

ANT-510-221

4G/5G + Wi-Fi + GPS 5-in-1 MIMO Antenna (Gibraltar)



Applications

- Buses, Vans, Trucks
- Police / Fire / Ambulance Vehicles
- Trains
- Taxi Cabs
- Boats



Product Features

- Combines 2x 4G/5G + 2x Wi-Fi + 1x GPS antennas into a single streamlined enclosure
- Low Profile ~ 3 inches tall
- 2x2 MIMO on 4G/5G and WiFi 4/5/6/7
- Weatherproof & Impact Resistant
- Compatible with most Cellular/Wi-Fi/GPS Devices
- Omni-Directional 5 dBi Peak Gain
- 10 ft Low-Loss Coax Leads

Ordering Information

Part No.	Description
ANT-510-221	Gibraltar Low-Profile 4G/5G + Wi-Fi + GPS 5-in-1 Combination Screw Mount MIMO Vehicle Antenna

General Description

Proxicast's 5-in-1 4G/5G / Wi-Fi / GPS antenna (Gibraltar) is a low-profile, heavy-duty, multi-element design for use in fleet management, mobile video, remote monitoring and recreational vehicle applications that cost-effectively combines high efficiency and peak gain in a compact easy to install form factor.

With 2 Cellular and 2 Wi-Fi elements, it is ideally suited for 2x2 MIMO vehicular modems and routers. 4G/5G coverage includes all bands used by commercial and public safety operators worldwide (600 – 6000 MHz).

Wi-Fi elements cover the 2.4 GHz 802.11 b/g/n, 5 GHz 802.11 a/ac, and 802.11 ax/be 6/7 GHz bands. The 4.9 GHz public safety WLAN band is also supported. The GPS element has a 28 dB low noise amplifier (LNA) and covers the GPS L1 band.

The antenna has its own ground-plane and can radiate on any mounting surface like metal, plastic or fiberglass without affecting performance.

Each antenna element includes a 3 meter (9.8 ft) low-loss pre-terminated coax cable.

The durable ABS radome is impact resistant and fully IP67 waterproof.

Installation requires only a 1 in diameter hole. The included rubber gasket and mounting nut seal the opening from water and dust.

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Electrical Specifications

4G/5G Elements

Parameter	Rating
Frequency Range	600-960 MHz ~ 1710-4200 MHz ~ 4900-6000 MHz includes all 4G and sub-6 5G Bands including FirstNet & CBRS
Peak Gain	5/4/3 dBi x 2
VSWR	≤ 2.0:1
Input Impedance	50 Ohm
Polarization	Vertical
Max Input Power	50 W
DC Grounded	No

Wi-Fi Elements

Parameter	Rating
Frequency Range	2400-2500 MHz, 4900-7125 MHz
Peak Gain	4 dBi x 2
VSWR	≤ 2.0:1
Input Impedance	50 Ohm
Polarization	Linear
Max Input Power	50 W
DC Grounded	No

GPS Element

Parameter	Rating
Frequency Range	1575.42 MHz (L1 band)
Gain	Antenna: 5 dBi LNA: 28 ± 2dB Typical
VSWR	≤ 2.0:1
Ex-band Attenuation	2dB@CF+50MHz/16dB@CF-50MHz
Input Impedance	50 Ohm
Polarization	RHCP
Max Input Power	50 W
Noise Figure	1.5 dB
DC Voltage	2.7/3.0/3.3/5.0/3.0 to 5.0 etc.
DC Current	5 - 15mA
Current Consumption	11 mA (max)
DC Grounded	No

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Mechanical Specifications

Parameter	Rating
Connector Type	LTE: SMA Male (plug) Wi-Fi: RP-SMA Male (plug) GPS: SMA Male (plug)
Cable Length (all)	LTE & Wi-Fi: 9.8 ft (3 m) of RG58U low-loss coax GPS: 9.8 ft (3 m) of RG174 low-loss coax
External Ground Plane	Not Required
Height	3 inches (78 mm) above mounting surface
Diameter	Radome: 6.4 in x 5.8 x 3 inches (162 x 148.5 x 76.5 mm) max Mounting post: 1.0 in (26 mm)
Weight	2.6 lbs (1.2 kg)
Materials	Radome: ABS plastic Connector: Brass with Nickel plating Gasket: Rubber
Antenna Color	Black
Operating Temperature	-40°C to +85°C
Environmental Rating	IP67 (waterproof)

