2.4GHz & 4.9/5GHz Drone-Robot Antennas

Ultralight Flexible Omni Antennas

Rajant Kinetic Mesh® technology powers the 2.4GHz and 4.9/5GHz Drone-Robot Antennas. These antennas are the latest in multi-polarized antenna technology, providing superior patterning and continuous performance for UAV and Drone Links requiring a lightweight solution.

Drone-Robot Antenna Key Features

- Multi-polarized antennas feature three-dimensional designs and built-in spatial and polarization diversity.
- Excellent for providing superior patterning and continuous performance for wireless communications on UAVs, drones, UGVs, and AGVs.
- Ideal for Non Line Of Sight (NLOS) communications and highly obstructed deployments.
- < 1.5:1 VSWR
- Frequency Range: 2.4GHz-2.5GHz or 4.9GHz-6GHz
- Features Gooseneck Style Coax Pigtail
- Is ultralight weight and offers a reduced footprint
- Has maximum signal stability and is multi-polarized
- Has built-in spatial diversity
- IP67 Rated
- Temperature Range:
  - Operation Temp. -40 to 85 deg. C
  - Storage Temp. -40 to 85 deg. C
  - Transport Temp. -40 to 85 deg. C

The 2.4 GHz (right) and 4.9/5GHz (left) Drone-Robot Antennas are the latest in multi-polarized antenna technology, providing superior patterning and continuous performance.

Providing Consistent Voice and Data Communications in Any Situation

The Drone-Robot Antenna is one of the most advanced antennas on the market today. Multi-polarized antennas feature three-dimensional designs and built-in spatial and polarization diversity, providing users with consistent voice and data communications.

These antennas use the latest technologies to improve signal strength, penetration, and connectivity in the most dynamic environments. They outperform all other purported non-line-of-sight (NLOS) antennas in quality, connectivity, and reliability while providing network users with increased data throughput, enhanced voice clarity, and multi-path mitigation.

The Drone-Robot Antenna has a frequency range of either 2.4-2.5GHz or 4.9-6GHz, and is excellent for providing superior patterning and continuous performance for wireless communications on UAVs, drones, UGVs, and AGVs. The omnidirectional antenna is ideal for NLOS communications and highly obstructed deployments. The compact antenna provides increased throughput and signal stability in challenging environments and increases range and performance over standard dipole or singularly polarized antennas. It allows users to transmit and receive in real world environments where other antennas fail to connect.

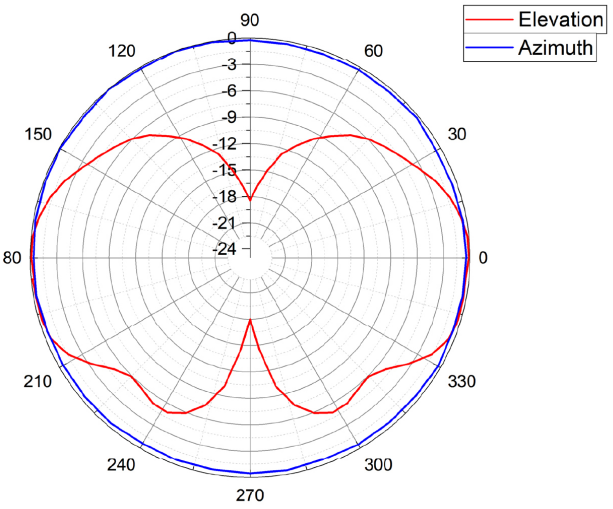
Model	Description
75-100156-002	Drone/bot 2.4GHz antenna, omnidirectional, multi-polarized, 2.4GHz, 4 dBi, SMA (male) connector
75-100156-001	Drone/bot 4.9/5GHz antenna, omnidirectional, multi-polarized, 4.9GHz-6GHz, 4 dBi, SMA (male) connector

Wireless	2.4 GHz	4.9/5 GHz
Frequency Range	2.4GHz-2.5GHz	4.9GHz-6.0GHz
Max Gain	4dBi	
VSWR	< 1.5:1	
Horizontal Pattern	Omnidirectional	
Ground Plane	Built-In	

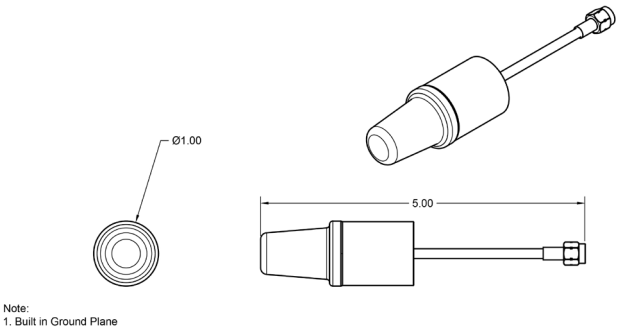
Power	2.4 GHz	4.9/5 GHz
Power Input	50 Watts	
Impendance	50 ohms nominal	

Physical	2.4 GHz	4.9/5 GHz
Weight	20 g (0.70 oz)	25 g (0.90 oz)
Length	127 mm (5.0 in.)	
Diameter	25.4 mm (1.0 in.)	
Color	Black	
Antenna Feeds	1	
Connector Type	SMA Male	
Coax Type	RG402	
Coax Minimum Bend Radius (Repeated)	38.1 mm (1.5 in.)	
Coax Minimum Bend Radius (Installation)	6.35 mm (0.25 in.)	
Polarization	Multi-Polarized	
Construction	ABS, Aluminum	
Environment	Fully Sealed IP67 (6: Dust-Tight, 7: Waterproof) Outdoor Design	
Compliance	RoHS Reach Compliant	

2.4GHz Antenna



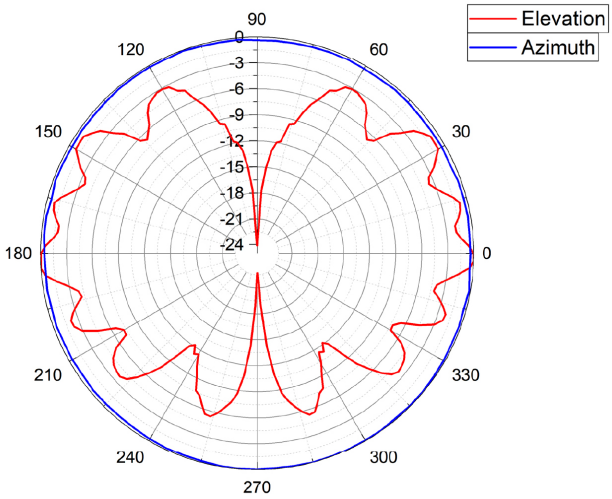
Radiation Patterns



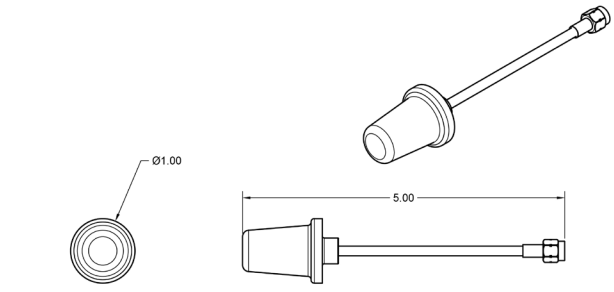
Note:
1. Built in Ground Plane

Technical Drawing

4.9/5GHz Antenna



Radiation Patterns



Note:
1. Built in Ground Plane

Technical Drawing

20+ Years OF GAME-CHANGING WIRELESS

RAJANT
INTELLIGENT EDGE
Enabling Industrial AI