

# NETGEAR ProSafe™ Wireless LAN Antennas and Accessories

**NETGEAR 14 dBi Patch Panel Directional Antenna - ANT24D18**

**NETGEAR 9 dBi Omni-directional Antenna - ANT2409**

**NETGEAR 5 dBi Omni-directional Antenna - ANT24O5**

**NETGEAR Antenna Cables**

NOTE: To obtain optimal results in extending wireless range with antenna installations, it is recommended that a qualified, professional installer is consulted for site survey and proper installation.

## ● Optimize WLAN Range and Power

NETGEAR's ProSafe line of antennas and accessories for 802.11b and 802.11g 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, low-loss cables, mounting hardware, and other accessories, installers can customize a value-priced wireless solution that meets the requirements of even the most challenging applications. All NETGEAR antennas are FCC-approved to work with the following NETGEAR models: WAG302, WG302, WAG102, WG102, FVG318, FWG114P.

### ● ProSafe 14 dBi Patch Panel Directional Antenna

The ANT24D18 indoor/outdoor directional\* 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 9 dBi Indoor/Outdoor Omni-directional Antenna

The ANT2409 indoor/outdoor antenna provides extended point-to-multi-point coverage for wireless 802.11b or 802.11g devices. Optimal for medium range indoor or outdoor point-to-multi-point applications. Included lightning arrester (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 5 dBi Omni-directional Antenna

The ANT24O5 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 ANT24O5 antenna.

### ● Low-loss Antenna Cables

These 1.5 m, 3 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, and Booster/Power Injector products (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:**

14dBi 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

**Maximum Outdoor Range<sup>1</sup>:**

15.8 km (~9.8 miles)

**Frequency Range:**

2400 - 2500 MHz

**Gain<sup>2</sup>:**

14 dBi

**Beam Width:**

Horizontal 60°

Vertical 30°

**Dimensions:**

262 x 240 x 30mm (10.31 x 9.44 x 1.18 in)

**Weight:**

1520 g/3.35 lbs.

**Package Contents:**

- 14 dBi Patch Panel Directional Antenna - ANT24D18 (cable required, sold separately)
  - Wall and ceiling mount brackets and hanging materials
  - One reverse N type to reverse SMA adapter
  - 2 meter cable
  - Lightning Arrestor
  - Installation guide
  - Warranty/Support information card
- NETGEAR 2-year warranty

**Warranty:**

<sup>1</sup> Range estimation is based on two wireless nodes each with an ANT24D18 antenna attached, associating with each other at 11 Mbps under ideal line-of-sight conditions.

<sup>2</sup> Gain: A ratio of decibels to an isotropic antenna that is commonly used to measure antenna coverage.

## ProSafe 9 dBi Indoor/Outdoor 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

**Frequency Range:**

2400 - 2485 MHz

**Gain<sup>2</sup>:**

9 dBi

**Polarization:**

Vertical

**Operating Temperature:**

-30 to 80° C (-22 to 176° F)

**Weight:**

.9 kg/2 lbs.

**Package Contents:**

- Indoor/Outdoor 9 dBi Omni-directional Antenna ANT2409
  - Lightning Arrestor
  - 2 meter low loss antenna cable (to connect antenna to the lightning arrestor)
  - Wall and pole mounting brackets and hanging materials
  - One reverse N/SMA Adapter
  - Installation guide
  - Warranty/Support information card
- NETGEAR 2-year warranty

**Warranty:**



## ProSafe 5 dBi Omni-directional Antenna - ANT24O5

### Technical Specifications

<b>Description:</b>	5 dBi Omni-directional Antenna
<b>Maximum Outdoor Range<sup>3</sup>:</b>	790m (863.95 yds)
<b>Frequency Range:</b>	2400 to 2500 MHz
<b>Gain:</b>	5 dBi
<b>Polarization:</b>	Vertical
<b>Beam Width:</b>	Horizontal 120° Vertical 110°
<b>Operating Temperature:</b>	-20 to 65° C (-4 to 149° F)
<b>Storage Temperature:</b>	-30 to 80° C (-22 to 176° F)
<b>Dimensions:</b>	99.2 x 53.9 x 27.5 mm (3.91 x 21.2 x 1.08 in.)
<b>Weight:</b>	55 g/.12 lb.
<b>Package Contents:</b>	- Indoor 5 dBi Omni-directional Antenna ANT24O5 (cable required, sold separately) - Ceiling/wall mount bracket - Installation guide - Warranty/Support information card
<b>Warranty:</b>	NETGEAR 2-year warranty

<sup>3</sup>Range estimation is based on two wireless nodes, each with an ANT24O5 antenna attached, associating with each other at 11 Mbps under ideal line-of-sight conditions.



## NETGEAR Antenna Cables

### Technical Specifications

<b>Description:</b>	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.			
<b>Part Number:</b>	ACC-10314-01	ACC-10314-02	ACC-10314-03	ACC-10314-04
<b>Cable Length:</b>	1.5 m (4.9 ft)	3 m (9.8 ft)	5 m (16.4 ft)	10 m (32.8 ft)
<b>Maximum Cable Loss with Connectors:</b>	1.4 dB	2.4 dB	3.7 dB	7.0 dB
<b>Weight:</b>	50 g (1.76 oz)	145 g (5.12 oz)	225 g (7.94 oz)	440 g (15.53 oz)
<b>Attenuation:</b>	0.21 dB/ft maximum or .659 dB/m maximum at 2.5 GHz			
<b>Operating Temperature:</b>	-40 to 75° C (-40 to 167° F)			
<b>Minimum Bend Radius:</b>	26 mm (1 in)			
<b>Package Size:</b>	450 x 280 x .12 mm (17.72 x 11.02 x .004 in)			
<b>Warranty:</b>	NETGEAR 2-year warranty			

# NETGEAR®

4500 Great America Parkway  
Santa Clara, CA 95054 USA  
Phone: 1-888-NETGEAR  
E-mail: info@NETGEAR.com  
www.NETGEAR.com

©2006 NETGEAR, Inc. NETGEAR, the NETGEAR logo, Connect with Innovation, Everybody's connecting, the Gear Guy logo, IntelliFi, ProSafe, RangeMax and Smart Wizard are trademarks or registered trademarks of NETGEAR, Inc. in the United States and/or other countries. Microsoft and Windows are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries. Other brand and product names are trademarks or registered trademarks of their respective holders. Information is subject to change without notice. All rights reserved.

Maximum wireless signal rate derived from IEEE Standard 802.11 specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate.

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

\* Free basic installation support provided for 90 days from date of purchase. Advanced product features and configurations are not included in free basic installation support; optional premium support available.