



Cisco Aironet 1500 Series Access Point Large Pole Mounting Kit Instructions

This document provides instructions for mounting the Cisco Aironet 1500 series on a telephone, power, or street lamp pole using the provided pole mount kit.

The following information is provided in this document.

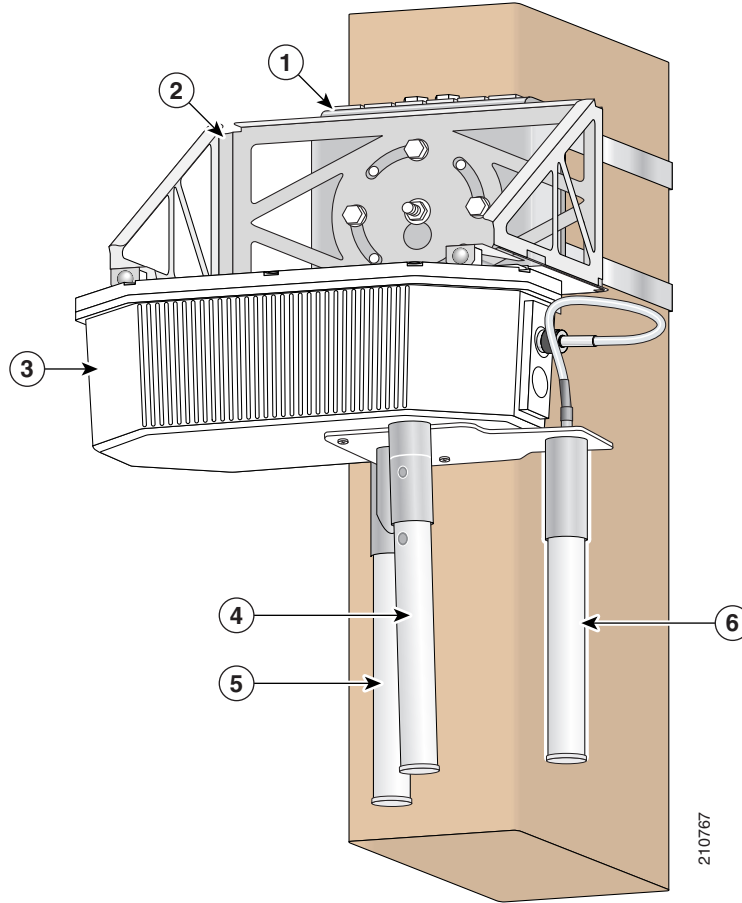
- [Overview, page 1](#)
- [Mounting Instructions, page 3](#)
- [Obtaining Documentation, Obtaining Support, and Security Guidelines, page 8](#)

Overview

The pole mount kit is used to mount the Cisco Aironet 1500 series to a street light or telephone pole as shown in [Figure 1](#).



Figure 1 Preferred Outdoor Access Point and Antenna Orientation



1	Pole clamp subassembly	2	Access point bracket
3	Access point	4	2.4-GHz antenna
5	5-GHz antenna		

The kit consists of the following components and appropriate mounting hardware: the access point mounting bracket, the pole clamp subassembly pieces, and the required steel bands, nuts, bolts, and washers. When correctly installed, these components provide an adjustment range that allows you to keep the access point level even when the pole is not.

Tools and Equipment Required

To install the access point you will need the following tools and equipment:

- Appropriate 13 mm and 7/16 in. or 10 mm wrench (open, box, or adjustable)
- Torque wrench
- Pocket level
- AIR-BAND-INSTL-TL= hand tool (available separately)

Mounting Instructions

The access point provides the greatest coverage area and data transfer rate when used with the Cisco Aironet external omnidirectional antennas mounted vertically (see [Figure 1](#)) and the access point is mounted horizontally from a pole. The access point can also be mounted vertically and the external antennas can be mounted independent of the access point.



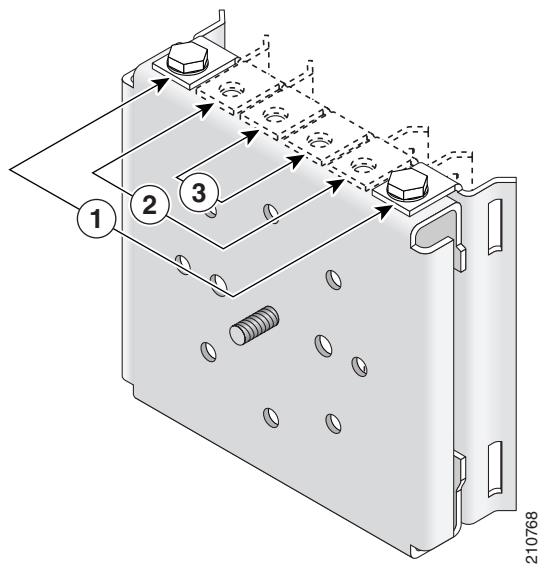
Note

Refer to the *Quick Start Guide: Cisco Aironet 1500 Series LWAPP-Enabled Outdoor Mesh Access Point* for general instructions on installing the access point. If you install the access point vertically, you must install the AC power and Ethernet/ DC power connectors facing down to prevent water intrusion.

