

ANT-121-002 (-004)

Vandal Resistant 4G/5G Omni-Directional Antenna



Applications

- Kiosks
- Vending Machines
- Digital Signage
- Video Surveillance
- Point-of-Sale Terminals
- SCADA / Telemetry / PLCs



Product Features

- Vandal Resistant
- Low Profile ~ 3 inches Tall
- Weatherproof
- Compatible with all 4G, 5G, FirstNet Networks
- Compatible with most Cellular Modems/Routers
- 3 – 6 dBi Peak Gain
- Omni-Directional
- SMA Male Connector on Low-Loss Coax

Ordering Information

Part No.	Description
ANT-121-002	Vandal Resistant Low Profile 4G/5G Omni-Directional Screw Mount Antenna - 10 ft Coax Lead
ANT-121-004	Vandal Resistant Low Profile 4G/5G Omni-Directional Screw Mount Antenna – 18 in Coax Lead

General Description

This low profile (~3 inches tall) fixed mount omni-directional antenna is a solution for today's state-of-the-art multi-antenna wireless systems (5G & 4G/LTE). It offers 3 to 6 dBi of gain and support for all 4G/5G cellular frequency bands on AT&T, Verizon, T-Mobile, Bell, Rogers, Telus and other carriers worldwide.

Ideal for use in vending machines, meter housings, equipment sheds, NEMA enclosures or other locations requiring a low-profile vandal resistant external antenna. Also suitable for vehicle mounting on buses, vans, trucks or other mobile installations.

Permanently mounts via a 1/2 in. (13 mm) hole. Resists vandalism with no exposed coax cable, high impact ABS radome shell and a thick threaded mounting post. Includes low-loss LMR 195 coax fed through the center mounting post. Includes an "L" bracket for optional wall mounting. Completely waterproof (IP67).

Integrated SMA male plug connectors mate with SMA female jacks found on most cellular modems and routers. The 2 lead version of this antenna is part # ANT-121-M22 and the 4x4 MIMO version is ANT-121-M44

For optimum performance this antenna should be mounted on a flat, horizontal metal surface at least 8 inches in diameter.

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Electrical Specifications

Parameter	Rating
Frequency Range	600-6000 MHz - all 4G & 5G Sub-6 (FR1) Bands including FirstNet and CBRS (OnGo)
Gain	3 – 6 dBi frequency dependent
VSWR	≤ 2.0:1 in band
Input Impedance	50 Ohm
Polarization	Vertical
Max Input Power	50 W
DC Grounded	No
Ground Plane	8 inch (20 cm) diameter min

Mechanical Specifications

Connector Type	SMA Male (plug)
Cable Length	ANT-121-002: 10 ft (3 m) of LMR195 low-loss coax ANT-121-004: 18 in (0.5m) of LMR195 low-loss coax
Height	Radome: 3.2 inches (82 mm) above mounting surface Overall: 4.0 inches (102 mm)
Diameter	Radome: 1.9 inches (48 mm) at base Mounting post: 0.5 inches (12 mm x 1 mm extra fine thread)
Weight	6.2 oz (176 g excluding mounting bracket)
Materials	Radome: UV stabilized ABS plastic Connector: Brass with Nickel plating Mounting Bracket: Aluminum Adhesive Pad: Urethane Foam
Antenna Color	Black
Operating Temperature	-40°C to +70°C
Environmental Rating	IP67 (waterproof)

Operation of this device outside the parameter ranges given above may cause permanent damage.

