



# Cisco Aironet Dual-Band Omni-Directional Antenna (AIR-ANT2568VG-N and AIR-ANT2568VG-NS)

**First Published: July 2015**

**Last Updated: November 15, 2021**

**Note:** The documentation set for this product strives to use bias-free language. For purposes of this documentation set, bias-free is defined as language that does not imply discrimination based on age, disability, gender, racial identity, ethnic identity, sexual orientation, socioeconomic status, and intersectionality. Exceptions may be present in the documentation due to language that is hardcoded in the user interfaces of the product software, language used based on RFP documentation, or language that is used by a referenced third-party product.

This document describes the Cisco Aironet AIR-ANT2568VG-N and the Cisco Aironet AIR-ANT2568VG-NS dual-band omni-directional antennas and provides specifications and mounting instructions. The antennas are designed for outdoor use with Cisco Outdoor Access Points with radios operating in the 2.4-GHz and 5-GHz frequency bands.

The Cisco AIR-ANT2568VG-NS is a self-identifying antenna having circuitry that enables Cisco access points (APs) to self-identify the antenna. This antenna has an in-built EEPROM that the APs read and automatically configure the antenna type and the gain in the wireless controller.

These topics are discussed:

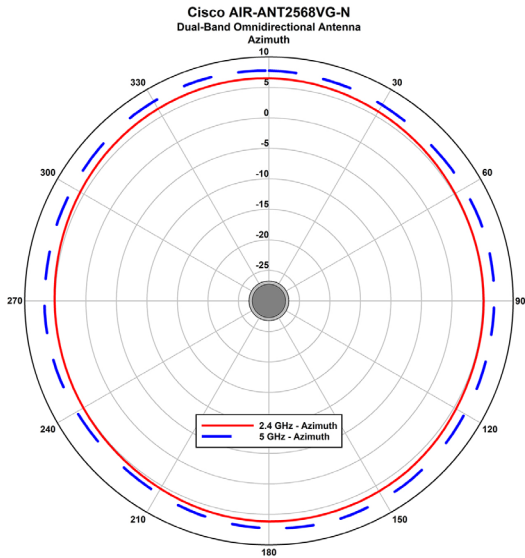
- [Technical Specifications, page 2](#)
- [System Requirements, page 4](#)
- [Safety Precautions, page 4](#)
- [Installation Notes, page 4](#)
- [Communications, Services, and Additional Information, page 5](#)

## Technical Specifications

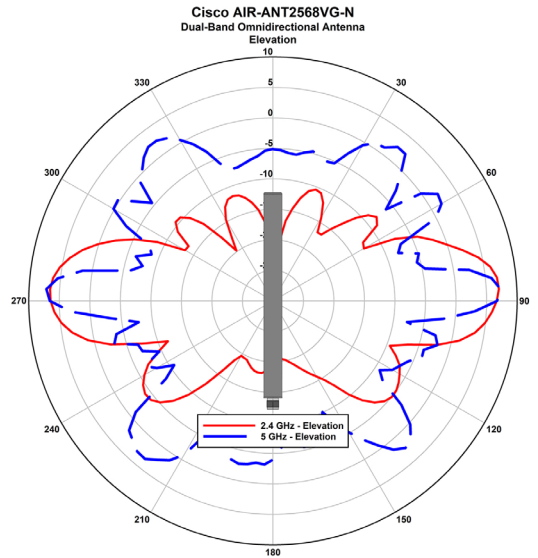
Antenna Type	Omni-directional	
Operating Frequency Range	2400-2483 MHz; 5150-5925 MHz	
VSWR	1.5:1 (2400-2483 MHz) 2:1 (5150-5925 MHz)	
Nominal Input Impedance	50 Ohms	
Gain	6 dBi (2400-2483 MHz) 8 dBi (5150-5925 MHz)	
Polarization	Vertical	
Azimuth Plane Ripple	2 dB (Max)	
Elevation Plane 3 dB Beamwidth	24° (2400-2483 MHz) 11° (5150-5925 MHz)	
Azimuth Plane 3 dB Beamwidth	Omni-directional	
Length	14.8 in (377 mm)	
Diameter	1.25 in (31.75 mm)	
Weight	7.2 oz. (204.1 g)	
Connector	N-Male	
Operational Temperature	-22-158°F (-30-70°C)	
Storage Temperature	-40-185°F (-40-85°C)	
Water/Foreign Body Ingress	IP67	
Wind Rating (Operational)	100 mph (161 kph)	
Wind Rating (Survival)	136 mph (218 kph)	