Follow these steps to mount your Cisco Aironet 1505 or 1510 on a pole.

- Step 1** Determine the diameter of the pole you will be attaching the mounting kit to. You can attach the access point to any light pole upright or arm having a diameter over 2 in. (5 cm). The pole clamp subassembly can be assembled in three configurations:

Figure 2 Pole Clamp Configurations

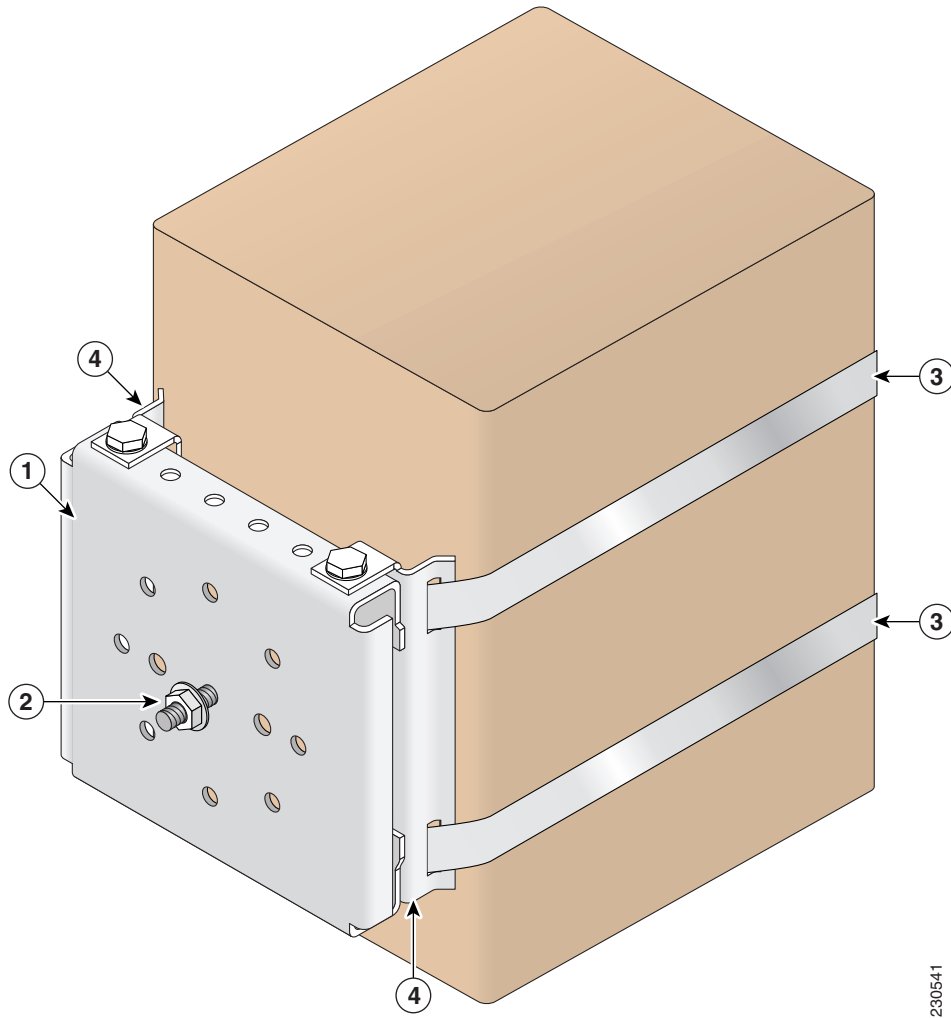


1	poles 11-16 in.	2	poles 6-11 in.
3	poles 2-6 in.		

- Step 2** Assemble the mounting plate and gusset brackets using the provided bolts, lock washers and flat washers configured as needed for your application. Tighten the four supplied M8 bolts to 14 - 16 ft. lb. (19 - 22 N/m).
- Step 3** Select a mounting location. Good practice is to install 5 to 10 ft (1.5 to 3 m) above the roof line and away from all power lines and obstructions.
- Step 4** Loosely assemble the pole mount kit components around the pole as shown in [Figure 3](#) or [Figure 4](#). This creates the pole clamp subassembly. On a horizontal or angled pole, the pole mount clamp subassembly should be mounted on the side of the pole so that the face of the pole clamp plate is vertical. Banding

can be routed through slots in the gussets or between the gussets and the mounting plate (see [Figure 4](#)), which ever will hold the subassembly most tightly to the given pole. Be sure the banding goes around the pole in two layers as described in the documentation for the tool. Double-wrapped banding is required to meet Cisco design standards. Be sure the pole clamp subassembly is correctly positioned as the banding is tightened. The banding is not adjustable or reusable once it has been installed.

