



ProSafe® Wireless LAN Antennas and Accessories

NETGEAR 14 dBi Patch Panel Directional Antenna - ANT24D18
NETGEAR 5 dBi 3x3 Omni-directional Antenna - ANT32405
NETGEAR 9 dBi Omni-directional Antenna - ANT2409
NETGEAR 7 dBi Omni-directional Antenna - ANT2407
NETGEAR 5 dBi Omni-directional Antenna - ANT2405
NETGEAR Antenna Cables

Data Sheet

Optimize WLAN Range and Power

NETGEAR's ProSafe line of antennas and accessories for 802.11b, 802.11g and 802.11n devices give you multiple options for maximizing the reach and performance of your wireless infrastructure devices. Every WLAN deployment is unique. When planning a network that incorporates wireless, varying facility sizes, construction materials, distance between transmission points and physical obstructions must be accounted for. With both directional and omni-directional antennas, indoor and outdoor options, low-loss cables, mounting hardware, and other accessories, installers can customize a wireless solution that meets the requirements of even the most challenging applications.

ProSafe 14 dBi Patch Panel Directional Antenna

The ANT24D18 indoor/outdoor directional* 2.4 GHz antenna provides a 3-in-1 solution for mixed applications in combination with an 802.11b or 802.11g access point or wireless router. One, it delivers extended access point range in a single floor environment ideally positioned in the corner of a building. Two, it functions point-to-point so that you can wirelessly connect LANs between buildings in a campus-type environment. Three, it provides multifloor transmission when placed on a ceiling, as the higher power output extends the range through typical flooring materials. Includes several mounting options (fixed wall, wall adjustable, and pole), cable sold separately.

*Directional: Concentrates transmit and receive radio-frequency energy into a cone, or beam, for higher signal strength and reception in a single direction.

ProSafe 5 dBi 3x3 Omni-directional Antenna

The ANT32405 indoor 2.4 GHz antenna is for multiple-input-multiple-output wireless devices such as 802.11n access points. Using three dipole antennas, the ANT32405 supports 3x3 or 2x3 streams of traffic, as supported by the 802.11n standard. Integrated magnetics enable optimal placement of the antenna element, offering mounting capabilities on file cabinets, white boards and ceiling T-bars. Desktop and wall mounting are also possible. With an integrated 1m cable, the ANT32405 can connect directly to an access point. Includes wall-mounting kit.



1-888-NETGEAR (638-4327)
Email: info@NETGEAR.com

ProSafe 9 dBi Indoor/Outdoor Omni-directional Antenna

The ANT2409 indoor/outdoor 2.4 GHz antenna provides extended point-to-multi-point coverage for wireless 802.11g devices. Optimal for medium range indoor or outdoor point-to-multi-point applications. Included lightning arrestor (a \$90 value) helps prevent damage due to lightning-induced surges or static electricity in outdoor applications. Typically hung from crossbars of drop ceilings or on a rooftop, the waterproof and UV resistant ANT2409 includes wall and pole mounting materials for installation ease; antenna cable and grounding cable not included.

ProSafe 7 dBi Omni-directional Antenna

The ANT2407 indoor Omni-directional 2.4 GHz antenna enables improved coverage for 802.11g devices. Using passive RF shaping and enabling more optimal placement, the ANT2407 can extend your range and improve your connectivity for 2.4 GHz devices. Integrated magnets allow for mounting on magnetic surfaces such as file cabinets, white boards, and ceiling T-bars. Desktop and wall mounting are also possible. With an integrated 1.5 m cable, the ANT2407 can connect directly to an access point. Includes wall-mounting kit.

ProSafe 5 dBi Omni-directional Antenna

The ANT2405 indoor omni-directional** antenna is designed to extend coverage of wireless 802.11b or 802.11g devices. This antenna is especially useful in optimizing coverage when you want to place your wireless access point or router out of plain view – in a wiring closet or above a ceiling pad. Locate this antenna at the top of a cubicle, on a ceiling, desktop or wall, where it is more receptive to radio signals. Ideal placement is on a wall, 2 m high, or on the ceiling facing the area to cover. Includes mounting brackets, cable sold separately.***

** Omni-directional: Radiates radio-frequency energy equally in all directions for widespread, all-points deployment.

***NETGEAR recommends use of antenna cable up to 5 m long with the ANT2405 antenna.

Low-loss Antenna Cables

These 1.5 m, 5 m, and 10 m antenna cables offer low loss at 2.4 GHz and added flexibility for setting up access points at a greater distance from a power source. They come with reverse SMA connectors and provide a standard connection optimized for use with NETGEAR's line of WLAN antennas (range can be drastically reduced if longer or higher loss cables than these are used).



