

ANT-500-221

Low-Profile LTE + Wi-Fi + GPS 5-in-1 MIMO Antenna



Applications

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



Product Features

- Combines 2 LTE + 2 Wi-Fi + 1 GPS antennas into a single streamlined enclosure
- Ultra Low Profile ~ 1.26 inches tall
- 2x2 MIMO on 3G/4G/LTE and 2.4/5.8 GHz WiFi
- Weatherproof & Impact Resistant
- Compatible with most Cellular/Wi-Fi/GPS Devices
- Omni-Directional 3 dBi Peak Gain
- 16 ft Low-Loss Coax Leads

Ordering Information

Part No.	Description
ANT-500-221	Professional Low-Profile LTE + Wi-Fi + GPS 5-in-1 Combination Screw Mount MIMO Vehicle Antenna

General Description

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

Featuring 2 LTE and 2 Wi-Fi elements, it is ideally suited for 2x2 MIMO vehicular modems and routers. LTE coverage includes all bands used by commercial and public safety operators worldwide. Wi-Fi elements cover 2.4 GHz 802.11 b/g/n, 5 GHz 802.11 a/ac and 4.9 GHz public safety WLAN bands. The GPS element has a low noise amplifier (LNA) and covers the GPS L1 band.

Each antenna element includes a 5 meter (16.4 ft) low-loss pre-terminated coax cable.

The durable ABS radome has the lowest profile of any combo antenna and is fully waterproof.

Installation requires only a 1.25 in diameter hole. The included rubber gasket, adhesive pad and mounting nut seal the opening from water and dust.

A version of this antenna without Wi-Fi support is also available. See part number ANT-500-201.

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Electrical Specifications

LTE Elements

Parameter	Rating
Frequency Range	698-960 / 1710-2700 MHz includes all 2G, 3G, 4G, LTE Bands
Gain	3 dBi x 2
VSWR	≤ 2.0:1
Input Impedance	50 Ohm
Polarization	Vertical
Max Input Power	50 W
DC Grounded	Yes

Wi-Fi Elements

Parameter	Rating
Frequency Range	2.4 GHz & 5.8 GHz Bands
Gain	3 dBi x 2
VSWR	≤ 2.0:1
Input Impedance	50 Ohm
Polarization	Vertical
Max Input Power	50 W
DC Grounded	Yes

GPS Element

Parameter	Rating
Frequency Range	1575.42 MHz (L1 band)
Gain	28 ± 2dB Typical
VSWR	≤ 2.0:1
Input Impedance	50 Ohm
Polarization	RHCP
Max Input Power	50 W
Noise Figure	1.5 dB
DC Voltage	2.2 - 5.0V
DC Current	5 - 15mA
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: 16.4 ft (5 m) of RG58U low-loss coax GPS: 16.4 ft (5 m) of RG174 low-loss coax
Recommended Ground Plane	8 inch (20 cm) diameter min
Height	1.26 inches (32 mm) above mounting surface
Diameter	Radome: 5.7 inches (143.6 mm) at base Mounting post: 1.25 inches (31 mm)
Weight	2.6 lbs (1.2 kg)
Materials	Radome: UV stabilized ABS plastic Connector: Brass with Nickel plating Adhesive Pad: Urethane Foam
Antenna Color	Black
Operating Temperature	-40°C to +85°C
Environmental Rating	IP67 (waterproof)