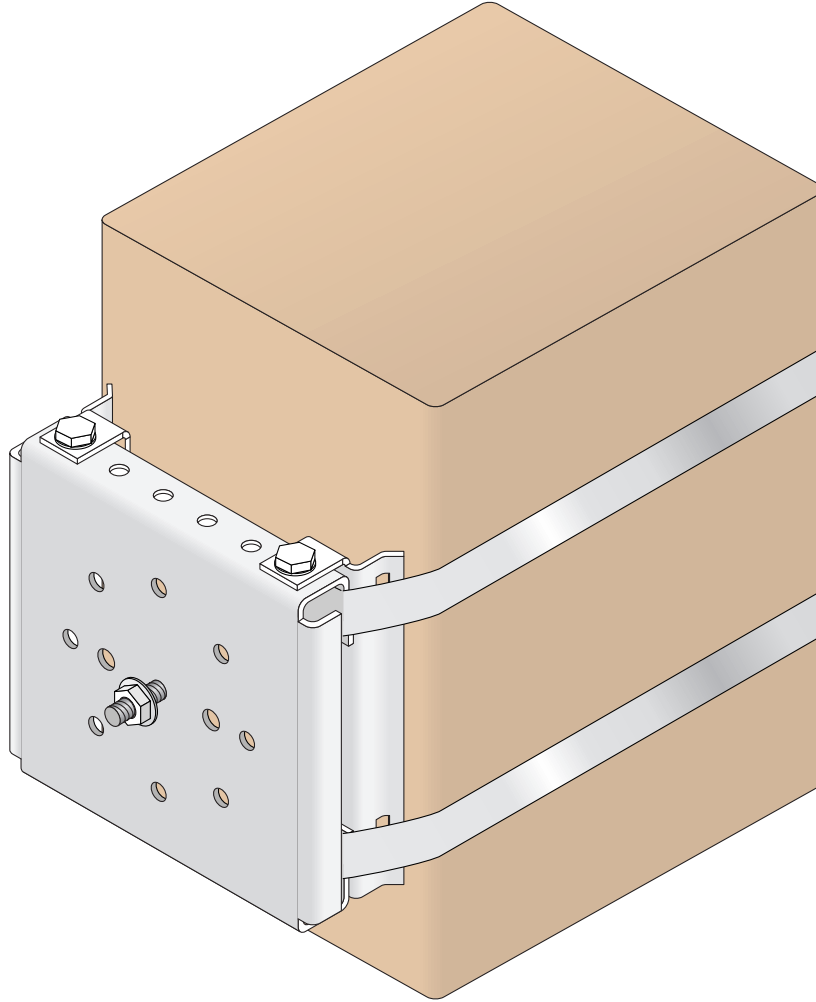
Figure 3 Pole Clamp Subassembly Components



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1	Pole clamp plate	2	Access point mounting stud and nut
3	Pole clamp bands	4	Gusset brackets