Technical Specifications

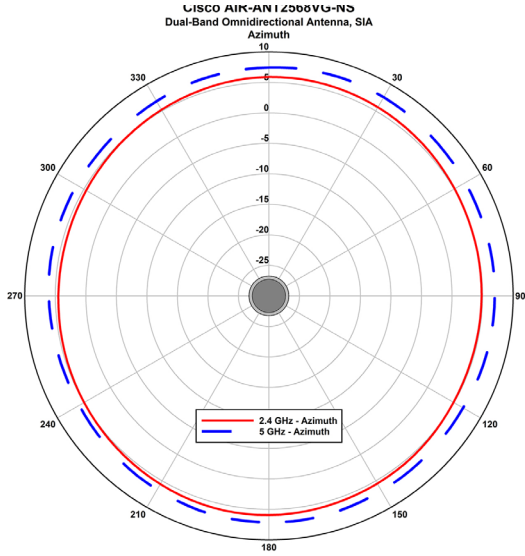
Dual-Band Omnidirectional Antenna (Azimuth)



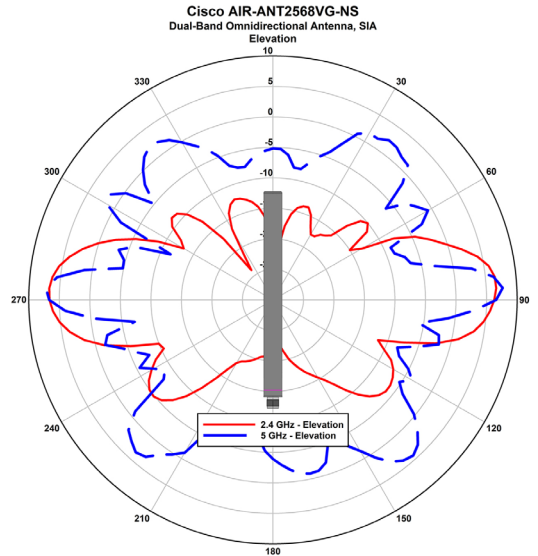
Dual-Band Omnidirectional Antenna (Elevation)



Dual-Band Omnidirectional Antenna SIA (Azimuth)



Dual-Band Omnidirectional Antenna SIA (Elevation)



## System Requirements

This antenna is designed for use with the Cisco Aironet Outdoor Access Points.

## Safety Precautions

**Warning: Do not locate the antenna near overhead power lines or other electric light or power circuits, or where it can come into contact with such circuits. When installing the antenna, take extreme care not to come into contact with such circuits, as they may cause serious injury or death. For proper installation and grounding of the antenna, please refer to national and local codes (e.g. U.S.: NFPA 70, National Electrical Code, Article 810, Canada: Canadian Electrical Code, Section 54). Statement 280**

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. 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 port on the access point. No special tools are required to install the antenna.

The antenna is resistant to the full range of outdoor environments. After the antenna is attached to the access point, seal the connections to prevent moisture and other weathering elements from affecting performance. Cisco recommends using a coax seal (such as CoaxSeal) for outdoor connections. Silicone sealant or electrical tape are not recommended for sealing outdoor connections.

## Choosing a Mounting Location

The antenna is designed to create an omni-directional broadcast pattern. 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.

Generally, the higher an antenna is above the ground, the better it performs. A practice is to install your antenna about 5 to 10 ft (1.5 to 3 m) above the roof line and away from all power lines and obstructions.

## Tools and Equipment Required

No tools are required to mount the antenna to the access point. However, you may need a 3/4 in. (19 mm) open end or combination wrench (or adjustable wrench) to remove the antenna port covers.

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:

1. If necessary, remove the antenna port cover.
2. Align the antenna N-type connector with the appropriate antenna port.
3. Gently push the antenna into the port.
4. Hand tighten the antenna to the port using the metal knurled ring only.

**Warning:** Do not use the plastic body to tighten. This may damage the antenna.

## Communications, Services, and Additional Information

- To receive timely, relevant information from Cisco, sign up at [Cisco Profile Manager](#).
- To get the business impact you're looking for with the technologies that matter, visit [Cisco Services](#).
- To submit a service request, visit [Cisco Support](#).
- To discover and browse secure, validated enterprise-class apps, products, solutions and services, visit [Cisco Marketplace](#).
- To obtain general networking, training, and certification titles, visit [Cisco Press](#).
- To find warranty information for a specific product or product family, access [Cisco Warranty Finder](#).

## Cisco Bug Search Tool

[Cisco Bug Search Tool](#) (BST) is a web-based tool that acts as a gateway to the Cisco bug tracking system that maintains a comprehensive list of defects and vulnerabilities in Cisco products and software. BST provides you with detailed defect information about your products and software.

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The following information is for FCC compliance of Class A devices: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio-frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case users will be required to correct the interference at their own expense.

The following information is for FCC compliance of Class B devices: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If the equipment causes interference to radio or television reception, which can be determined by turning the equipment off and on, users are encouraged to try to correct the interference by using one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Modifications to this product not authorized by Cisco could void the FCC approval and negate your authority to operate the product.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

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

All printed copies and duplicate soft copies of this document are considered uncontrolled. See the current online version for the latest version.

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco website at [www.cisco.com/go/offices](http://www.cisco.com/go/offices).

© 2013–2021 Cisco Systems, Inc. All rights reserved.