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

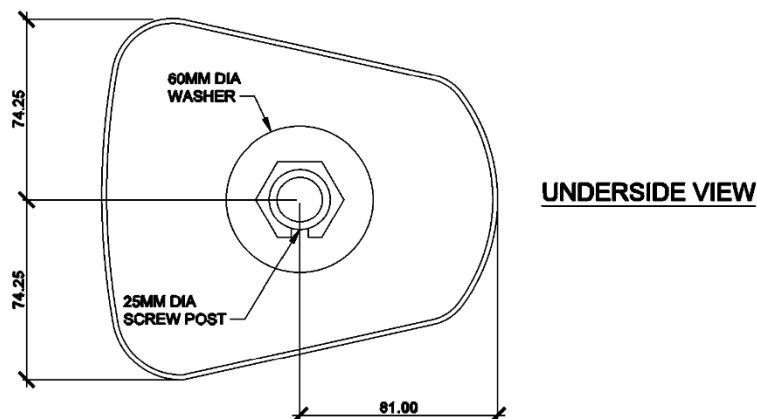
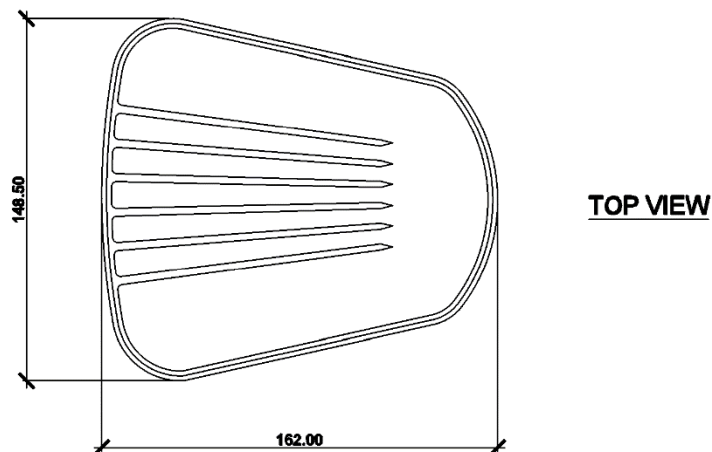
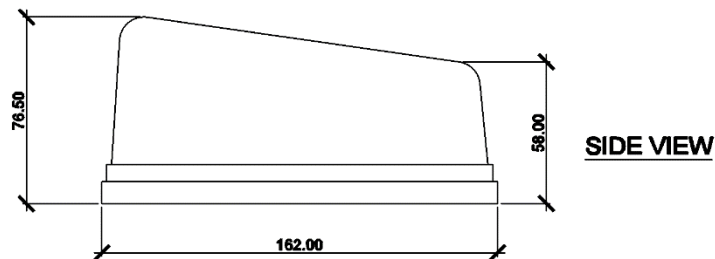
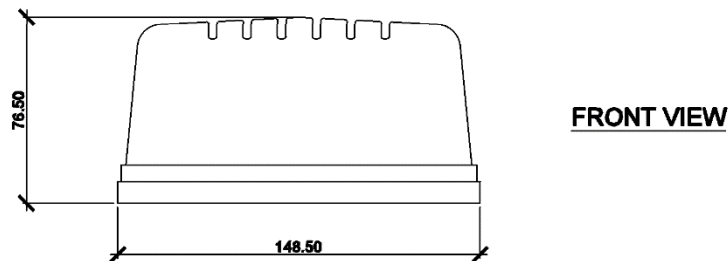
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Mechanical Dimensions