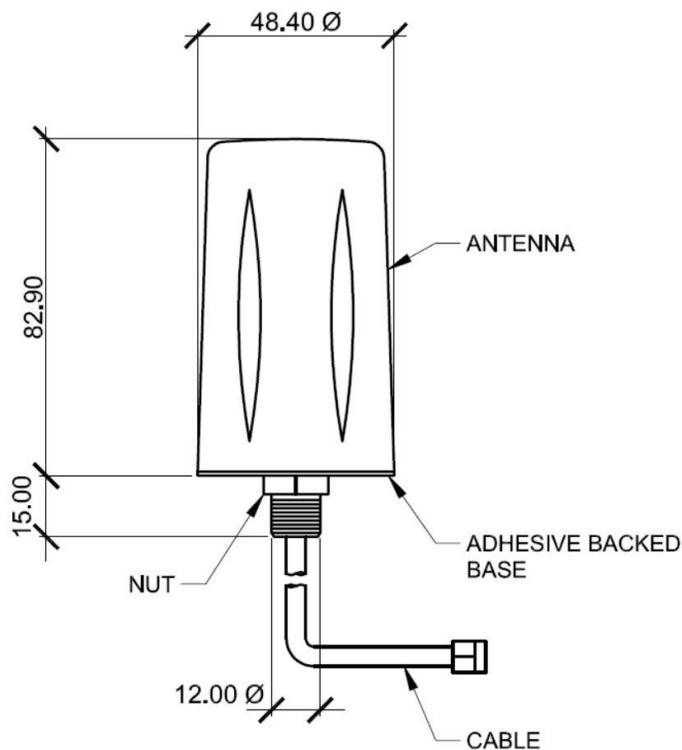
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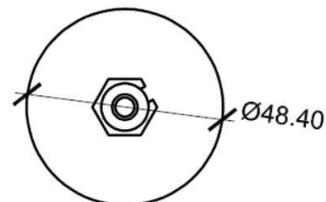


Mechanical Dimensions

NOTE: ALL DIMENSIONS IN MILLIMETERS (mm)



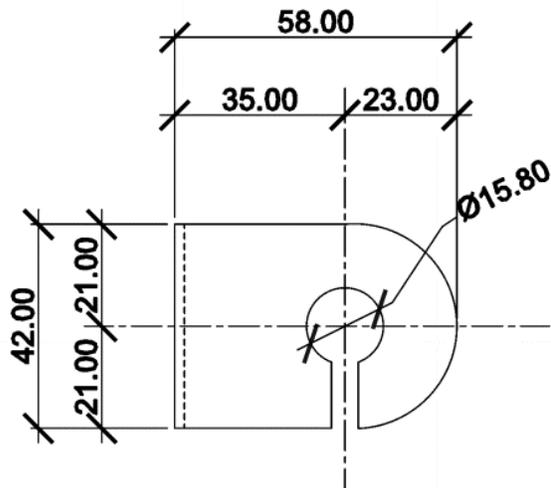
FRONT VIEW



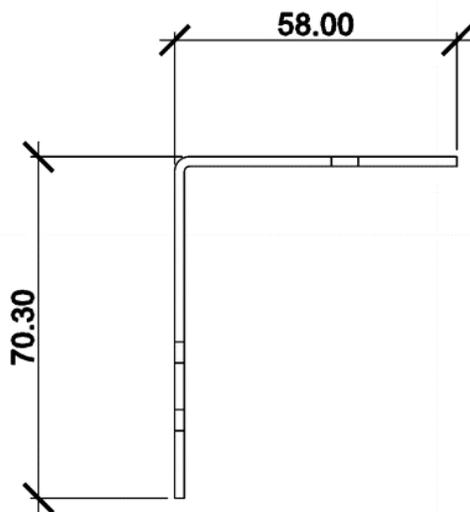
BOTTOM VIEW

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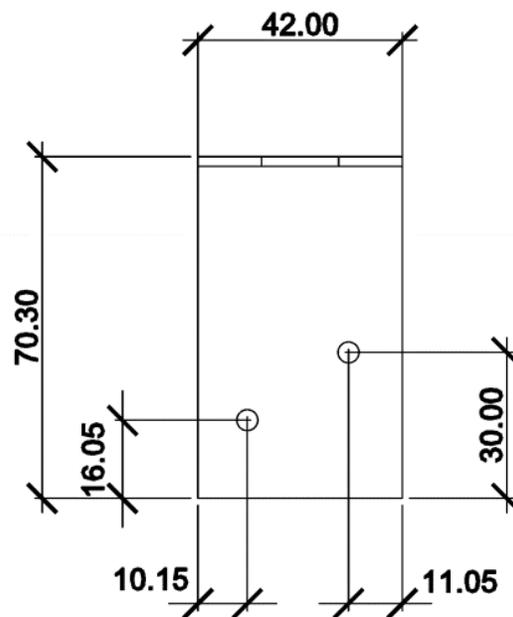
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PLAN VIEW