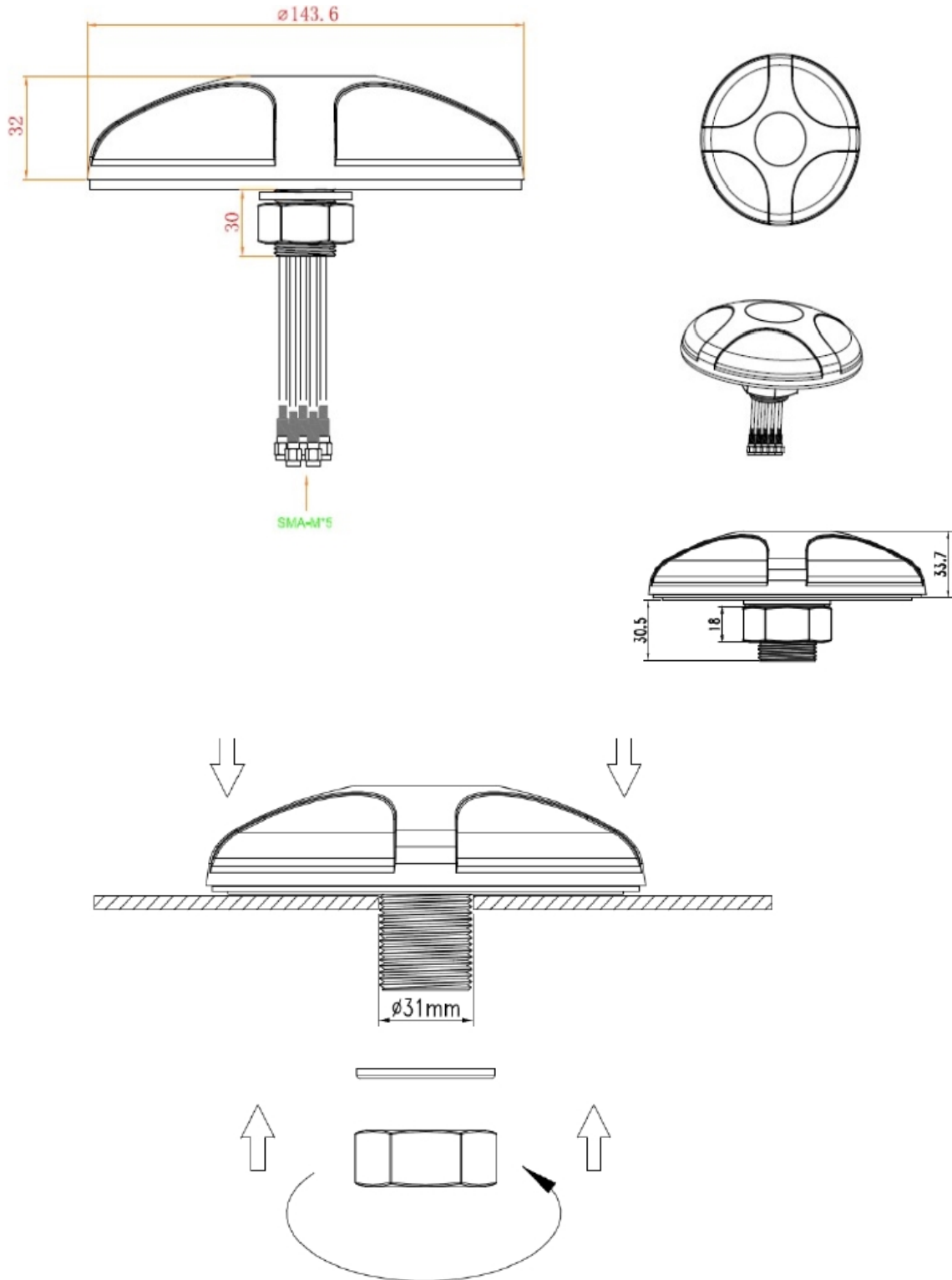
Operation of this device outside the parameter ranges given above may cause permanent damage.

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Mechanical Dimensions



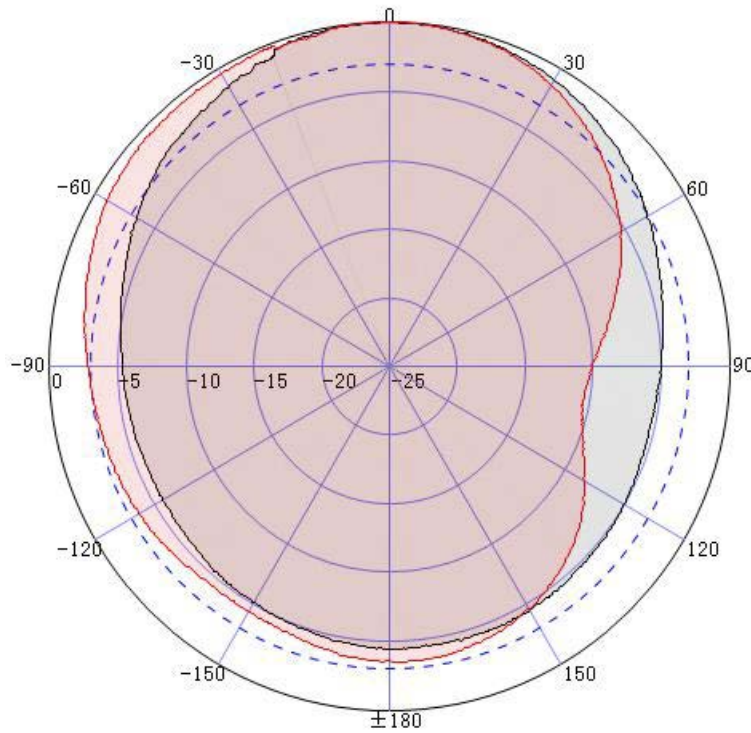
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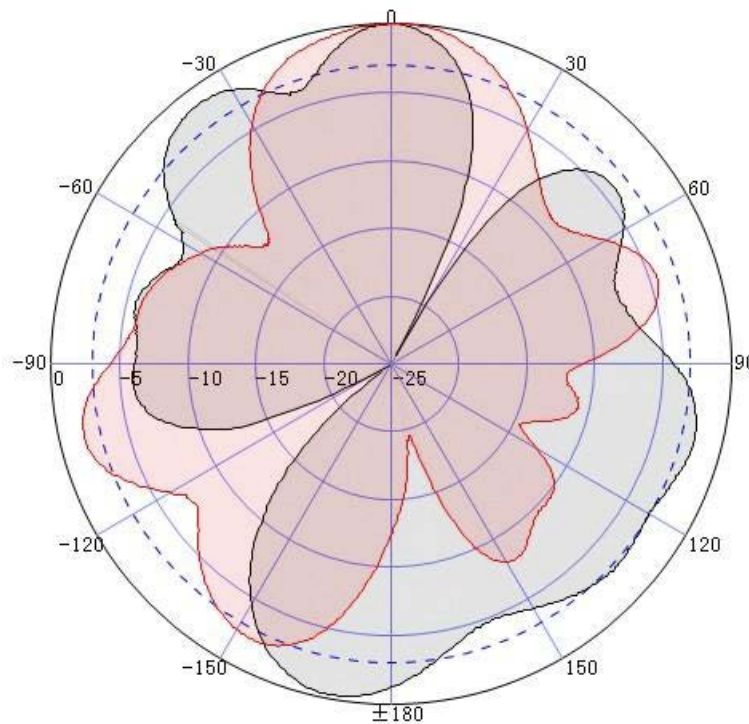


