

# Cisco Aironet Hyperlocation Module (AIR-ANT-LOC-01=) Installation Guide

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This document outlines the specifications for the Cisco Aironet Hyperlocation Module (AIR-ANT-LOC-01=) and provides instructions for mounting it.

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**Early Beta Draft Only**

# System Overview

The Hyperlocation module is a 32 element antenna design that provides 360 degree coverage around supported access points — currently the 3600 and 3700 series APs. It is designed to integrate into the Cisco Aironet Wireless Security and Location Module (RM3010L) providing precise RF Angle of Arrival (AoA) information allowing the operating system a much more granular approach to the location of a client device.

The hyperlocation module along with RM3010L helps in providing a location accuracy of less than a meter for a wireless clients, using WiFi and Bluetooth technology.

The module operates in both the 2.4-GHz and 5-GHz frequency ranges and is designed for indoor use.

Together with the Hyperlocation module, the Wireless Security and Location Module is fully capable of providing the following monitoring and security services:

- RRM
- CleanAir
- wIDS/wIPS
- Rogue Detection
- Context Aware – Location
- 802.11ac capability @ 20, 40 and 80 MHz operation
- Integrated Bluetooth Low Energy “BLE” Beacon capability
- External DART connector for location capability with the use of the Hyper-Location module (antenna array)

**Early Beta Draft Only**

# System Requirements

This hyperlocation module is designed for indoor use with Cisco Aironet 3600 and 3700 access point along with the Cisco Aironet Wireless Security and Location module (AIR-RM3010L-UXX9=).

## Installing the Modules

### Tools and Equipment Required

No specialized tools are required for installing the modules.

### Mounting the modules

**Step 1** Remove the modules from the packaging.

**Step 2** Power down the access point.

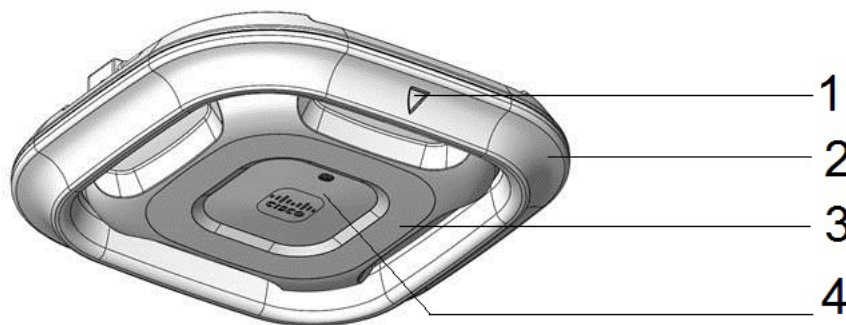


**Note** If you install a module while the AP is powered on, the AP will reboot.

**Step 3** Unmount the access point, in the reverse order of installing it.

**Step 4** Position the hyperlocation module around the AP as shown in [Figure 1](#). Note that the arrow on the module and the face of the AP with the logo and LED should be aligned as shown in [Figure 1](#).

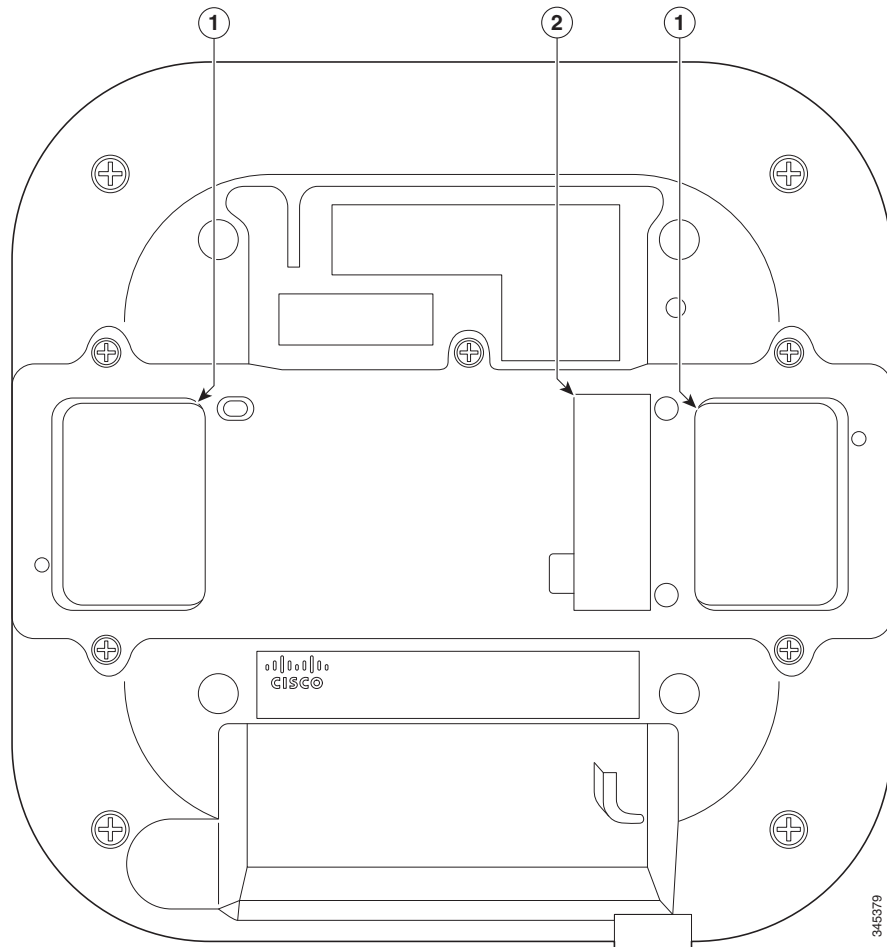
**Figure 1** Positioning the hyperlocation module around the AP



|          |                               |          |   |
|----------|-------------------------------|----------|---|
| <b>1</b> | Arrow on hyperlocation module | <b>3</b> | Face of the AP  |
| <b>2</b> | Hyperlocation module          | <b>4</b> | The position of the LED and the logo on the face of the AP. |

