

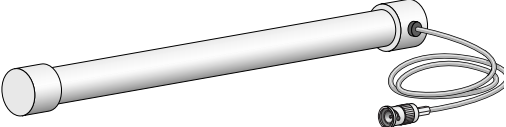


Cisco Aironet High Gain Omnidirectional Ceiling Mount Antenna (AIR-ANT1728)

Overview

This document outlines the specifications, describes the high gain omnidirectional ceiling mount antenna, and provides instructions for mounting it on a suspended ceiling track. Designed for WLAN applications operating in the 2.4- to 2.5-GHz frequency range, the antenna has a nominal gain of 5.2 dBi. The antenna is used primarily with access points, but is compatible with Cisco Aironet radio products utilizing a reverse-polarity threaded Neil Concelman (RP-TNC) connector.

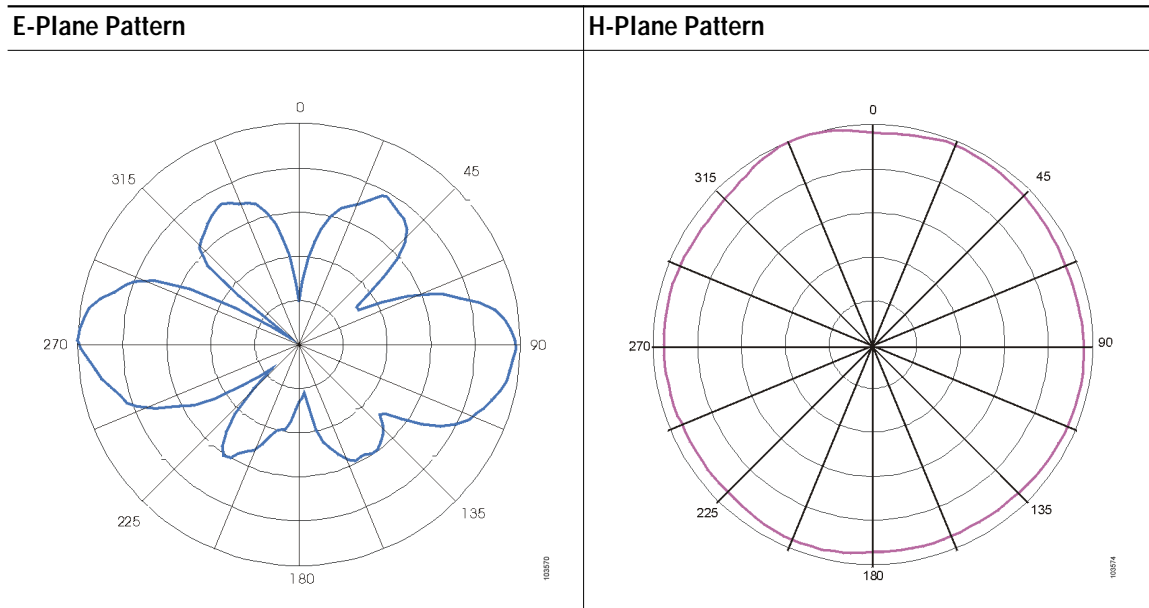
Technical Specifications

Antenna type	Dipole	
Operating frequency range	2.4- to 2.83-GHz	
VSWR	Less than 2:1, 1.5:1 nominal	
Gain	5.2 dBi	
Polarization	Vertical	
E-Plane (3dB bandwidth)	50 degrees	
H-Plane (3dB bandwidth)	Omnidirectional	
Cable length and type	3 ft (0.91 m) Plenum rated RG-58	
Dimensions (H x W)	9 in. x 1.25 in. (22.8 cm x 3.2 cm)	
Weight	4.6 oz (131 g)	
Horizontal radiation pattern		



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System Requirements

This antenna is designed for use with Cisco Aironet access points, but can be used with any 2.4-GHz Cisco Aironet radio device that utilizes a RP-TNC connector.

Installation Notes

Choosing a Mounting Location

The location of the antenna is important. Objects such as metal columns, walls, etc. will reduce efficiency. Best performance is achieved when transmit and receive antennas are mounted at the same height and in a direct line of sight with no obstructions. If this is not possible and reception is poor, you should try different mounting positions to optimize reception.

The antenna is designed to attach to and hang from a standard suspended ceiling track having a width from 13/16 inches (20.6 millimeters) to 1 1/4 inches (31.7 millimeters).

Tools and Equipment Required

To install the antenna on a suspended ceiling track, you will need the following tools and equipment.

- A ceiling track bracket (shipped with your antenna)
- A 7/16 inch (11.1 millimeters) wrench
- Cable ties or electrical tape

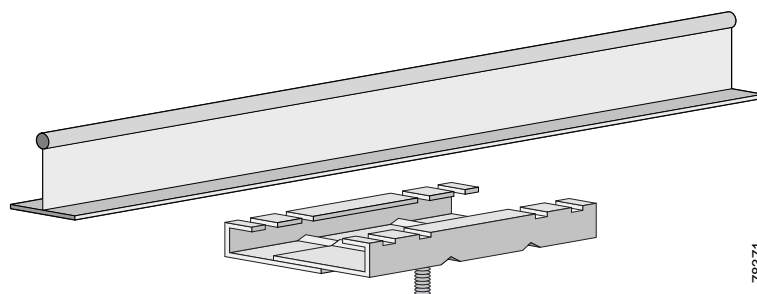
The following sections contain procedures for installing the antenna to a suspended ceiling track.