Dimensions in mm



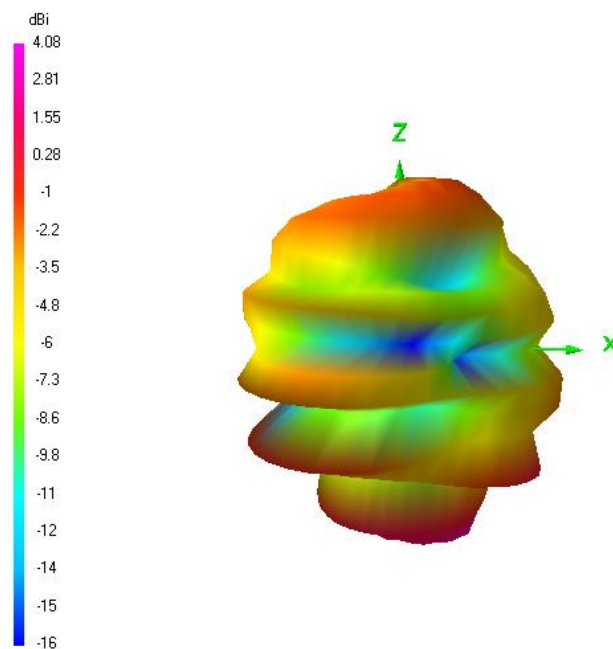
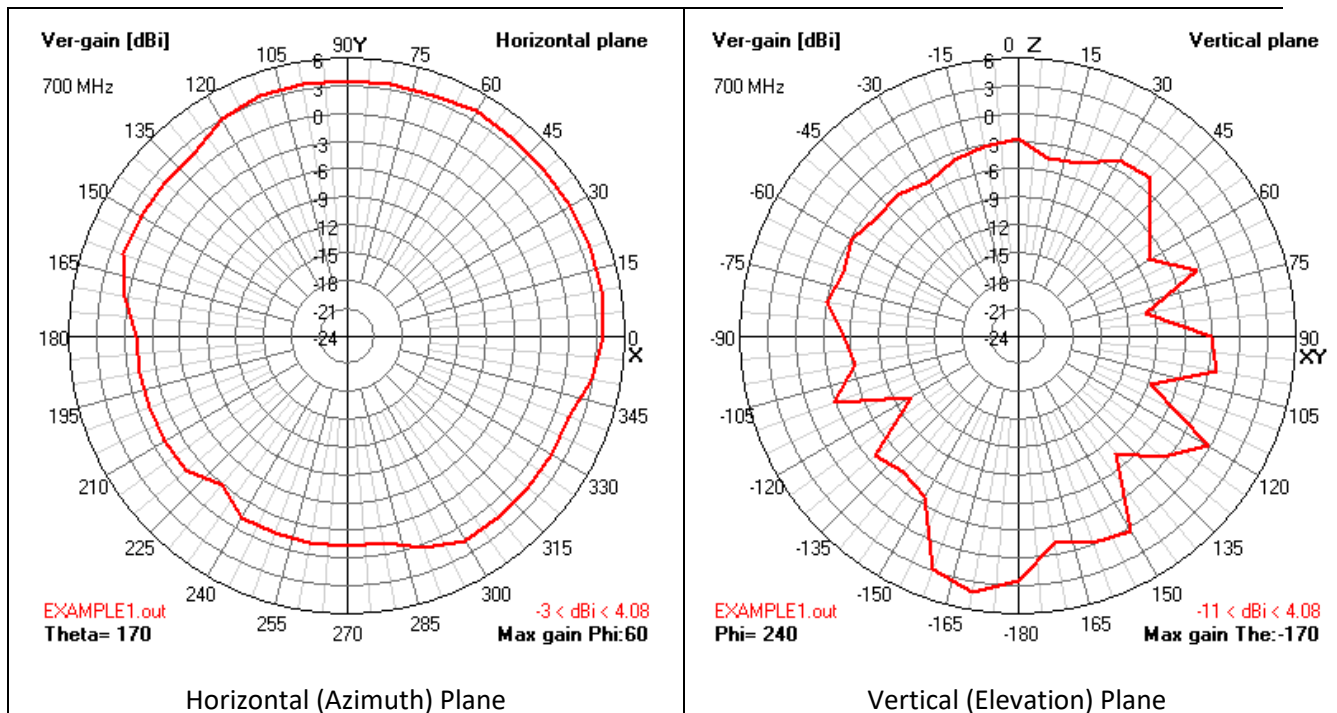
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Cellular Radiation Patterns