SIDE ELEVATION



FRONT ELEVATION

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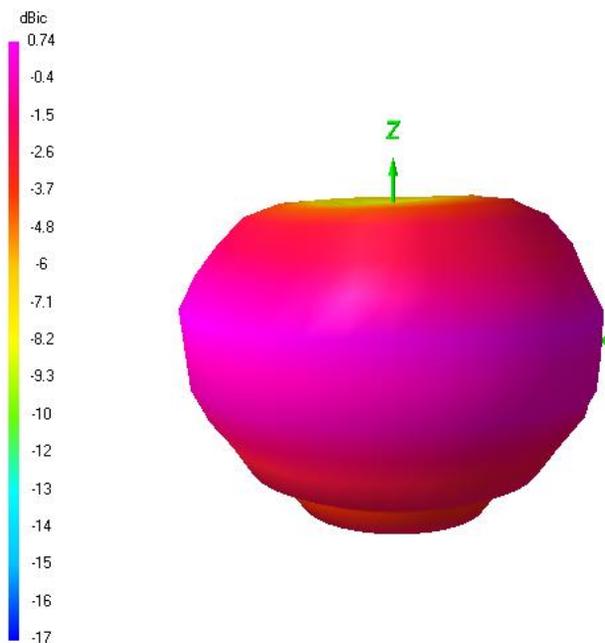
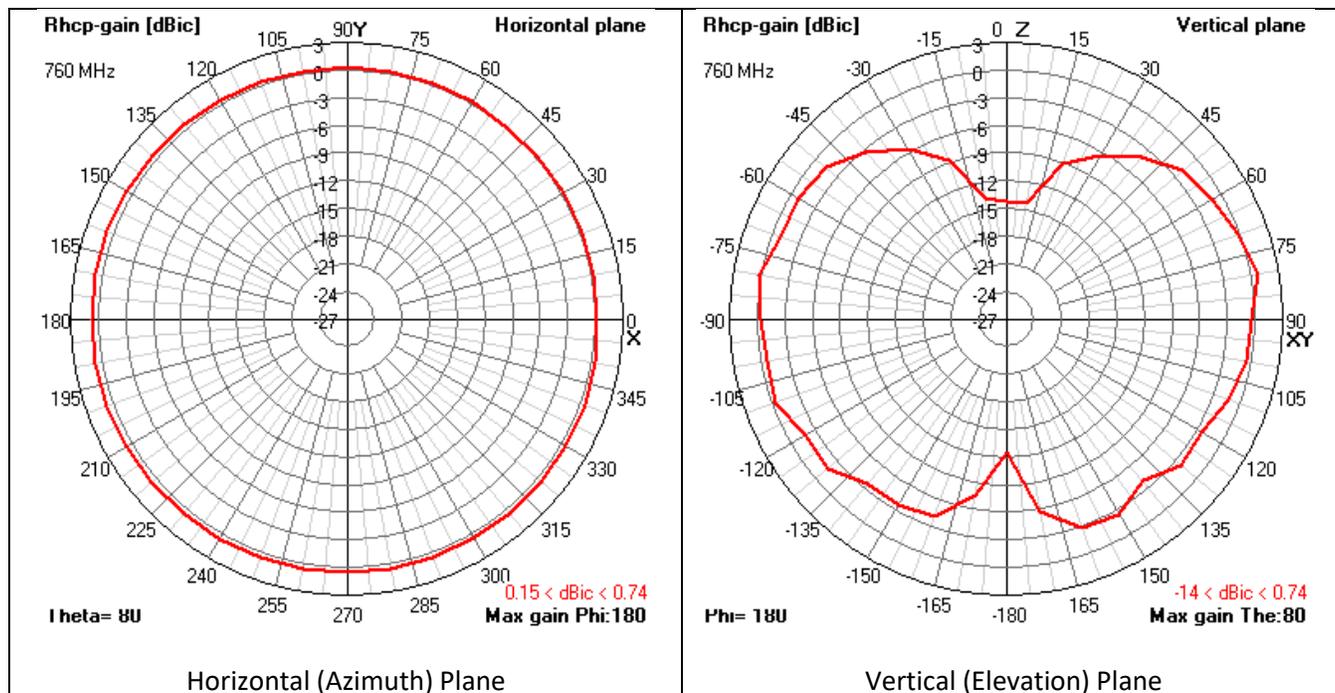


