

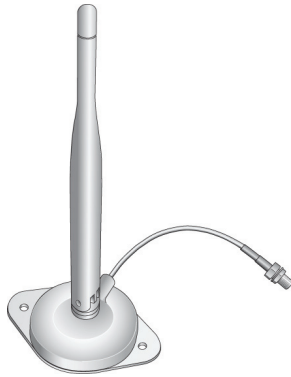
## 5 dBi Omni-directional Antenna ANT2405

**Note:** For optimal results in extending wireless range with antenna installations, consult a qualified professional installer service for a site survey and proper installation. For a list of devices approved by the FCC for use with the antenna, see the NETGEAR website at [http://tools.netgear.com/legal/fcc\\_antennas.html](http://tools.netgear.com/legal/fcc_antennas.html).

## Package Contents

The package includes:

- NETGEAR 5 dBi Omni-directional Antenna ANT2405 including a 10 cm RG316 cable with a reverse SMA connector for IEEE 802.11b or 802.11g wireless devices
- Ceiling/wall mount bracket hardware
- Warranty card
- Support information card



## Antenna Cable

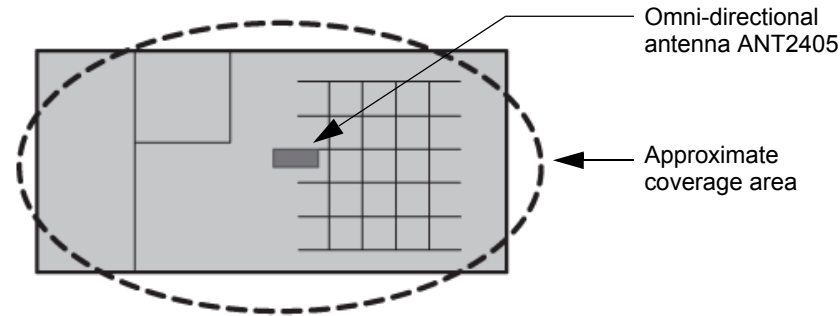
The longer the antenna cable, the higher the signal loss (attenuation). This decreases range and performance. For best performance, use a short cable between the antenna and the wireless device. The shortest FCC-approved antenna cable is the NETGEAR 1.5 M (ACC-10314-01) cable. For optimal performance, use a low-loss NETGEAR antenna cable up to 10 meters long.

Specifications for 10 cm RG316 Antenna Cable (Included in the Package)	
Type	RG316
Length	10 cm (3.9 in)
External diameter	2.5 mm
Impedance	50 +/- 5 Ohms
SWR	1.5 maximum
Loss	138 dB/100 m (42 dB/100 ft) at 2.4 GHz
Minimum bend radius	2.5 mm (1 in)

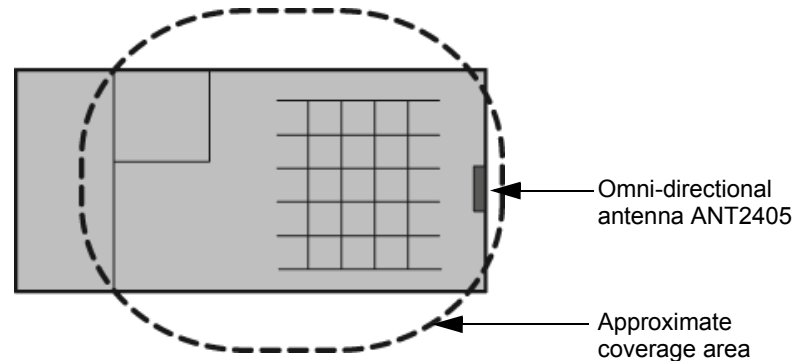
## Antenna Placement and Location

To maximize coverage and performance, place the antenna within the line of sight of your wireless devices. Try to minimize partitions and objects that block the line of sight if possible.

- For a ceiling installation, place the antenna in the middle of the coverage area.



