Cisco Aironet Short Dual-Band Omni Antenna (AIR-ANT2535SDW-R)

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This document describes the Cisco Aironet AIR-ANT2535SDW-R antenna and provides electrical specifications and mounting instructions. The antenna operates over the 2.4 GHz and 5 GHz Wi-Fi bands and is designed for indoor use with the AP1600, AP2600, AP3600, and AP3700 series access points. The antenna utilizes an omnidirectional radiation pattern to achieve a broad coverage area.

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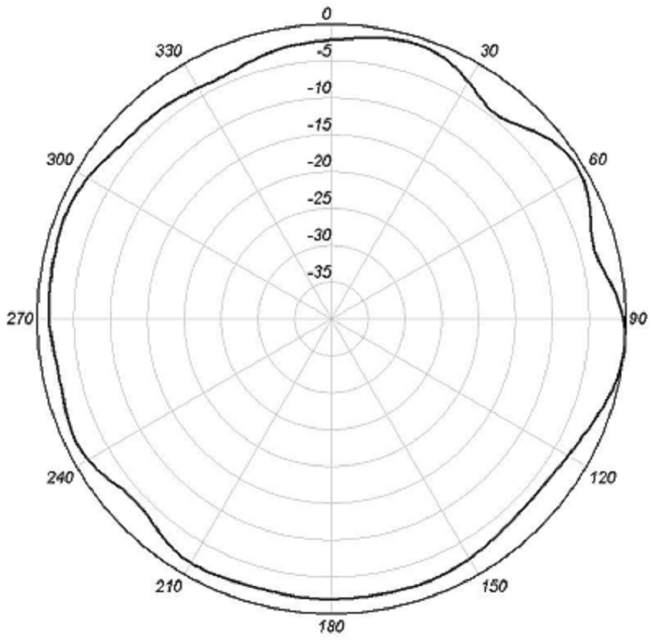
Technical Specifications

Antenna Type	Omnidirectional
Operational Frequency Ranges	2.4-2.5 GHz & 5.15-5.925 GHz
Nominal Input Impedance*	50 Ohms
VSWR*	2.0:1
Polarization	Vertical
2.4 - 2.5 GHz Nominal Peak Gain*	3 dBi
5.15 - 5.925 GHz Nominal Peak Gain*	5 dBi
2.4 - 2.5 GHz Elevation Plane Beamwidth*	35°
5.15 - 5.925 GHz Elevation Plane Beamwidth*	35°
2.4 - 2.5 GHz Port-to-Port Isolation*	> 20 dB
5.15 - 5.925 GHz Port-to-Port Isolation*	> 23 dB
Connector Type	Male RP-TNC
UV Stability	ASTM D-4674 Method 1
Diameter	1.25 in. (3.18 cm)
Height	3.3 in. (8.4 cm)
Weight	1.7 oz. (0.05 kg)
Operating Temperature Range	-30° C to 70° C
Storage Temperature Range	-40° C to 85° C

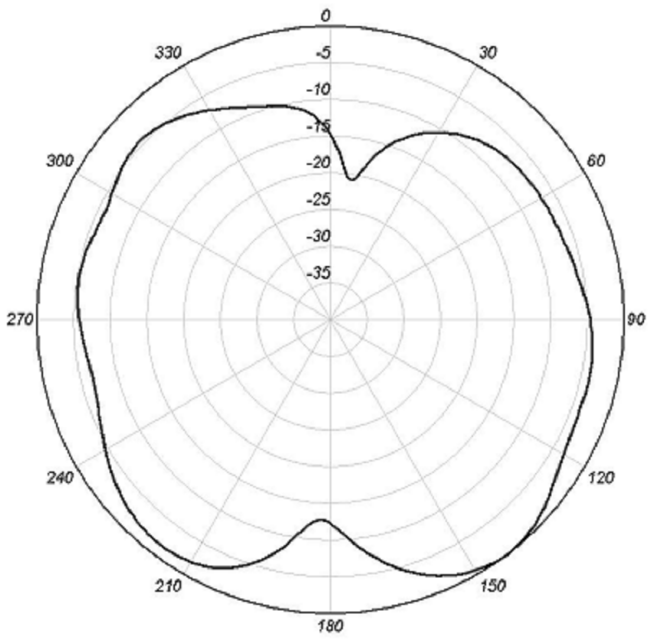
*When the antenna is mounted to a Cisco AP1600, AP2600, AP3600, or AP3700 access point.