Additional Product Images



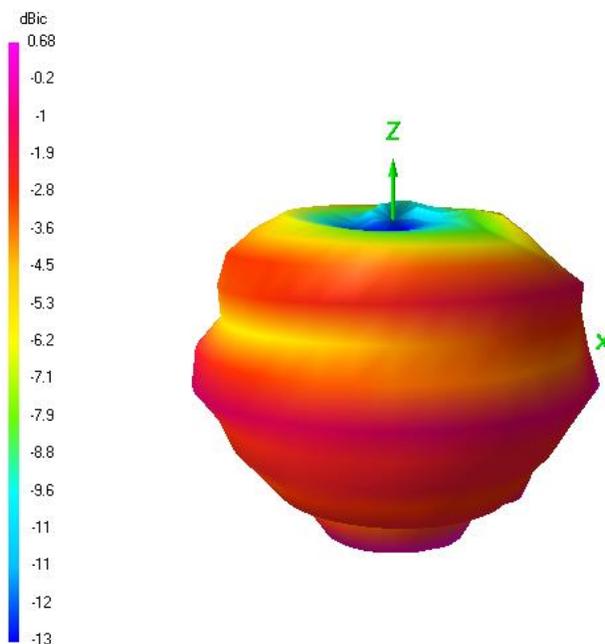
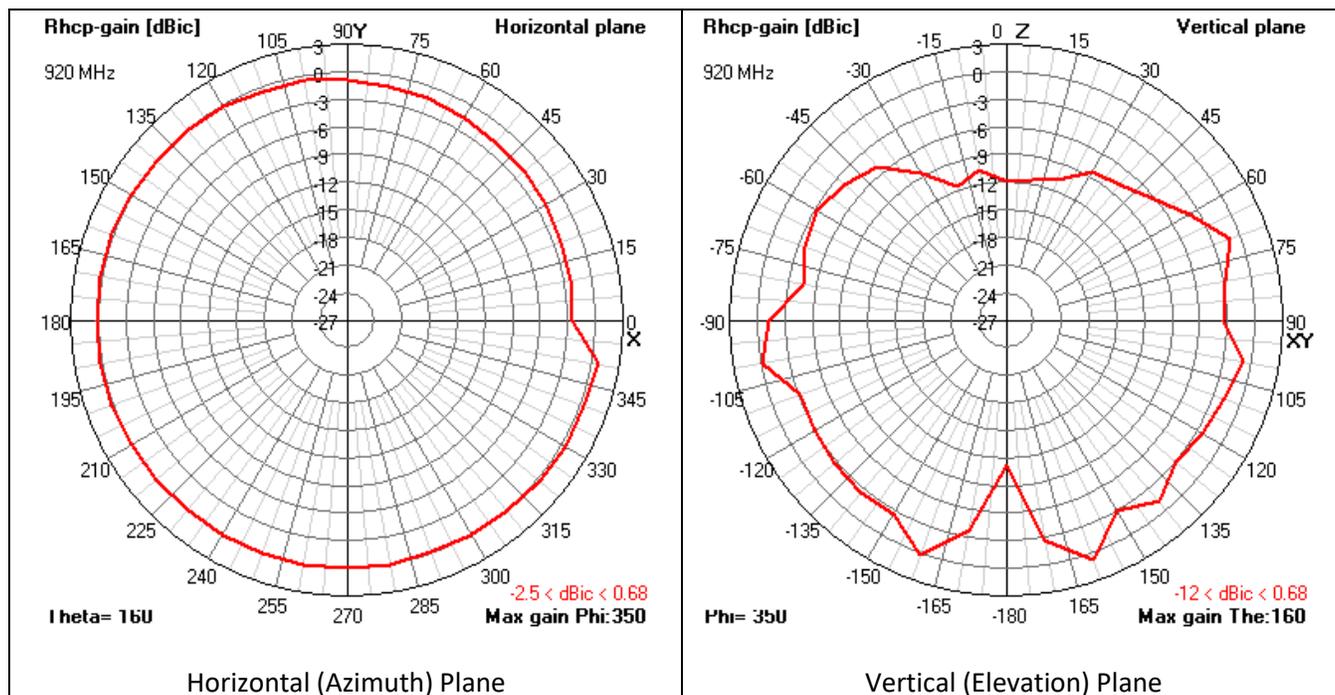
Radiation Patterns