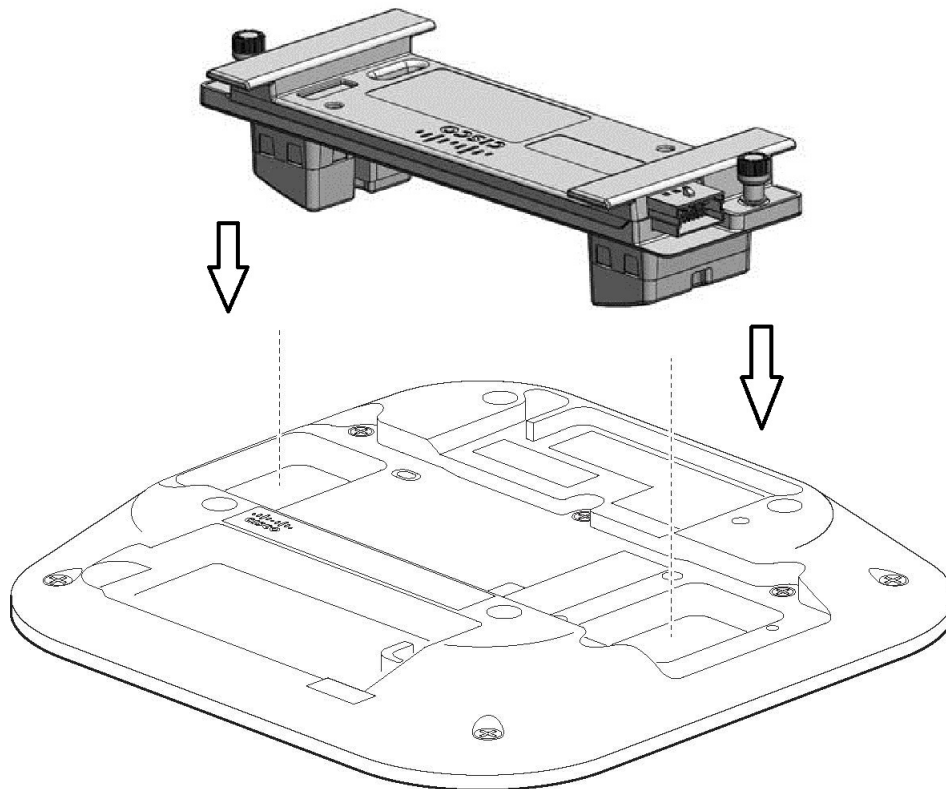
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- Step 5** Peel off the Module Port Protective Cover from the back of the access point to reveal the module port connector, labeled 2 in the following figure. The PCIe connector on the wireless security and location module will go into the AP's module port connector.



|   |                                |   |  |
|---|--------------------------------|---|--|
| 1 | Openings for module's antennas | 2 | Removable Module Port Protective Cover |
|---|--------------------------------|---|--|

- Step 6** Align the PCIe connector with the module port connector on the back of the access point and click the module down into place. Press firmly on the center of the module to properly seat the PCIe connector into the AP's module port connector.

**Early Beta Draft Only****Figure 2** Installing the Wireless Security and Location Module

- Step 7** Screw down the thumb screws on the module, by hand only. Hand tighten each screw until the resistance is obvious and you know you cannot further tighten the screws.

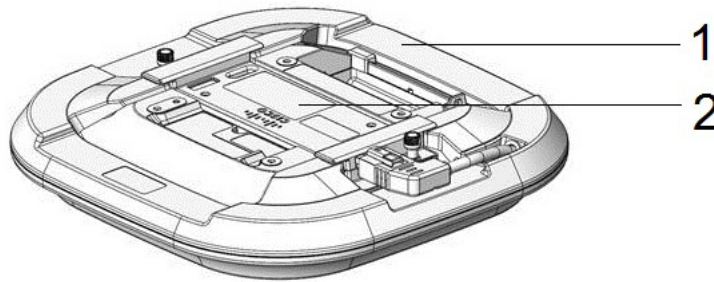


**Caution** Do not use any mechanical tool or device such as pliers or a torque wrench to tighten the screws.

- Step 8** Plug in the DART connector of the hyperlocation module in to the DART port on the wireless security and location module. The final assembly is as shown in [Figure 3](#).

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**Figure 3** View of the final assembly



|          |                      |          |                                       |
|----------|----------------------|----------|---------------------------------------|
| <b>1</b> | Hyperlocation Module | <b>2</b> | Wireless Security and Location Module |
|----------|----------------------|----------|---------------------------------------|

**Step 9** Power up the access point.  
When the access point boots up, it detects the modules.

## Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation* at: <http://www.cisco.com/c/en/us/td/docs/general/whatsnew/whatsnew.html>.

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