- For a wall installation, place the antenna on an interior wall above cubicles (cubicles generally include a metal foil). Ideal placement is 2 meters high.



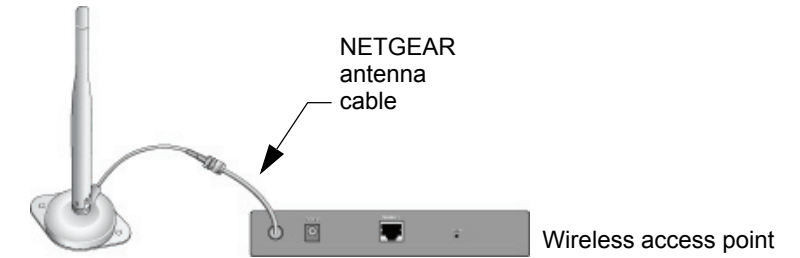
- If the wireless access point, router, or gateway, is in an IT room, place the antenna outside the room against a wall and close to the ceiling.

The area close to, behind, or beside the antenna will be covered, because the dynamic range of the WLAN transmitter/receiver and antenna is approximately 100 dB. Even with 20 dB to 40 dB or attenuation, the signal strength is still strong and communication is maintained.

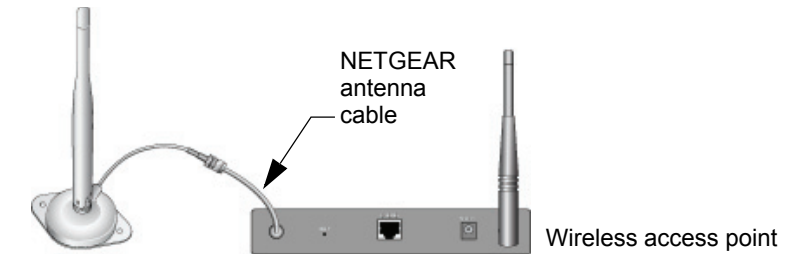
## Installing the Antenna

Turn off your wireless access point, and connect your ANT2405 antenna. If your wireless access point is new, follow the access point installation instructions. If you are upgrading an existing access point, turn it on again.

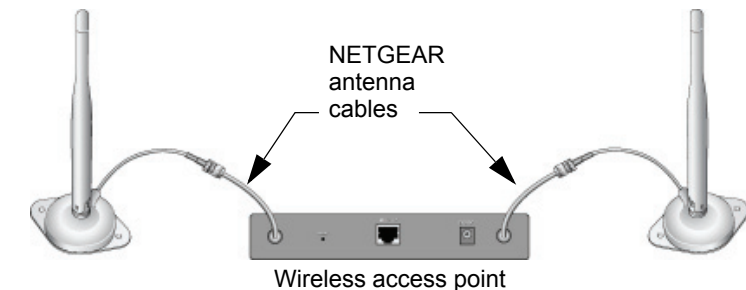
### Wireless Device with 1 Antenna



### Wireless Device with 2 Antennas: Replacing the Primary Antenna

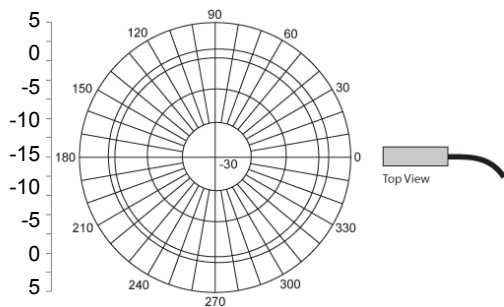


### Wireless Device with 2 Antennas: Replacing Both



NETGEAR 5 dBi Omni-directional Antenna ANT2405 Specifications	
Frequency range	2450 +/- 50MHz
Type	Dipole
Impedance	50 +/-5 Ohms
Maximum input power	20W (without N/SMA adapter)
SWR	2.0 maximum
Return loss	-10 dB
Gain	5 dBi
Radiation	Omni-Directional
Polarization	Vertical
Beam degree	Horizontal 120°, Vertical 110°
Connector type	SMA female reverse
Material	TPE; PC; PBT
Color	White
Mounting base	Steel
Operating temperature	-10 to 60° C (14 to 140° F)
Storage temperature	-10 to 70° C (14 to 158° F)
Device size (l x w x h)	80 x 50 x 202 mm (3.14 x 1.96 x 7.95 in)
Weight	107.9 g (0.237 lb)
Warranty	2 years