760 MHz



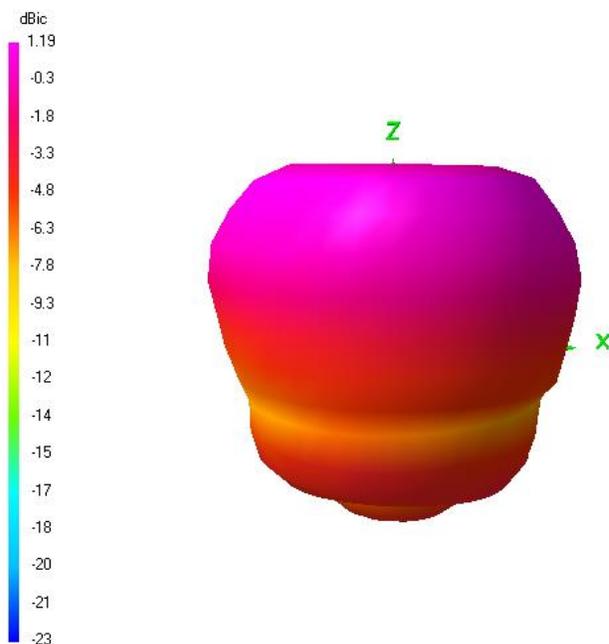
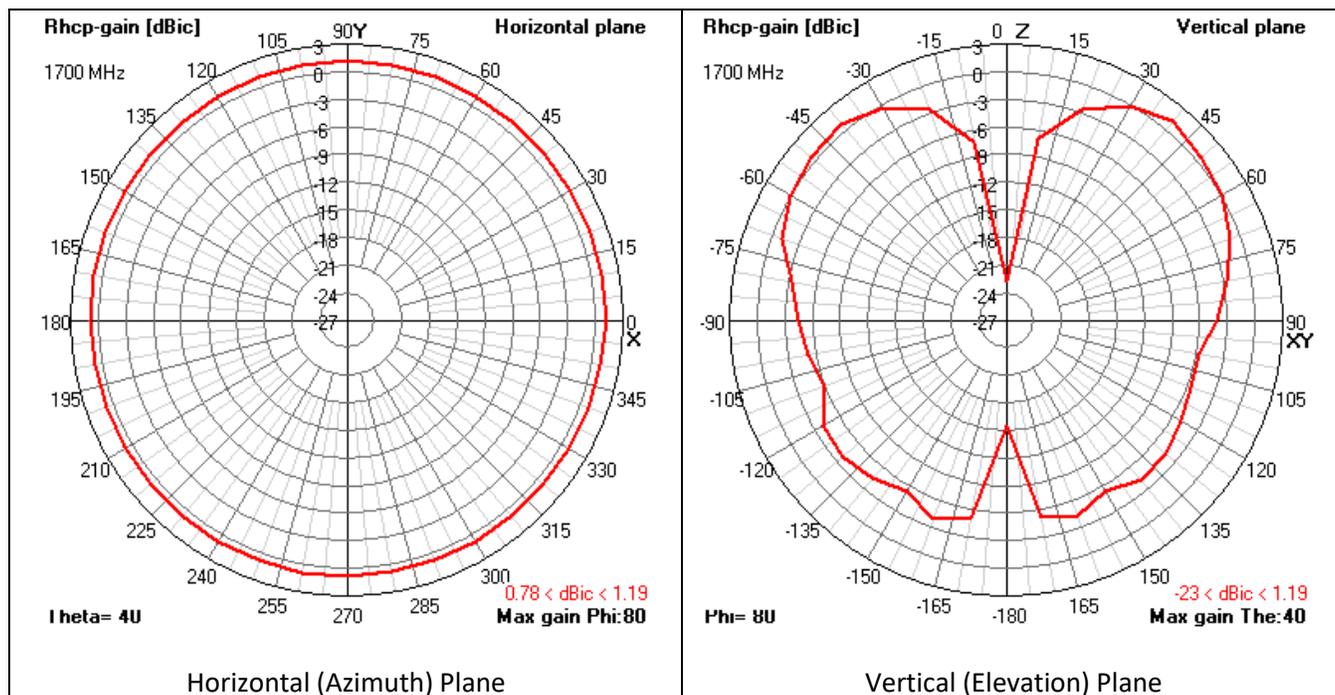
Radiation Patterns

