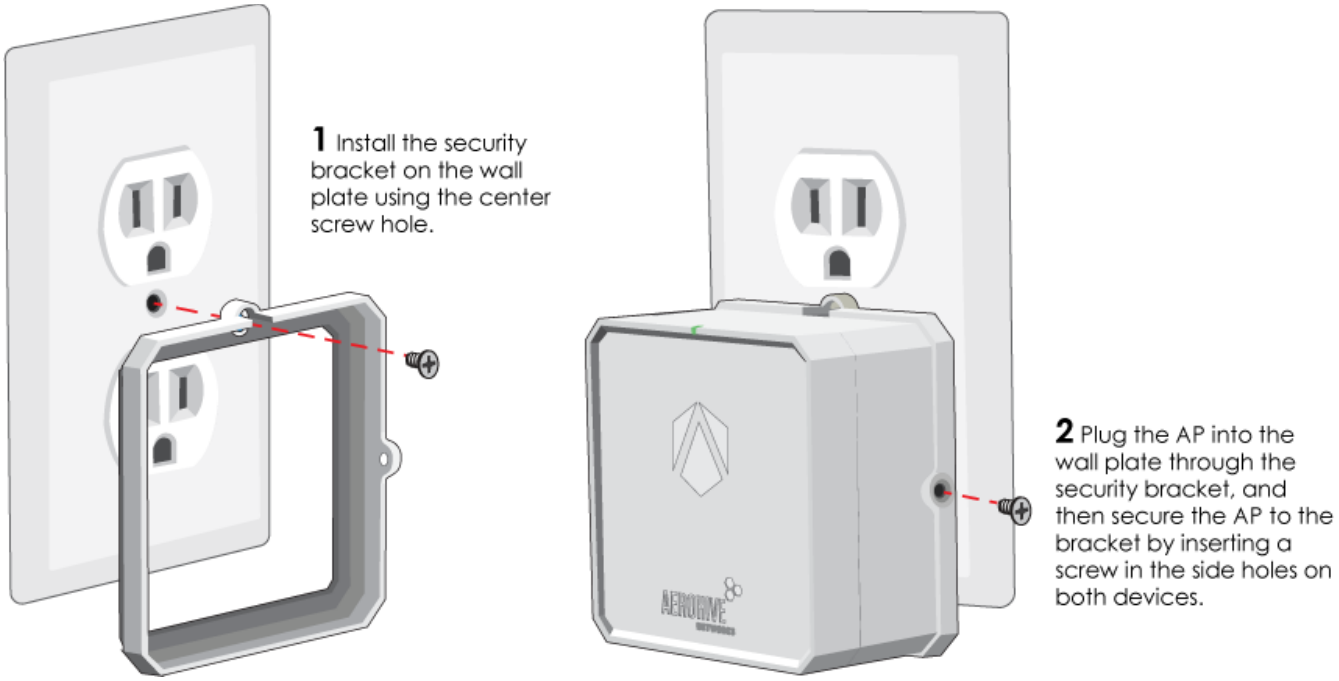
The Atom AP30 shipping carton contains the following items:

- Three Atom AP30 devices
- Read Me card

To install your Atom AP30, if you plan to secure the device, first install the security bracket (SKU AH-ATOM-BRKT) in the wall socket. Then install the AP into the security bracket as shown below, and plug the device into the wall socket. If you do not plan to secure the device, simply plug it directly into the wall socket.

The Atom AP30 automatically looks for neighboring APs with which to form a mesh. You can also configure the Ethernet port for bridge mode, and use it to connect a wired device, such as a printer or projector, to your network.

Make sure the Aerohive logo is upright. Plugging the device in upside down will impact performance.



Hardware Components

This section describes the hardware components of the Atom AP30.

Status LED

The Atom AP30 has a rectangular status LED on the top front edge of the chassis. When you plug the device into a wall socket, this light cycles through the following sequence:

- **Steady Amber**: The device is initializing, rebooting, or downloading new software.
- **Slow-blinking Amber**: The device is looking for a neighbor with which to establish a mesh connection.
- **Fast-blinking White**: The device has obtained a password from a neighbor and is now establishing a mesh connection.
- **Steady White**: The device has successfully established a CAPWAP connection and is operating normally.

Ethernet Port

The Atom AP30 has one RJ45 1x 1 Gbps Ethernet port that supports bridge and backhaul modes.

Hardware Specifications

The following specifications describe the physical features and hardware components, the power adapter and electrical requirements, and the temperature and humidity ranges in which the devices can operate.

802.11ac: 2x2:2 802.11ac dual band, 300 + 867 Mbps

Antennas: The Atom AP30 has 4 integrated antennas:

- 2 Wi-Fi 2.4 G antennas
- 1 Wi-Fi 5 G antenna
- 1 dual band 2.4 G BLE/5 G Wi-Fi antenna

Power Adapter: Integrated Type A 110V AC power adapter that is compatible with a Type A or Type B electrical plug.

BLE: Built-in BLE for iBeacon and beacon management applications

Device Specifications:

- Chassis dimensions: 2.83" W x 2. 83" H x 1.73" D (72 mm x 72 mm x 44 mm)

Environmental Specifications:

- Operating temperature: 32° to 95° F (0° to 35° C)
- Storage temperature: -40° to 158° F (-40° to 70° C)
- Maximum Humidity: 95% RH (noncondensing)

Regulatory Compliance Statements

The regulatory compliance statements in this section apply to Aerohive Atom AP30 devices.

Japan Indoor Use

For Japan, the Atom AP30 is restricted for indoor use in the 5150-5350 MHz band only.

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the antenna of the receiving devices.
- Increase the separation between this equipment and receiving equipment.
- Connect this equipment into an outlet on a circuit different from that to which the receiving equipment is connected.
- Consult the dealer or an experienced radio or TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE:

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 8" (20 cm) between the radiator and people or animals.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Country Code selection feature to be disabled for products marketed to the US/CANADA.

Mexico Statement

La operación de este equipo está sujeta a las siguientes dos condiciones

(1) es posible que este equipo o dispositivo no cause interferencia perjudicial y

(2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

The operation of this equipment is subject to the following two conditions:

(1) it is possible that this equipment or device does not cause disruptive interference and

(2) this equipment or device must accept any interference, including interference that may cause undesired operation).

Industry Canada Statement:

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- This device may not cause interference, and
- This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- l'appareil ne doit pas produire de brouillage, et
- l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Caution:

(i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

Avertissement:

(i) les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and people or animals.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et des personnes ou des animaux.

Taiwan Compliance Information

Aerohive Atom AP30

第十二條→經型式認證合格之低功率射頻電機，非經許可，公司，商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條→低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前項合法通信，指依電信法規定作業之無線電通信。 低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

在 5.25-5.35 秭赫頻帶內操作之無線資訊傳輸設備，限於室內使用。

無線資訊傳設備的製造廠商應確保頻率穩定性，如依製造廠商使用手冊上所述正常操作，發射的信號應維持於操作頻帶中。

Taiwan MPE Warning

電磁波曝露量MPE標準值(MPE) 1mW/cm^2，送測產品實值為0.734 mW/cm^2