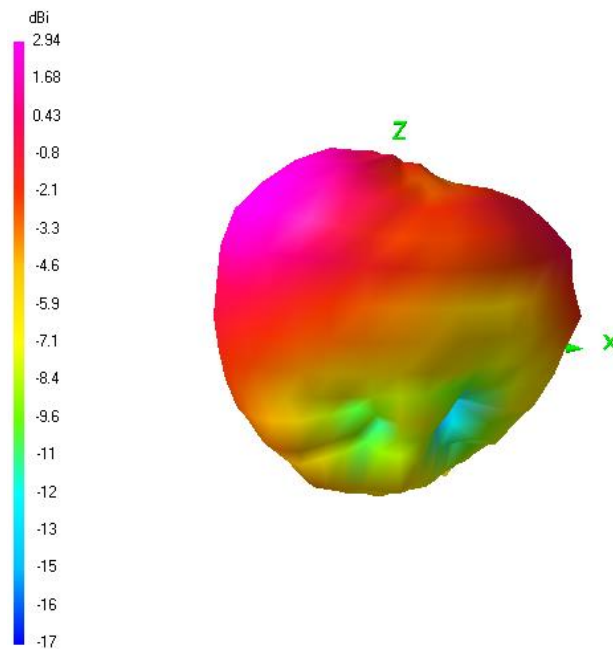
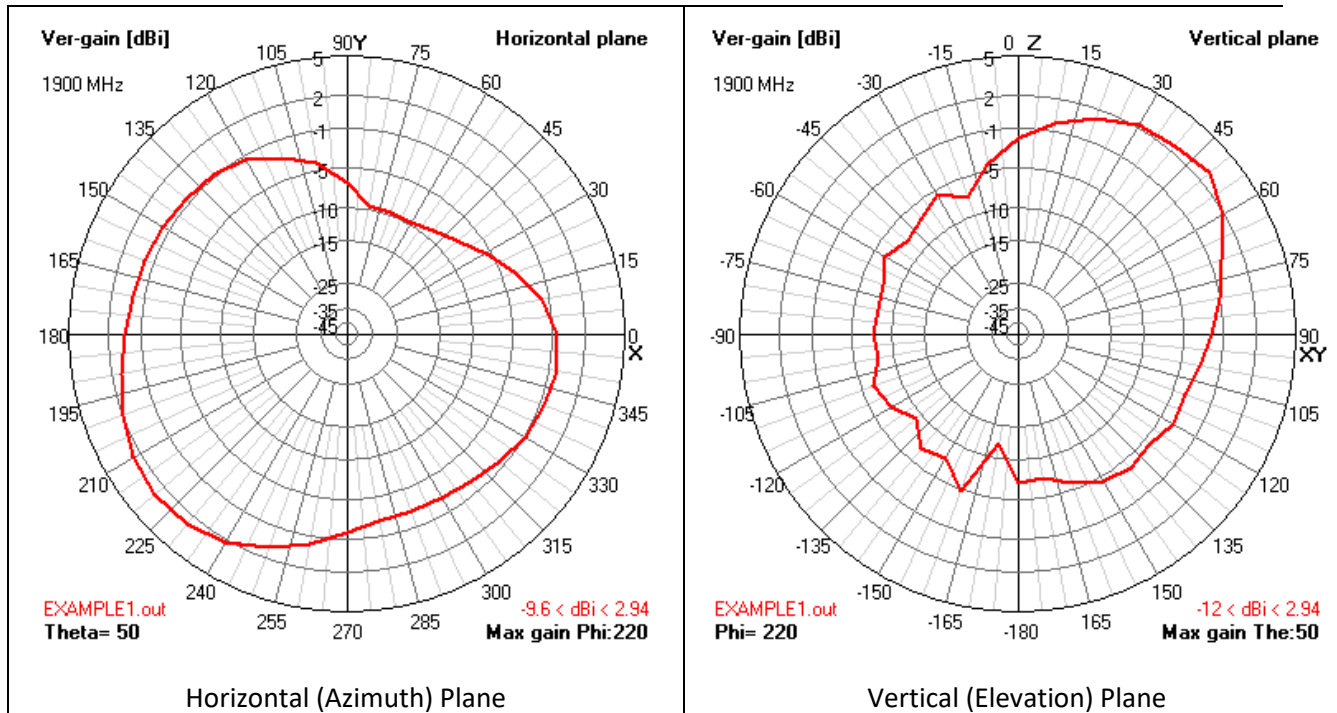
700 MHz