920 MHz



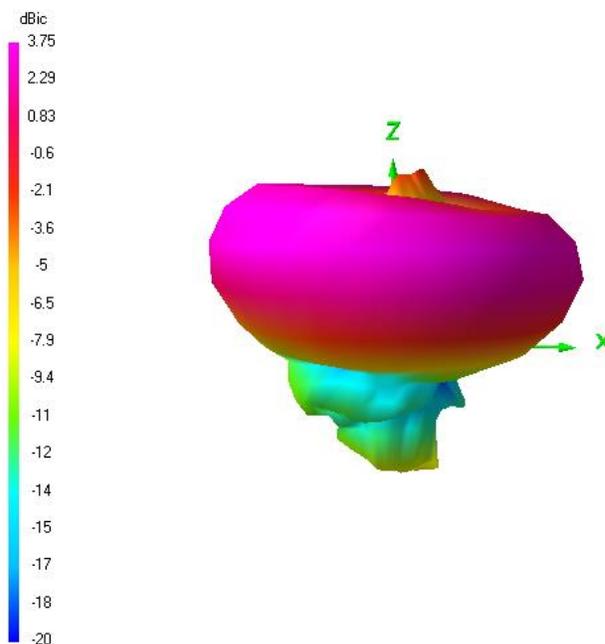
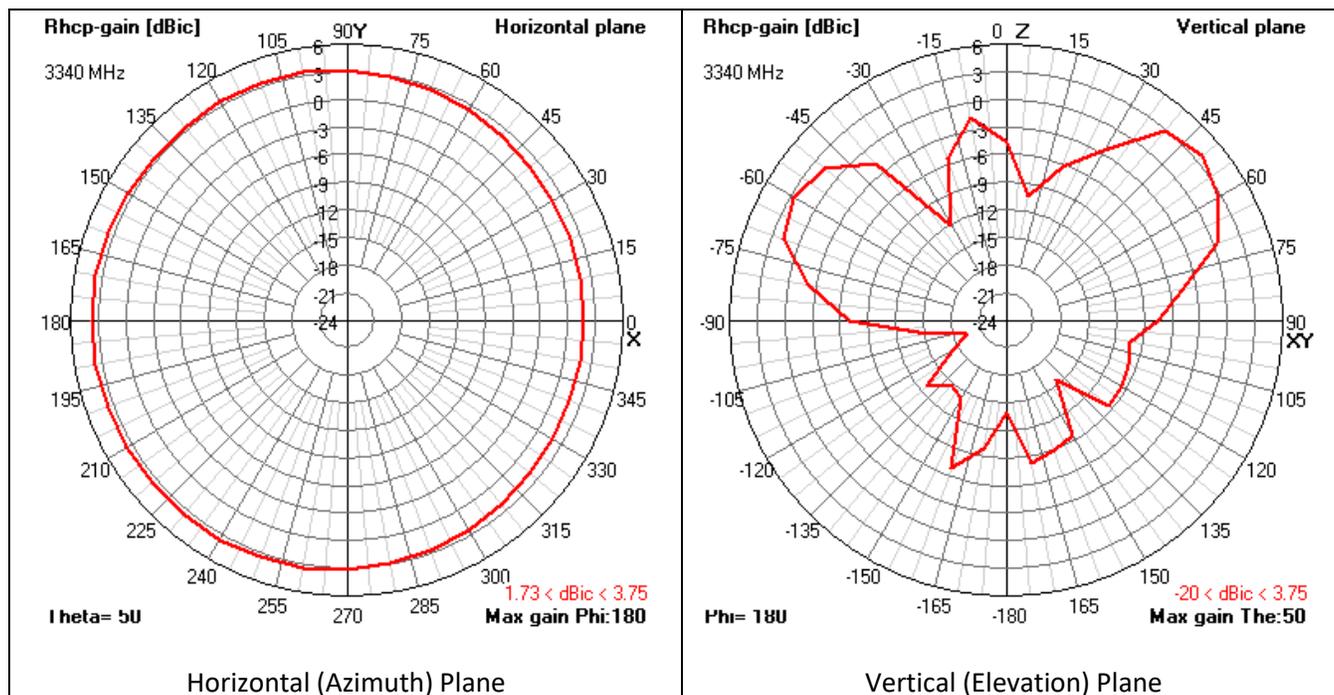
Radiation Patterns

