

4.4 GHz to 5.9 GHz, Bifilar Omni Antenna,  
RHCP with 3.75 dBi Gain, Ultra Flex Spring  
SMA Male and Black G10 Radome



## PEANOM1172

### Features

- Bifilar Omni Antenna
- 4.4 GHz to 5.9 GHz
- 3.75 dBi Gain
- 3 Turn (3T) Bifilar
- RHCP
- Ultra Flex Spring
- SMA Male
- Black G10 Radome
- Made in USA

### Applications

- Ground-to-Air Communication
- Unmanned Vehicles
- Autonomous Vehicles
- Video Relay
- Rugged, Harsh, Hostile Environments

### Description

The PEANOM1172 from Pasternack is a bifilar omni antenna designed for ground-to-air vehicle communication, including manned and unmanned aircraft. This omnidirectional antenna has an SMA male connector. Our single-band antenna can operate at frequencies ranging from 4.4 to 5.9 GHz. This antenna is stocked to be readily available for same-business-day shipment.

This C-band antenna with RHCP polarization has an impedance of 50 Ohms and a maximum input power of 20 Watts. Our bifilar antenna comes with a black G10 fiberglass radome of 0.812-inch diameter that provides a protective covering without compromising the antenna system's performance. Pasternack's PEANOM1172 single-band antenna has a maximum gain of 3.75 dBi. This antenna has an overall length of 9.94 inches, a height of 0.812 inches, and a weight of 0.14 lbs.

Our bifilar antenna has a vertical beam width of 163 degrees and a horizontal beam width of 360 degrees at 3 dB. This RHCP polarized C-band antenna has a maximum input VSWR of 2:1 and is suitable for aerial vehicle communications and satellite communications. The PEANOM1172 omnidirectional antenna features an ultra-flex sealed spring base, which allows the antenna to bend and flex upon impact, reducing the risk of damage to the connected RF connector. Additional dimensions and specifications for this antenna are on our downloadable PDF datasheet.

Pasternack has one of the largest in-stock selections of single-band omnidirectional antennas for international and domestic orders. Make your online purchase right now to take advantage of our same-business-day shipping. For further information on similar products, our expert technical support and knowledgeable sales team can help you get the ideal bifilar antenna for your requirements.

### Configuration

Design	Portable
Application Band	C-band
Band Type	Single
Radiation Pattern	Omni Directional
Polarization	RHCP
Connector Type	SMA Male

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	4,400		5,900	MHz
Input VSWR			2:1	
Impedance	50			Ohms
Gain			3.75	
Horizontal (Azimuth) HPBW	360			Degrees

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### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Vertical (Elevation) HPBW		163		Degrees
Input Power			20	Watts

### Mechanical Specifications

Radome Material G10 Fiberglass

#### Size

Radome Diameter	0.812 in [20.62 mm]
Length	9.94 in [252.48 mm]
Width	0.812 in [20.62 mm]
Height	0.812 in [20.62 mm]
Weight	0.1 lbs [45.36 g]

### Environmental Specifications

#### Temperature

Operating Range	-40 to +85 deg C
Wind Survivability	100.041 MPH [161 KPH]

**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

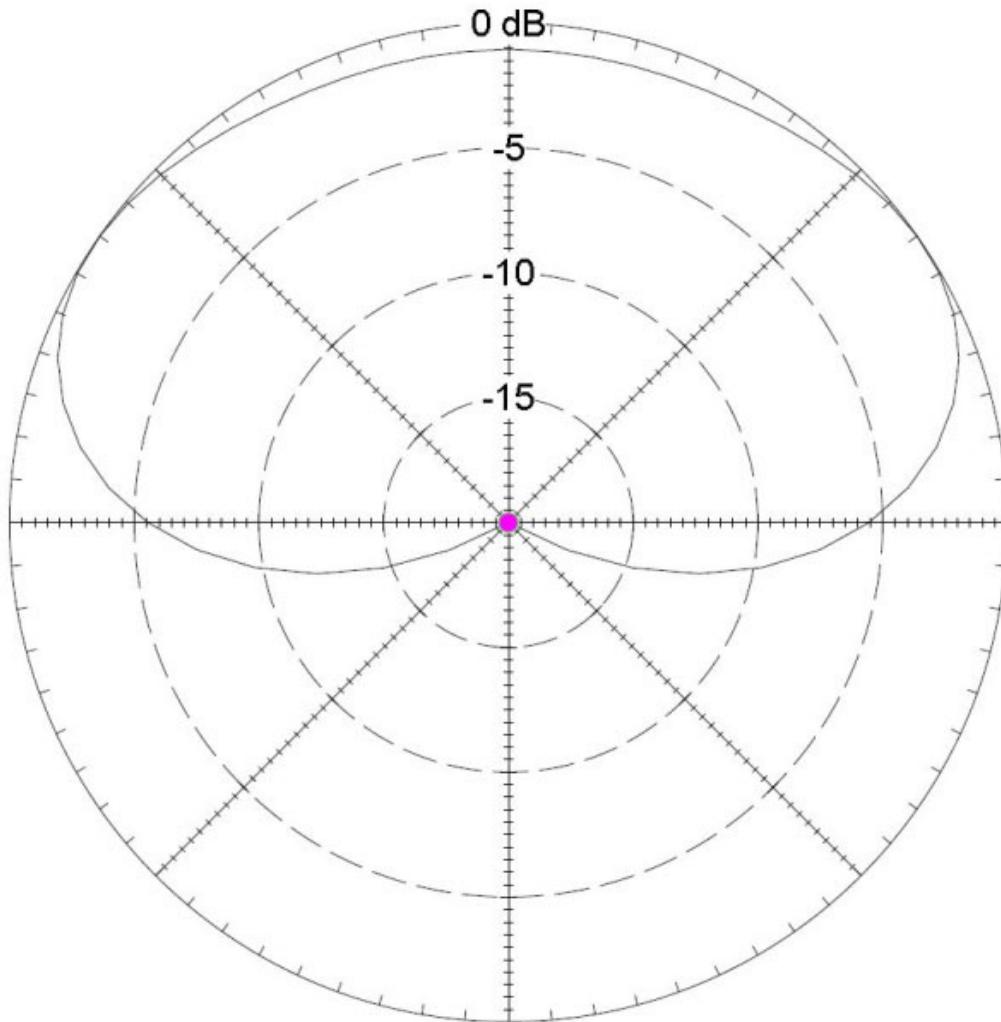
Notes:

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### Typical Radiation Pattern



**Elevation Pattern**

referenced to 4 dBi

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### Appendix

**Electrical Downtilt:** Angle in the antenna's elevation pattern in which the maximum gain occurs.

**Gain:** Antenna's average gain.

**Front to Back Ratio @ 180°±30°:** Average difference between the antenna's maximum gain and the maximum gain in the antenna's back lobe over  $\pm 30^\circ$  angles.

**Cross-polarization Ratio (dB):** Typical difference between the co-polarization and cross-polarization gain across the sector's 3 dB Beam Width.

4.4 GHz to 5.9 GHz, Bifilar Omni Antenna, RHCP with 3.75 dBi Gain, Ultra Flex Spring SMA Male and Black G10 Radome from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [4.4 GHz to 5.9 GHz, Bifilar Omni Antenna, RHCP with 3.75 dBi Gain, Ultra Flex Spring SMA Male and Black G10 Radome PEANOM1172](#)

URL: <https://www.pasternack.com/bifilar-antenna-4400-5900-mhz-sma-male-connector-peanom1172.html>

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. Pasternack Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

# PEANOM1172 CAD Drawing

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