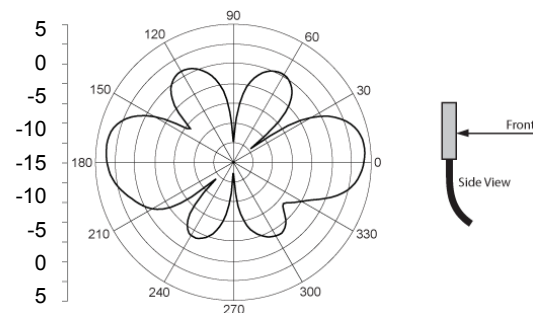
## Horizontal Plane Radiation Pattern (X-Y) Azimuth



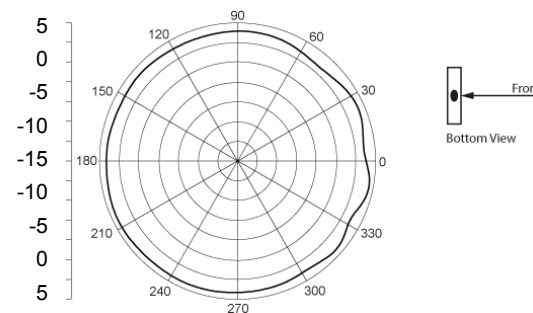
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## Vertical Plane Radiation Pattern (X-Z Elevation)



## Radiation Pattern



## Technical Support

Thank you for selecting NETGEAR products.

After completing the Smart Wizard configuration assistant, locate the serial number on the bottom label of your product, and use it to register your product at

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

Registration on the website or over the phone is required before you can use our telephone support service. The phone numbers for worldwide regional customer support centers are on the Warranty and Support Information card that came with your product.

Go to <http://kbserver.netgear.com> for product updates and Web support.

## Statement of Conditions

In the interest of improving internal design, operational function, and/or reliability, NETGEAR reserves the right to make changes to the products described in this document without notice. NETGEAR does not assume any liability that may occur due to the use or application of the product(s) or circuit layout(s) described herein.

### Federal Communications Commission (FCC) Compliance Notice: Radio Frequency Notice

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

To comply with FCC regulations, the ANT2405 should only be used with devices that have been FCC approved for use with the NETGEAR ANT2405. Check the NETGEAR website at [http://tools.netgear.com/legal/fcc\\_antennas.html](http://tools.netgear.com/legal/fcc_antennas.html) for an updated list of FCC approved devices.

**Note:** This equipment has been tested and found to comply with the limits for Class B digital devices, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in 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 this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: (1) Reorient or relocate the receiving antenna; (2) Increase the separation between the equipment and receiver; (3) Connect the equipment to an outlet or circuit different from that to which the receiver is connected; (4) Consult the dealer or an experienced radio/TV technician for help.

### FCC and EU Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. To avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna must be less than 20 cm (8 inches) during normal operation.

This device should not be co-located with other transmitters.

For EU, use of any antenna requires careful planning and extra considerations to comply with EU emissions and health standards and regulations. Antenna installation must comply with the maximum level authorized by each country.



This symbol was placed in accordance with the European Union Directive 2002/96 on the Waste Electrical and Electronic Equipment (the WEEE Directive). If disposed of within the European Union, this product should be treated and recycled in accordance with the laws of your jurisdiction implementing the WEEE Directive.

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