Installing the Antenna

Follow these steps to install the antenna on a suspended ceiling track.

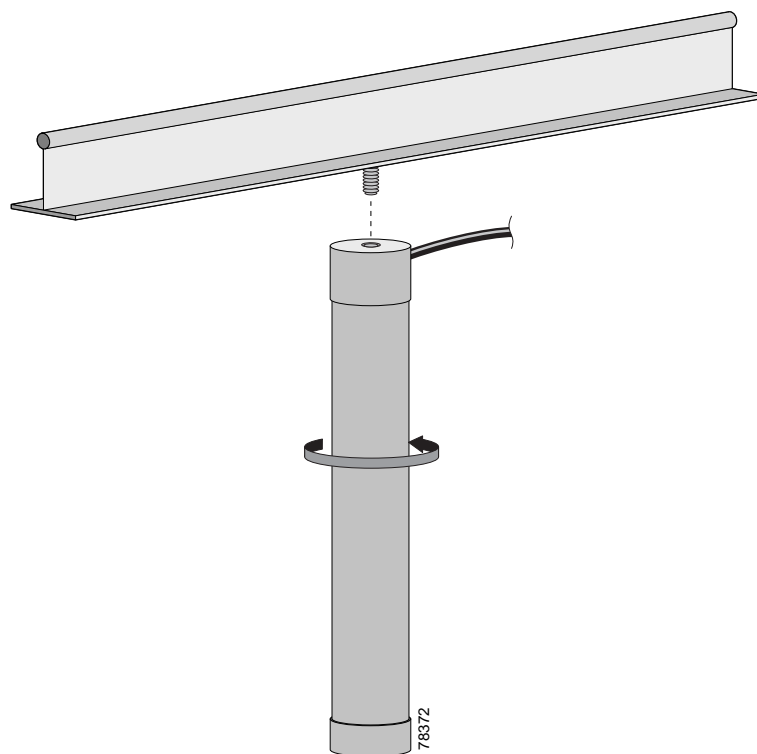
- Step 1** Determine the location you wish to mount the antenna.
- Step 2** Loosen the hex nut on the ceiling track bracket.
- Step 3** Position the bracket on the ceiling track. See Figure 1.

Figure 1 Positioning the Ceiling Track Bracket



- Step 4** Squeeze the bracket firmly onto the ceiling track.
- Step 5** Use a 7/16 inch (11.1 millimeter) wrench to tighten the hex nut. Do not overtighten.
- Step 6** Carefully screw the antenna onto the bracket's threaded stud until it is hand tight. See Figure 2.

Figure 2 Attaching the Antenna



**Note**

If you use another mount, make sure the length of the threaded stud does not exceed 0.35 inch (0.9 centimeter).

Step 7 Use cable ties or electrical tape to secure the antenna coaxial cable along the ceiling track.

Suggested Cable

Cisco recommends a high-quality, low-loss cable for use with the antenna.

**Note**

The higher the frequency, the higher the loss through the cable. Also, the longer the run, the higher the loss.

Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Customers and partners can obtain documentation, troubleshooting tips, and sample configurations from online tools by using the Cisco Technical Assistance Center (TAC) Web Site. Cisco.com registered users have complete access to the technical support resources on the Cisco TAC Web Site.

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Technical Assistance Center

The Cisco TAC is available to all customers who need technical assistance with a Cisco product, technology, or solution. Two types of support are available through the Cisco TAC: the Cisco TAC Web Site and the Cisco TAC Escalation Center.

Inquiries to Cisco TAC are categorized according to the urgency of the issue:

- Priority level 4 (P4)—You need information or assistance concerning Cisco product capabilities, product installation, or basic product configuration.
- Priority level 3 (P3)—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- Priority level 2 (P2)—Your production network is severely degraded, affecting significant aspects of business operations. No workaround is available.
- Priority level 1 (P1)—Your production network is down, and a critical impact to business operations will occur if service is not restored quickly. No workaround is available.

Which Cisco TAC resource you choose is based on the priority of the problem and the conditions of service contracts, when applicable.

Cisco TAC Web Site

The Cisco TAC Web Site allows you to resolve P3 and P4 issues yourself, saving both cost and time. The site provides around-the-clock access to online tools, knowledge bases, and software. To access the Cisco TAC Web Site, go to the following URL:

<http://www.cisco.com/tac>

All customers, partners, and resellers who have a valid Cisco services contract have complete access to the technical support resources on the Cisco TAC Web Site. The Cisco TAC Web Site requires a Cisco.com login ID and password. If you have a valid service contract but do not have a login ID or password, go to the following URL to register:

<http://www.cisco.com/register/>

If you cannot resolve your technical issues by using the Cisco TAC Web Site, and you are a Cisco.com registered, you can open a case online by using the TAC Case Open tool at the following URL:

<http://www.cisco.com/tac/caseopen>

If you have Internet access, it is recommended that you open P3 and P4 cases through the Cisco TAC Web Site.

Cisco TAC Escalation Center

The Cisco TAC Escalation Center addresses issues that are classified as priority level 1 or priority level 2; these classifications are assigned when severe network degradation significantly impacts business operations. When you contact the TAC Escalation Center with a P1 or P2 problem, a Cisco TAC engineer will automatically open a case.

To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to the following URL:

<http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml>

Before calling, please check with your network operations center to determine the level of Cisco support services to which your company is entitled; for example, SMARTnet, SMARTnet Onsite, or Network Supported Accounts (NSA). In addition, please have available your service agreement number and your product serial number.



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