Figure 4 **Alternate Assembly**

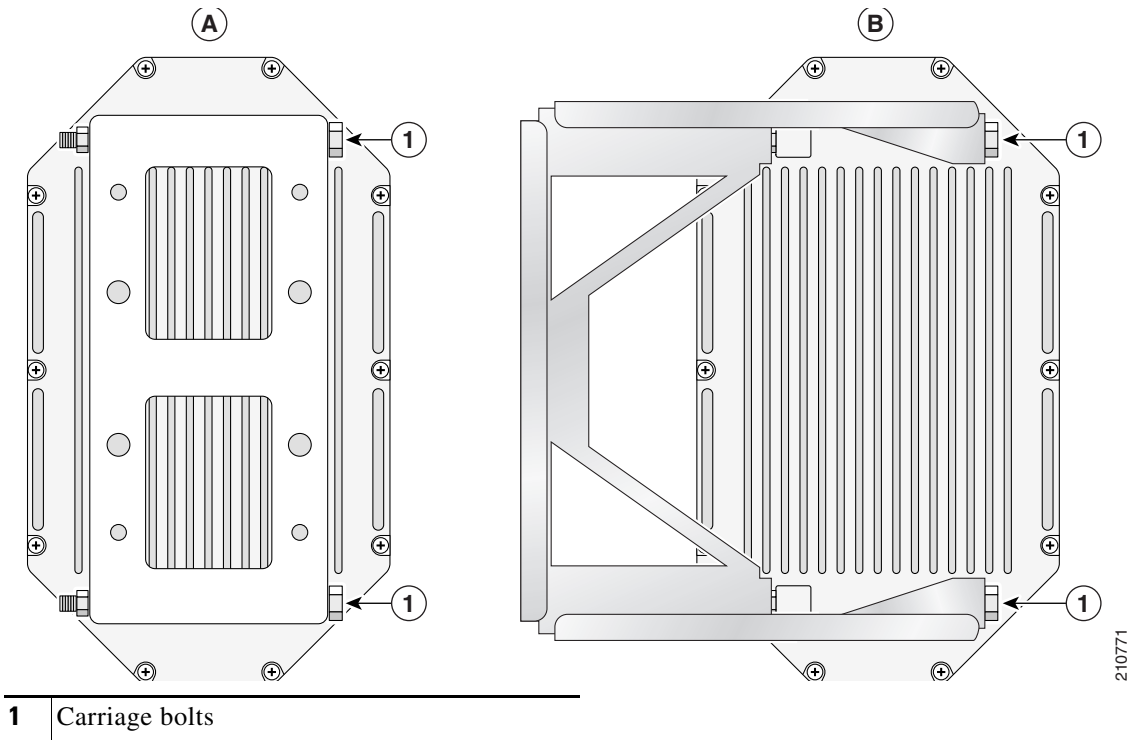


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Step 5 Use the AIR-BAND-INSTL-TL= hand tool to tighten the banding for the clamp and fasten it as described in the documentation for the tool.

Step 6 The access point ships with the mounting bracket attached to it as shown in the drawing labeled A in [Figure 5](#). Remove the carriage bolts and replace the mounting bracket with the mounting bracket supplied in this kit as shown in the drawing labeled B in [Figure 5](#). Tighten the carriage bolts to 5 - 6 ft. lb. (6.9 - 8.0 N/m).

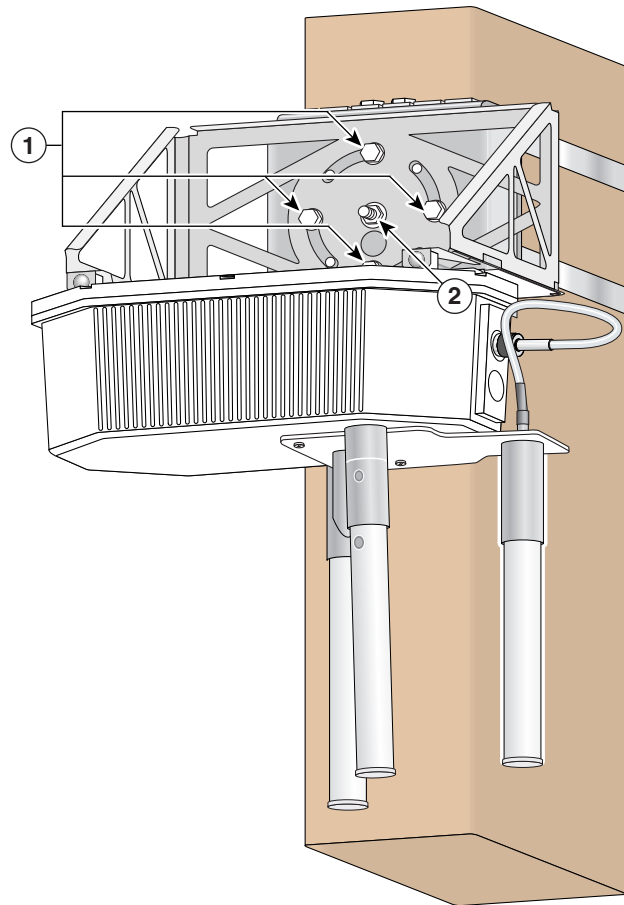
Figure 5 *Mounting Bracket*



Step 7 Attach the center nut to the pole clamp subassembly as shown in [Figure 3](#), but stop when the nut is about 1/4 in. away from the plate to leave room for the access point mounting bracket.

Step 8 Hang the mounting bracket and access point from the pole clamp subassembly by the center stud, and use the supplied bolts and lock washer sets to loosely attach them to the pole clamp subassembly as shown in [Figure 6](#).

Figure 6 Adjustment of the Access Point



1	Access point mounting bolts	2	Mounting stud
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Step 9 If necessary, rotate the access point until it is level. Use a pocket level to verify that the top edge of the access point is horizontal, and then use a torque wrench to tighten the access point mounting bolts and center nut to 14–16 ft. lb (19-22 N/m).



Caution Do not overtighten! If you overtighten the access point mounting bolts, you can damage the assembly.

Step 10 Install the antennas as described in their documentation.

Step 11 Refer to the *Quick Start Guide: Cisco Aironet 1500 Series LWAPP-Enabled Outdoor Mesh Access Point* to connect power and complete the installation.

Obtaining Documentation, Obtaining Support, and Security Guidelines

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, see the monthly *What's New* in Cisco Product Documentation, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

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