ProSafe 14 dBi Patch Panel Directional Antenna - ANT24D18

Technical Specifications

- **Description**
 - 14 dBi Patch Panel Directional Antenna with reverse N female jack and reverse N to reverse SMA adapter
- **Typical Application**
 - Indoor/outdoor long range point-to-point connections using 802.11g
- **Maximum Outdoor Range¹**
 - 21.4 km (13.3 miles)
- **Frequency Range**
 - 2400 - 2500 MHz
- **Gain³**
 - 14 dBi
- **Beam Width**
 - Horizontal 60°
 - Vertical 30°
- **Polarization**
 - Linear vertical
- **Operating Temperature**
 - -30° to 75° C (-22° to 167° F)
- **Dimensions**
 - 262 x 240 x 30 mm (10.31 x 9.44 x 1.18 in)
- **Weight**
 - 1.5 kg (3.35 lb)
- **Connectors**
 - Antenna - Reverse N female
 - Lightning arrestor - Reverse N female
 - Adapter - Reverse SMA
- **Package Contents**
 - 14 dBi Patch Panel Directional Antenna - ANT24D18 (cable required, sold separately)
 - Wall and pole mount brackets and hanging materials
 - One reverse N type to reverse SMA adapter
 - 2 m low-loss antenna cable (to connect antenna to the lightning arrestor)
 - Lightning arrestor
 - Installation guide
 - Warranty/support information card
- **Warranty**
 - NETGEAR 2-year warranty
- **Ordering Information (all regions)**
 - ANT24D18



ProSafe 5 dBi 3x3 Omni-directional Antenna - ANT32405

Technical Specifications

- **Description**
 - 5 dBi Omni directional antenna array with integrated cable and three reverse N female connectors
- **Typical Application**
 - Indoor optimization of 802.11n access point coverage
- **Frequency Range**
 - 2400 - 2500 MHz
- **Gain³**
 - 5 dBi
- **Beam Width**
 - Horizontal 360°
 - Vertical 30°
- **Polarization**
 - Linear vertical
- **Dimensions**
 - 280 x 98 x 28 mm (11 x 3.86 x 1.1 in)
 - Integrated cable length: 1.0 m
- **Weight**
 - .237 kg (.52 lb)
- **Connectors**
 - Reverse SMA female
- **Package Contents**
 - 5 dBi 3x3 Omni-directional Antenna - ANT32405
 - Wall-mount kit
 - Installation guide
 - Warranty/support information card
- **Warranty**
 - NETGEAR 2-year warranty
- **Ordering Information (all regions)**
 - ANT32405-10000S



ProSafe 9 dBi Omni-directional Antenna - ANT2409

Technical Specifications

- **Description**
 - 9 dBi Omni-directional Antenna with reverse N female connector
- **Typical Application**
 - Indoor/outdoor medium range point-to-multipoint connections using 802.11g
- **Maximum Outdoor Range²**
 - 11.5 km (7.2 miles)
- **Frequency Range**
 - 2400 - 2485 MHz
- **Gain³**
 - 9 dBi
- **Beam Width**
 - Horizontal 360°
 - Vertical 30°
 - Omnidirectional
- **Polarization**
 - Vertical
- **Operating Temperature**
 - -30° to 80° C (-22° to 176° F)
- **Dimensions**
 - 625 x 75 x 56 mm (24.6 x 2.95 x 2.2 in)
- **Weight**
 - .9 kg (2 lb)
- **Connectors**
 - Antenna - Reverse N female
 - Lightning arrestor - Reverse N female
 - Adapter - Reverse SMA
- **Package Contents**
 - Indoor/Outdoor 9 dBi Omni-directional Antenna - ANT2409 (cable required, sold separately)
 - Wall and pole mount brackets and hanging materials
 - One reverse N type to reverse SMA adapter
 - 2 m low-loss antenna cable (to connect antenna to the lightning arrestor)
 - Lightning arrestor
 - Installation guide
 - Warranty/support information card
- **Warranty**
 - NETGEAR 2-year warranty
- **Ordering Information (all regions)**
 - ANT2409-20000S



ProSafe 7 dBi Omni-directional Antenna - ANT2407

Technical Specifications

- **Description**
 - 7 dBi Omni-directional Antenna with integrated cable and reverse N female connector
- **Typical Application**
 - Indoor optimization of 802.11g access point coverage
- **Frequency Range**
 - 2400 – 2485 MHz
- **Gain³**
 - 7 dBi
- **Polarization**
 - Vertical
- **Beam Width**
 - Horizontal 360°
 - Vertical 60°
- **Operating Temperature**
 - -30° to 80° C (-22° to 176° F)
- **Dimensions**
 - 110 x 65 x 300 mm (4.33 x 2.56 x 11.81 in)
 - Cable length: 1.5 m
- **Weight**
 - .23 kg (.51 lb)
- **Connectors**
 - Reverse SMA female
- **Package Contents**
 - Indoor 7 dBi Omni-directional Antenna with integrated cable - ANT2407
 - Wall-mounting kit
 - Installation guide
 - Warranty/support information card
- **Warranty**
 - NETGEAR 2-year warranty
- **Ordering Information (all regions)**
 - ANT2407-10000S