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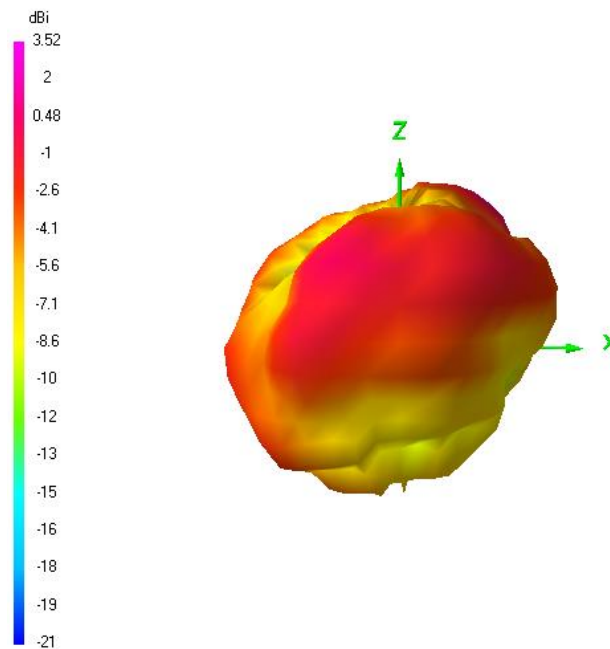
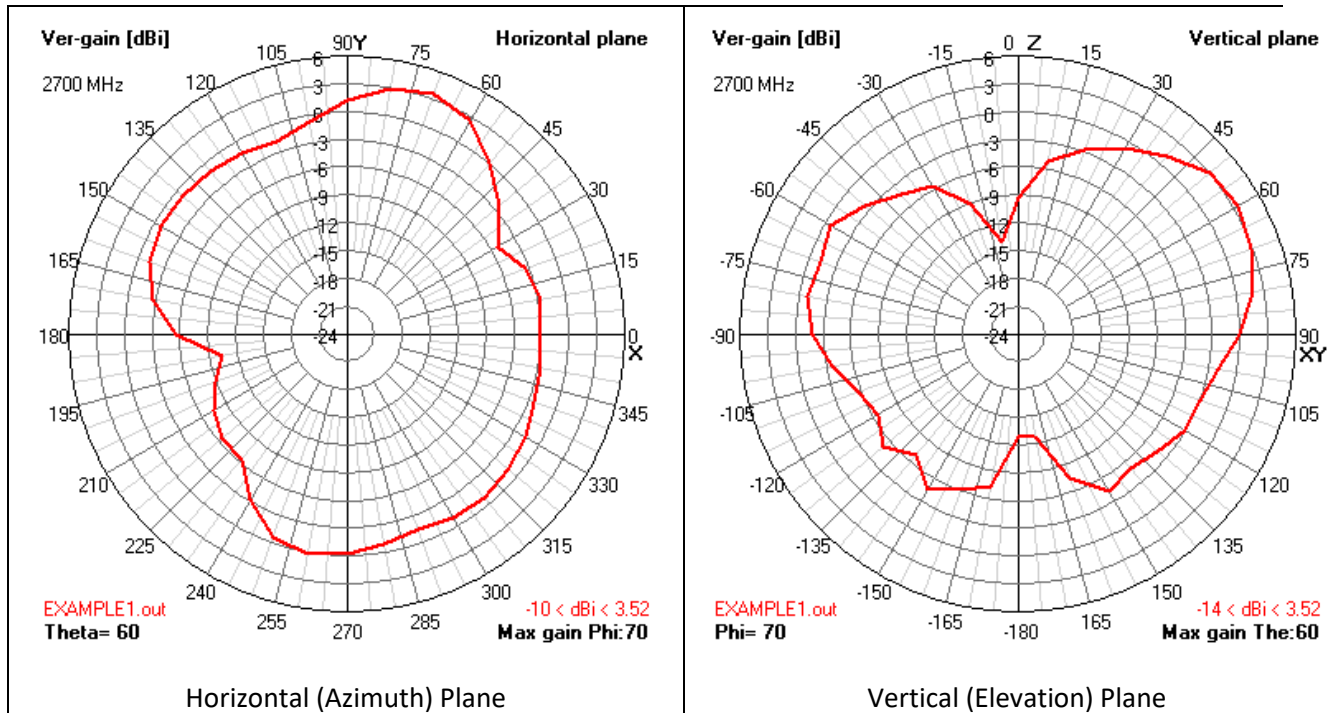
1900 MHz