1700 MHz



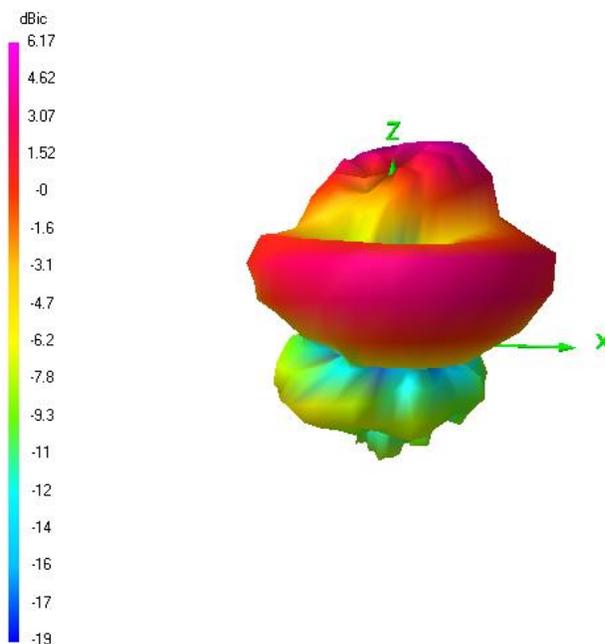
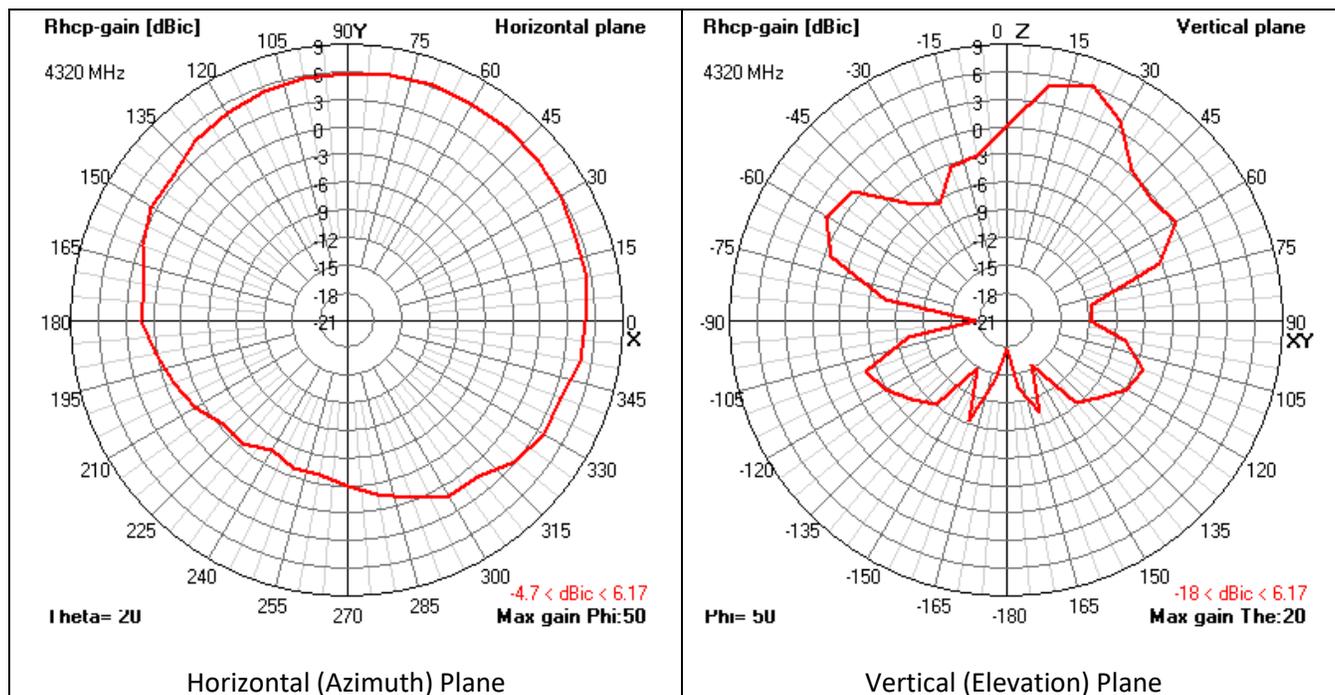
Radiation Patterns