Figure 1 ANT2535SDW-R High

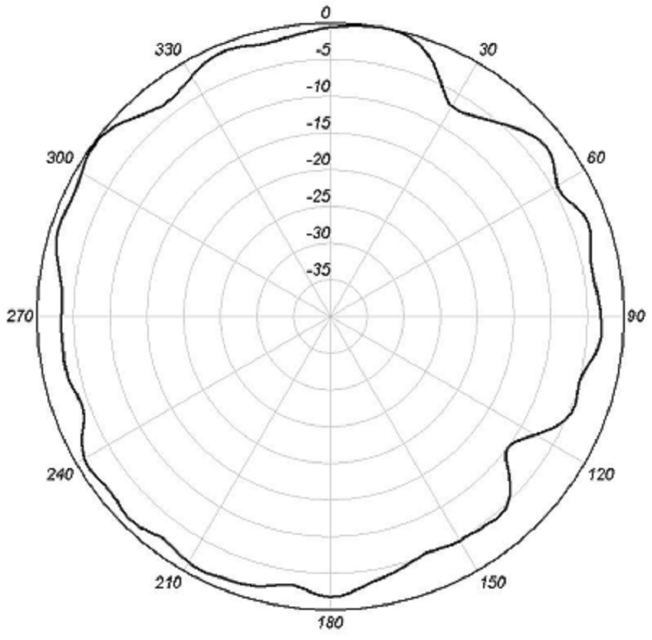
Azimuth Radiation Pattern (2.4 GHz)



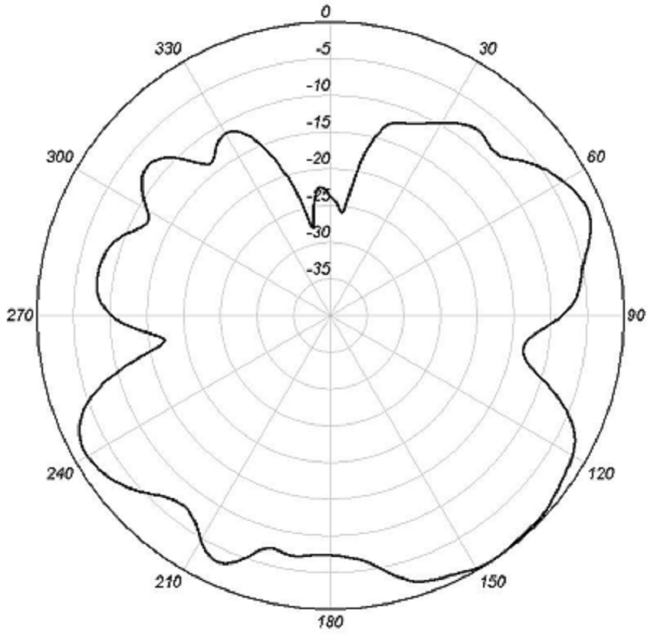
Elevation Radiation Pattern (2.4 GHz)



Azimuth Radiation Pattern (5 GHz)



Elevation Radiation Pattern (5 GHz)



System Requirements

This antenna is designed for use with Cisco access points having dual-band antenna ports. These include the AP1600, AP2600, AP3600, and AP3700 series access points. The antenna is intended solely for indoor deployments.

Safety Precautions

For your safety, read and follow these safety precautions:

1. Before you install an antenna, contact your Cisco account representative to explain which mounting method to use for the size and type of antenna that you are about to install.
2. Find someone to help you—installing an antenna is often a two-person job.
3. Select your installation site with safety, as well as performance, in mind. Remember that electric power lines and phone lines look alike. For your safety, assume that any overhead line can kill you.
4. Contact your electric power company. Tell them your plans and ask them to come look at your proposed installation.
5. Plan your installation carefully and completely before you begin. Each person involved in an installation should be assigned to a specific task and should know what to do and when to do it. One person should be in charge of the operation to issue instructions and watch for signs of trouble.
6. When installing your antenna, follow these guidelines:
   a. Do not use a metal ladder.
   b. Do not work on a wet or windy day.
   c. Do dress properly—wear shoes with rubber soles and heels, rubber gloves, and a long-sleeved shirt or jacket.
7. If the assembly starts to drop, move away from it and let it fall. Because the antenna, mast, cable, and metal guy wires are all excellent conductors of electrical current, even the slightest touch of any of these parts to a power line completes an electrical path through the antenna and the installer.
8. If any part of the antenna system should come in contact with a power line, do not touch it or try to remove it yourself. Call your local power company to have it removed safely.
9. If an accident should occur with the power lines, call for qualified emergency help immediately.

Installation Notes

The antenna is designed to connect to a dedicated antenna connector on the access point. No special tools are required to install the antenna.

Choosing a Mounting Location

The antenna radiates an omnidirectional pattern in the plane of the access point. To achieve this pattern, the access point should be mounted clear of any obstructions to the sides of the radiating element. If the mounting location is on the side of a building or tower, the antenna pattern is degraded on the building or tower side.

Tools and Equipment Required

No tools are required to mount the antenna to the access point. For information about tools required to mount the access point, see the appropriate access point documentation.

Mounting the Antenna

To connect the antenna to the access point, follow these steps:

Step 1 Align the antenna's RP-TNC connector with the appropriate antenna port.

Step 2 Gently push the antenna into the port.

Step 3 Tighten the antenna hand tight.

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

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