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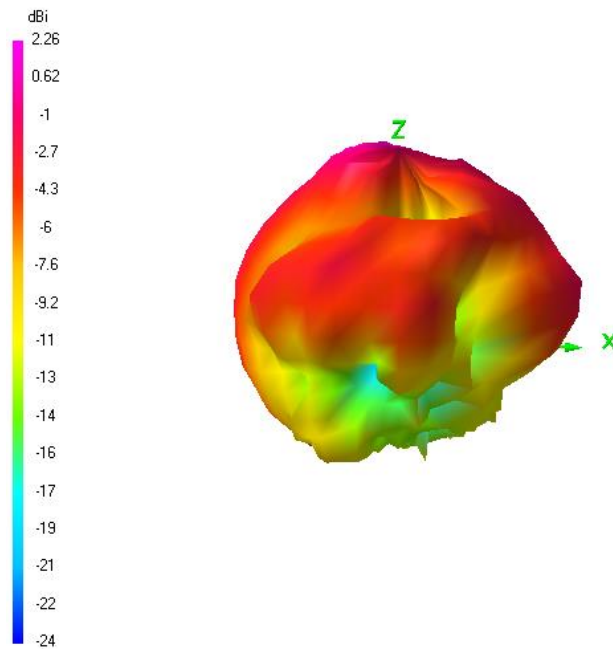
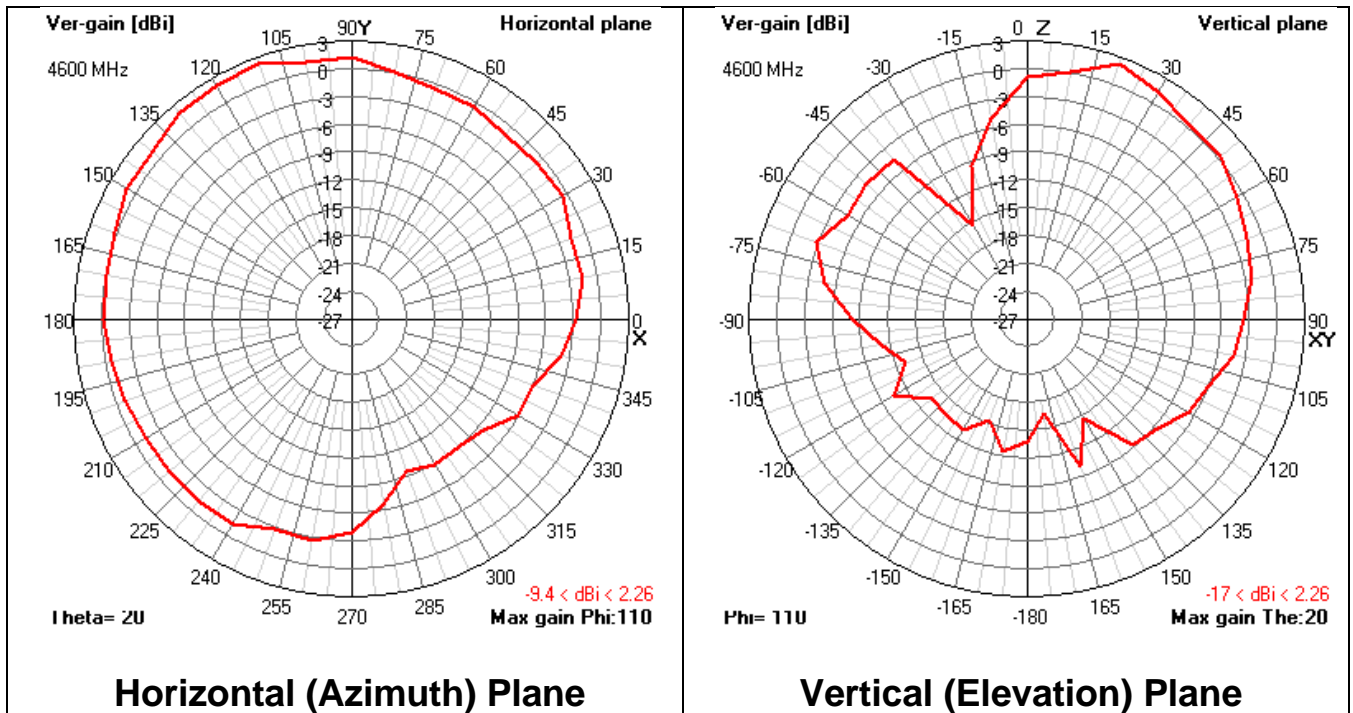
2700 MHz



