

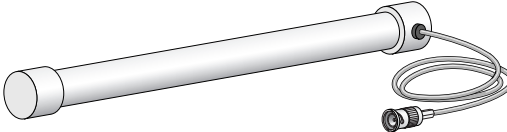


Cisco Aironet High Gain Omnidirectional Ceiling Mount Antenna (AIR-ANT1728)

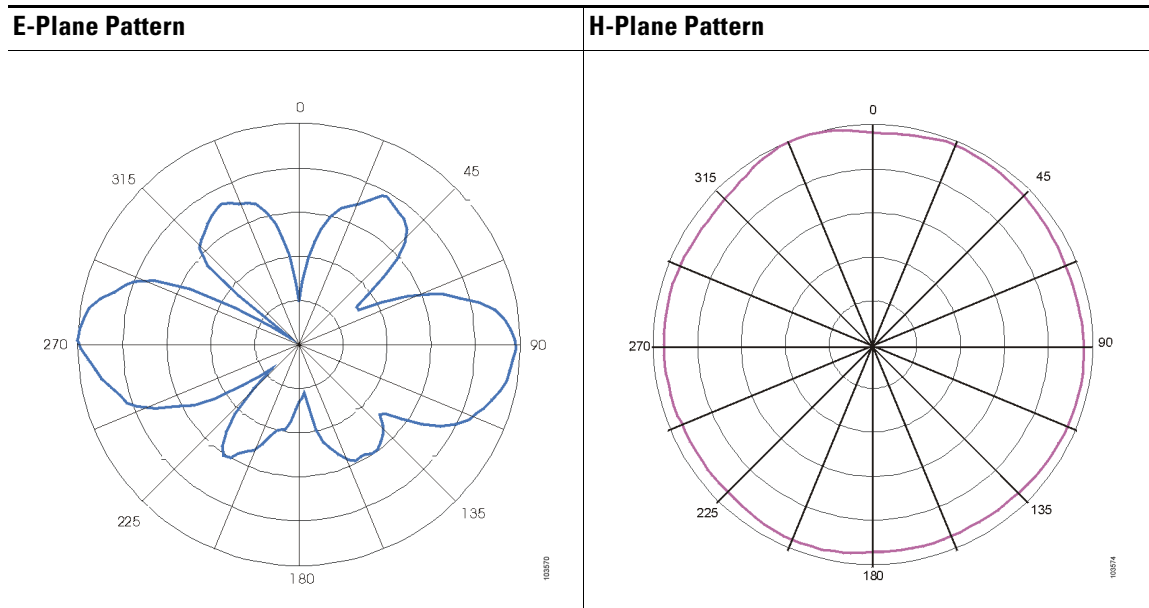
Overview

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 2.483-GHz	
VSWR	Less than 2:1, 1.5:1 nominal	
Gain	5.2 dBi	
Polarization	Vertical	
E-Plane (3dB bandwidth)	40 degrees	
H-Plane (3dB bandwidth)	Omnidirectional	
Cable length and type	3 ft (0.91 m) Plenum rated RG-58	
Dimensions (H x W)	11.5 in. x 1.25 in. (29.2 cm x 3.2 cm)	
Weight	4.6 oz (131 g)	





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

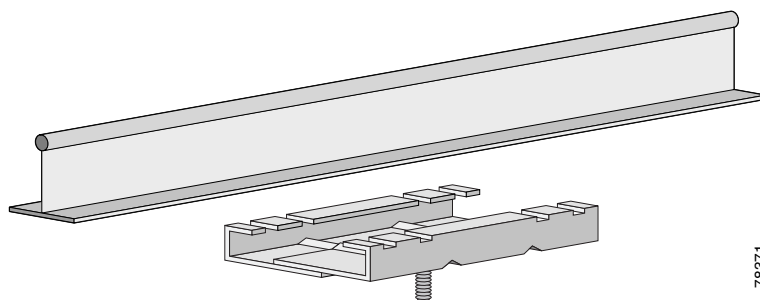
The following sections contain procedures for installing the antenna to a suspended ceiling track.

Installing the Antenna

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

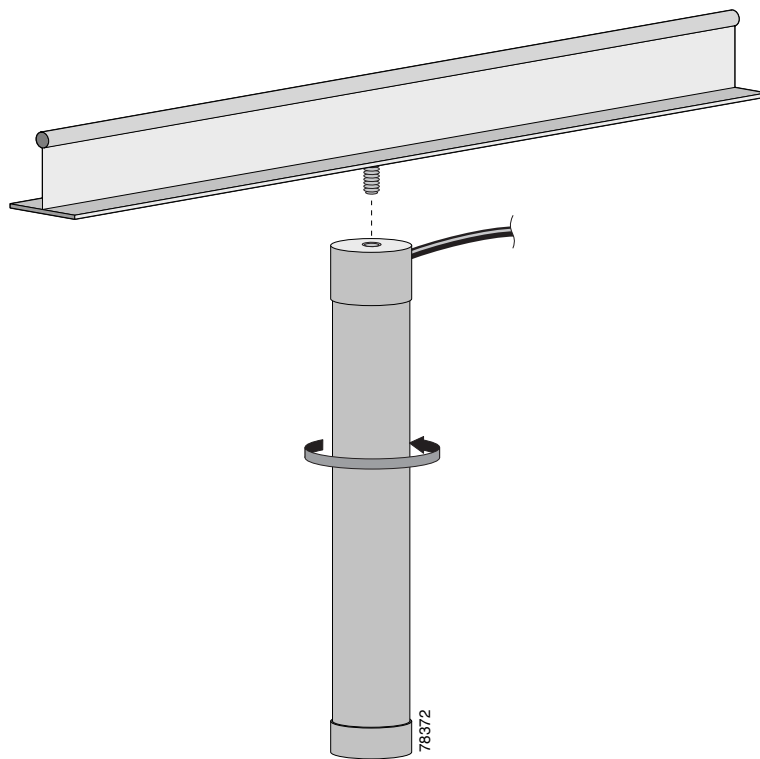
- Step 1** Determine the location you wish to mount the antenna.
- Step 2** Loosen the hex nut on the ceiling track bracket.
- Step 3** Position the bracket on the ceiling track. See Figure 1.

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 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>

CCVP, the Cisco Logo, and the Cisco Square Bridge logo are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn is a service mark of Cisco Systems, Inc.; and Access Registrar, Aironet, BPX, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, Follow Me Browsing, FormShare, GigaDrive, GigaStack, HomeLink, Internet Quotient, IOS, iPhone, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, iQuick Study, LightStream, Linksys, MeetingPlace, MGX, Networking Academy, Network Registrar, *Packet*, PIX, ProConnect, RateMUX, ScriptShare, SlideCast, SMARTnet, StackWise, The Fastest Way to Increase Your Internet Quotient, and TransPath are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0612R)

Any Internet Protocol (IP) addresses used in this document are not intended to be actual addresses. Any examples, command display output, and figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses in illustrative content is unintentional and coincidental.

© 2007 Cisco Systems, Inc. All rights reserved.

♻️ Printed in the USA on recycled paper containing 10% postconsumer waste.