Radiation Patterns

698 MHz



2170 MHz

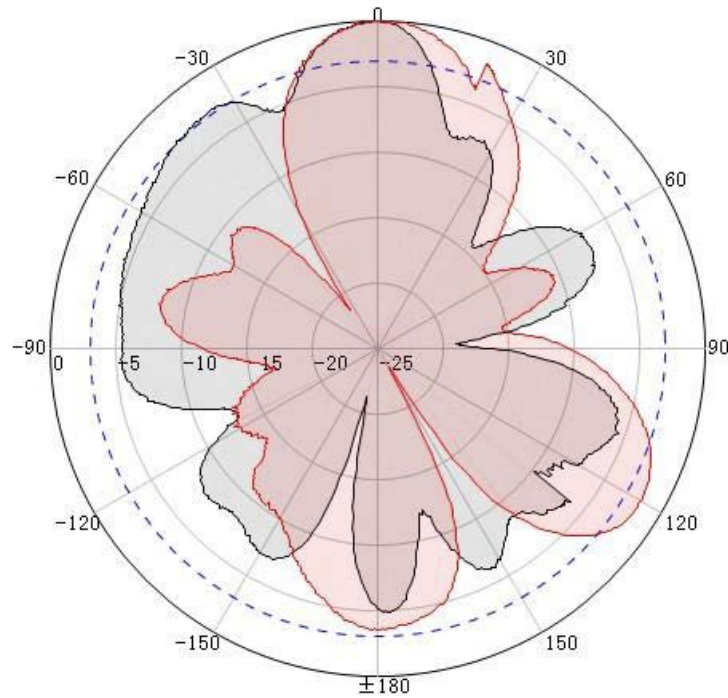


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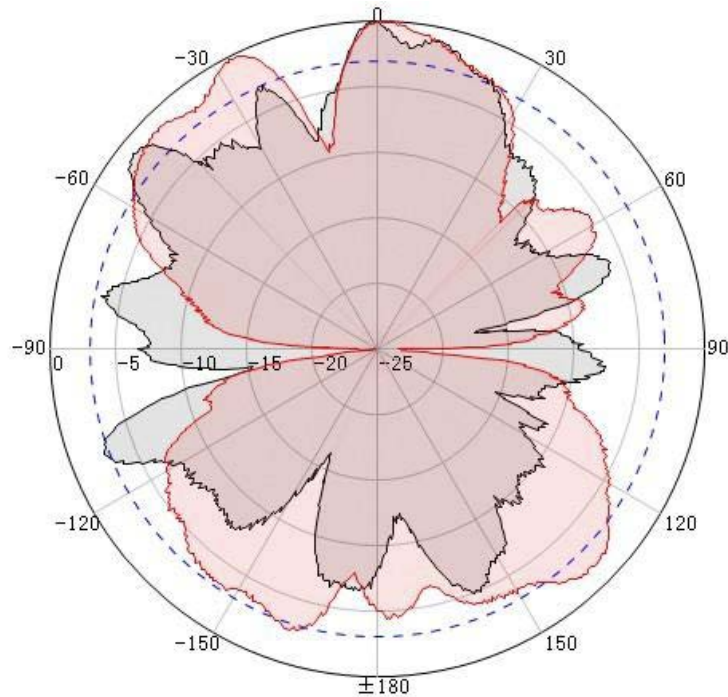
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2450 MHz



5850 MHz



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Product Images



Installation Instructions

- Drill a 1.25" (31mm) hole in flat horizontal metal surface
- Remove mounting nut & washer and feed coax cables 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

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Contact Information

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