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4600 MHz



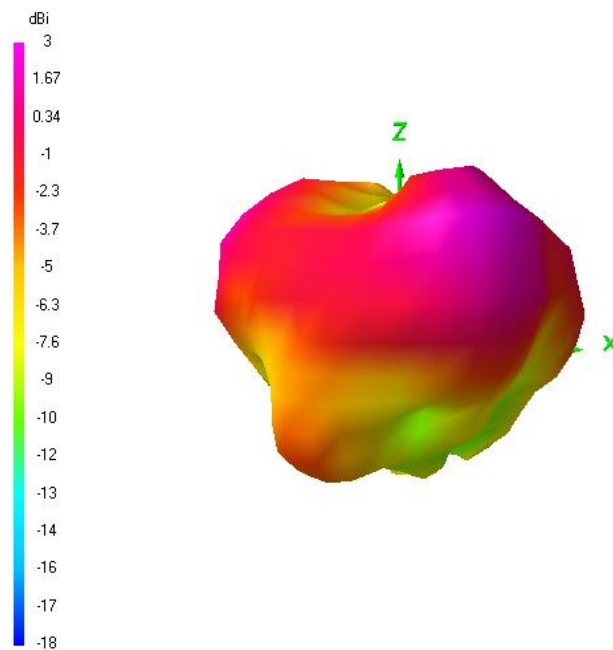
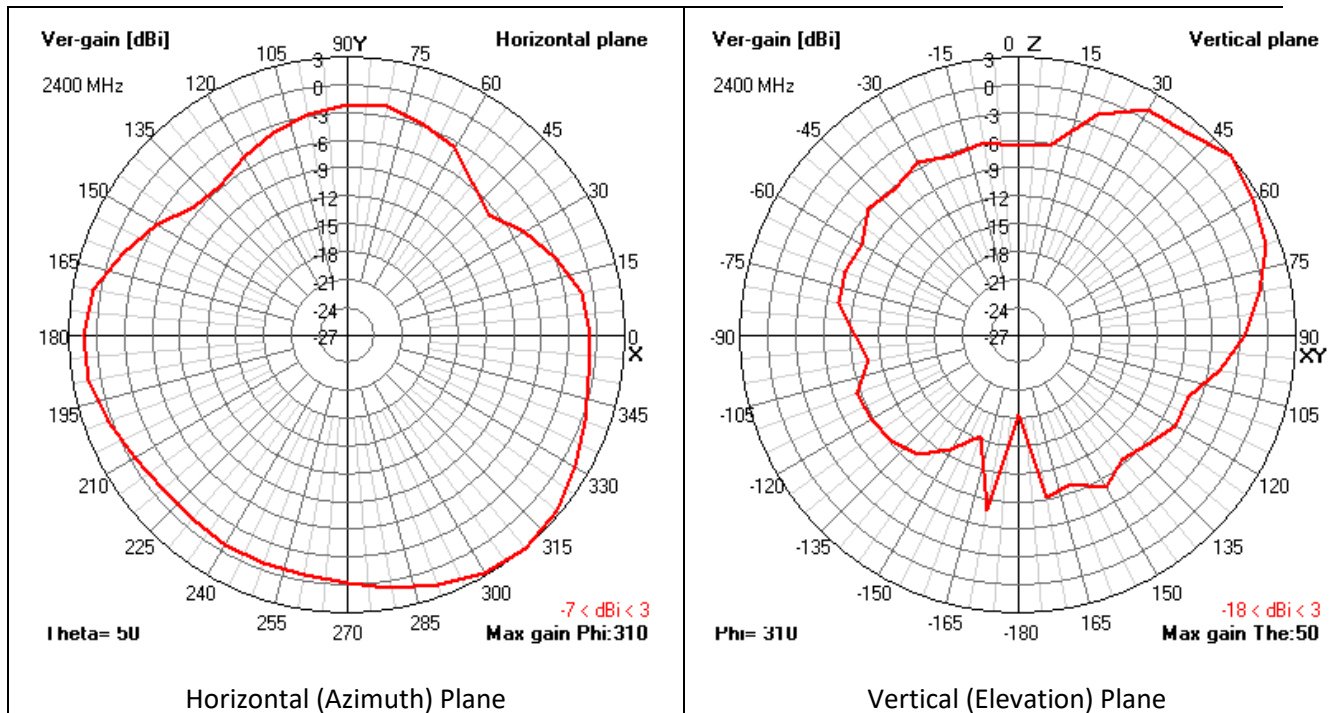
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WiFi Radiation Patterns