ProSafe 5 dBi Omni-directional Antenna - ANT2405

Technical Specifications

- **Description**
 - 5 dBi Omni-directional Antenna
- **Typical Application**
 - Indoor optimization of 802.11g access point coverage
- **Frequency Range**
 - 2400 - 2500 MHz
- **Gain³**
 - 5 dBi
- **Polarization**
 - Vertical
- **Beam Width**
 - Horizontal 360°
 - Vertical 30°
- **Operating Temperature**
 - -20° to 65° C (-4° to 149° F)
- **Dimensions**
 - 99.2 x 53.9 x 27.5 mm (3.91 x 21.2 x 1.08 in)
- **Weight**
 - .055 kg (.12 lb)
- **Connectors**
 - Reverse SMA
- **Package Contents**
 - Indoor 5 dBi Omni-directional Antenna ANT2405 (cable required, sold separately)
 - Ceiling/wall-mount bracket
 - Installation guide
 - Warranty/support information card
- **Warranty**
 - NETGEAR 2-year warranty
- **Ordering Information (all regions)**
 - ANT2405



NETGEAR Antenna Cables

Technical Specifications

• Description

- NETGEAR low-loss cables with 2 Reverse SMA Connectors extend the length between NETGEAR wireless access points or routers and the external antenna without sacrificing range.

Part Number	ACC-10314-01	ACC-10314-03	ACC-10314-04
Cable Length	1.5 m (4.9 ft)	5 m (16.4 ft)	10 m (32.8 ft)
Maximum Cable Loss with Connectors	1.4 dB	3.7 dB	7.0 dB
Weight	50 g (1.76 oz)	225 g (7.94 oz)	440 g (15.53 oz)

• Attenuation

- 0.21 dB/ft maximum or .659 dB/m maximum at 2.5 GHz

• Operating Temperature

- -40° to 75° C (-40° to 167° F)

• Minimum Bend Radius

- 26 mm (1 in)

• Package Size

- 450 x 280 x .12 mm (17.72 x 11.02 x .004 in)

• Connectors

- Reverse SMA female (both ends)

• Warranty

- NETGEAR 2-year warranty

¹Range estimation is based on FCC-compliant operation of two (2) 802.11 APs each with two (2) ANT24D18 antennas placed at 90 degree rotation, 5 m antenna cables, and lightning arrestors installed. With the antennas positioned 36 m above the ground, data rate should sustain 1 Mbps under ideal line-of-sight conditions.

²Range estimation is based on FCC-compliant operation of two (2) 802.11 APs each with two (2) ANT2409 antennas, 1 m antenna cables, and lightning arrestors installed. With the antennas positioned 27 m above the ground, data rate should sustain 1 Mbps under ideal line-of-sight conditions.

³Gain: A ratio of decibels to an isotropic antenna that is commonly used to measure antenna coverage.

NETGEAR®

350 E Plumeria Dr
San Jose, CA 95134 USA
1-888-NETGEAR (638-4327)
E-mail: info@NETGEAR.com
www.NETGEAR.com

© 2009 NETGEAR, Inc. NETGEAR, the NETGEAR Logo, NETGEAR Digital Entertainer Logo, Connect with Innovation, FrontView, IntelliFi, PowerShift, ProSafe, ProSecure, RAIDar, RAIDiator, RangeMax, ReadyNAS, Smart Wizard, X RAID, and X RAID2, are trademarks and/or registered trademarks of NETGEAR, Inc. and/or subsidiaries in the United States and/or other countries. Mac and the Mac logo are trademarks of Apple Inc., registered in the U.S. and other countries. Other brand names mentioned herein are for identification purposes only and may be trademarks of their respective holder(s). Information is subject to change without notice. All rights reserved.

This product comes with a limited warranty, the acceptance of which is a condition of sale.

*Basic technical support provided for 90 days from date of purchase.

¹Maximum wireless signal rate derived from IEEE standard 802.11 specifications. Actual data throughput and wireless coverage will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate and wireless coverage. NETGEAR makes no express or implied representations or warranties about this product's compatibility with any future standards.

This product has been tested for quality assurance and this product or its components may have been recycled.

D-Antennas-8