3340 MHz



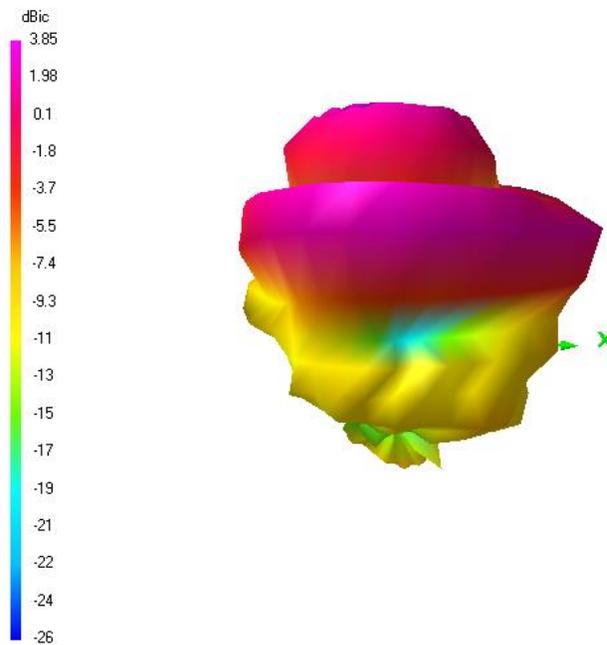
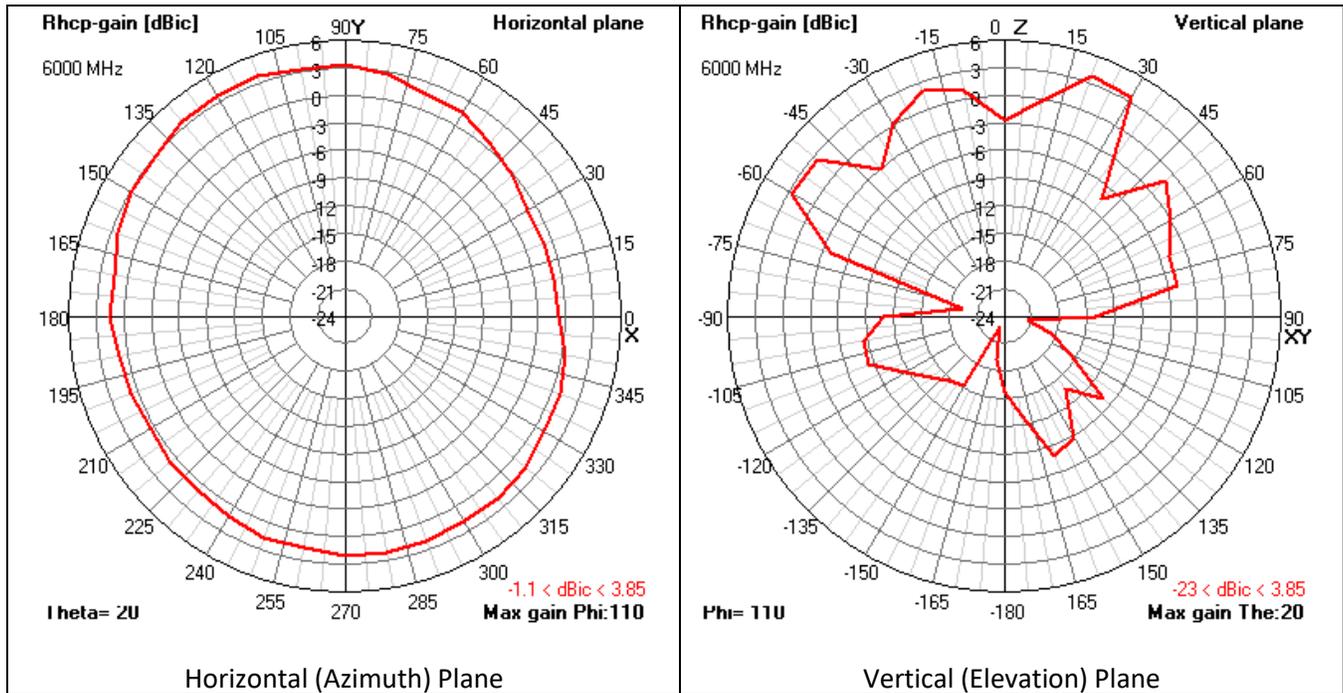
Radiation Patterns

4320 MHz



Radiation Patterns

6000 MHz



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Installation Instructions

- Position away from:
 - CRT/TVs
 - Lighting fixtures & motors
 - Other antennas & wireless devices
 - Low-E or tinted/coated windows
 - Large vertical metal or concrete objects
- Drill a 1/2" (13 mm) hole in flat horizontal surface
- Remove mounting nut & washer and feed coax cable through hole
- Remove bottom plastic liner to expose adhesive
- Press antenna into hole and tighten nut & washer from underneath
- Optionally apply a thin bead of silicone caulk around the antenna rim
- Use 2 identical antennas spaced 22 inches apart if modem supports diversity or MIMO
- Keep coax lead cable as short as possible & weatherproof all outdoor connectors

Contact Information

For the latest specifications, additional product information, worldwide sales and information about Proxicast:

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Email: sales@proxicast.com 1-412-213-2477

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