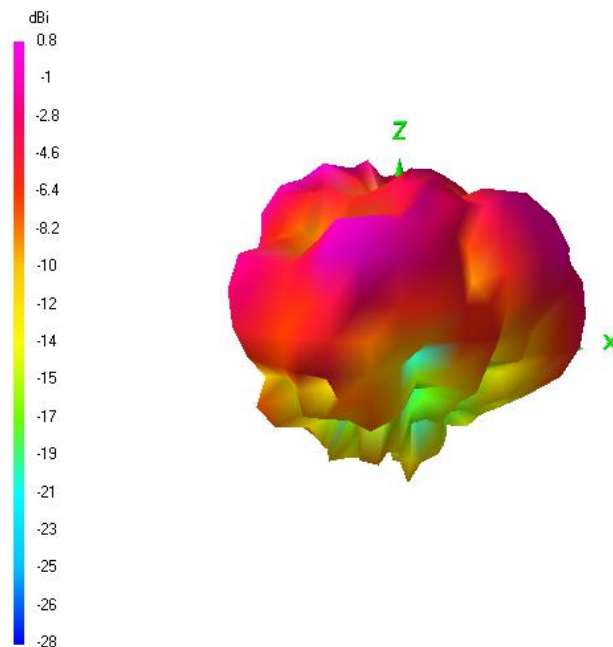
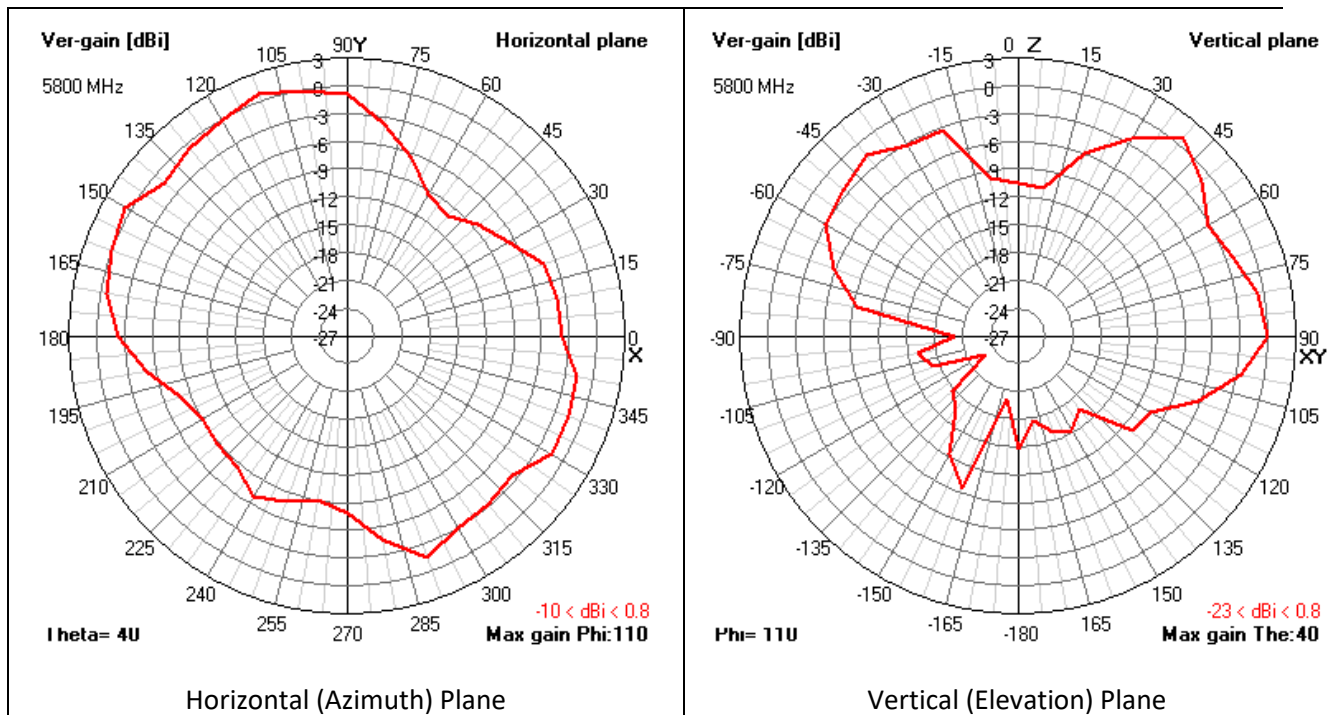
2400 MHz



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5800 MHz



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Product Images



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Installation Instructions

- Drill a 1" (26mm) hole in flat horizontal surface
- Remove mounting nut & washer and feed coax cables through hole
- Press antenna into hole and tighten nut & washer from underneath
- Optionally apply a thin bead of silicone caulk around the antenna rim

Contact Information

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Email: support@proxicast.com

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