



# Cisco Aironet 3.5-dBi Articulated Dipole Antenna (AIR-ANT5135D-R, AIR-ANT5135DG-R, and AIR-ANT5135DW-R)

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This document describes and provides specifications for the 3.5-dBi articulated dipole antenna. The antenna operates in the 5-GHz frequency band and is designed for use with Cisco Aironet 5-GHz radio products using a reverse-polarity TNC (RP-TNC) connector. The three antennas covered in this document are electrically the same. They differ physically by the color of the radome, which is specified by the product part number shown in [Table 1](#).

**Table 1**     *Antenna Radome Colors*

| Antenna Part Numbers              | Radome Color |
|-----------------------------------|--------------|
| AIR-ANT5135D-R, AIR-ANT5135DB-R   | Black        |
| AIR-ANT5135DG-R, AIR-ANT5135DG-R= | Gray         |
| AIR-ANT5135DW-R, AIR-ANT5135DW-R= | White        |

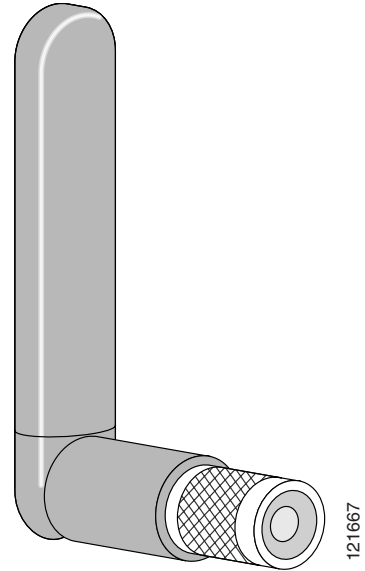
The following information is provided in this document.

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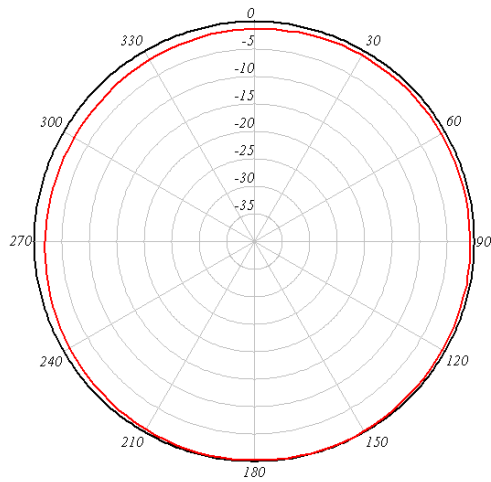


# Technical Specifications

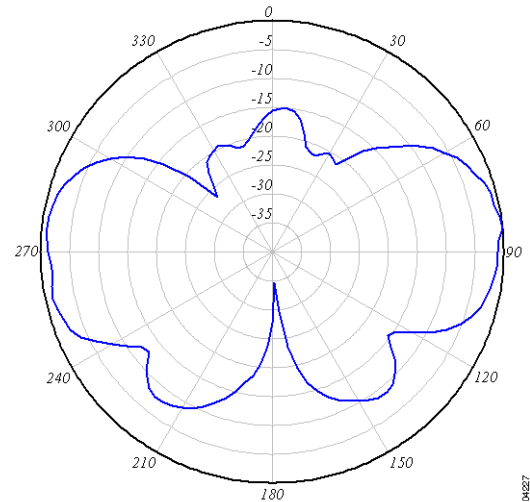
|                           |                                   |
|---------------------------|-----------------------------------|
| Antenna type              | Dipole                            |
| Operating frequency range | 5150 to 5850 MHz                  |
| Nominal input impedance   | 50Ω                               |
| 2:1 VSWR bandwidth        | 5150 to 5850 MHz                  |
| Gain                      | 3.5 dBi                           |
| Polarization              | Linear, vertical                  |
| E-plane 3-dB beamwidth    | 40 degrees                        |
| H-plane 3-dB beamwidth    | Omnidirectional                   |
| Connector type            | RP-TNC plug                       |
| Length                    | 5.3 in. (13.4 cm)                 |
| Radome length             | 3.4 in. (8.6 cm)                  |
| Width                     | 0.62 in. (1.5 cm)                 |
| Operating temperature     | -22°F to 158°F<br>(-30°C to 70°C) |
| Storage temperature       | -40°F to 185°F<br>(-40°C to 85°C) |
| Environment               | Indoor, office                    |



**H-Plane Pattern**



**E-Plane Pattern**

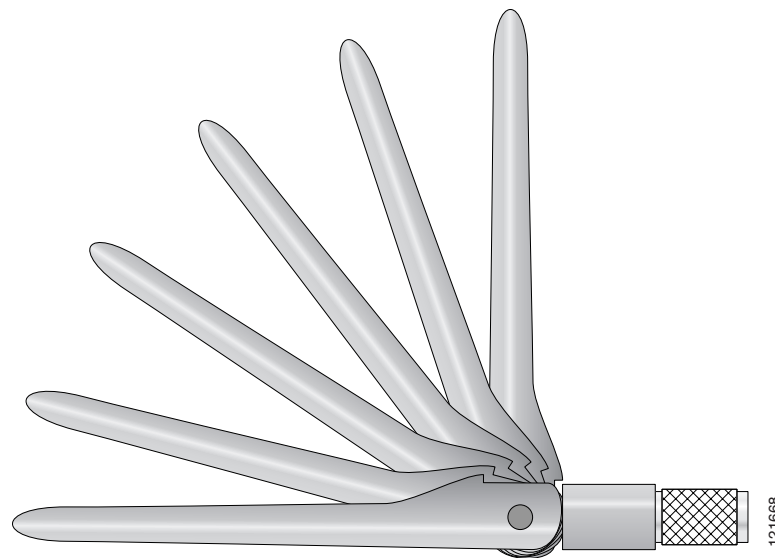


# System Requirements

This antenna is designed for use with Cisco Aironet access points and bridges but can be used with any 5-GHz Cisco Aironet radio device that uses RP-TNC connectors.

## Features

The antenna has an articulated base that can be rotated 360 degrees at the connection point and from 0 to 90 degrees at its joint. The articulated base is shown in the following illustration.



## Installing the Antenna



### Caution

This antenna operates in the 5-GHz frequency range. Connect this antenna to a 5-GHz antenna connector, which is identified by a blue dot. Connecting this antenna to a 2.4-GHz antenna connector will degrade radio performance and could damage the radio.

Follow these steps to install the antenna.

- Step 1** Verify that the connector to which you are connecting the antenna is a 5-GHz connector (identified by a blue dot near the access point RP-TNC connector).
- Step 2** Align the antenna connector with the RP-TNC connector on the access point.
- Step 3** Engage the antenna connector threads with the RP-TNC connector.
- Step 4** Tighten the antenna hand tight.
- Step 5** Adjust the antenna's articulated mount to the desired position.

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# Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, 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>

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS Version 2.0.

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