

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

FMANOM1172



Features

- Bifilar Omni Antenna
- 4.4 GHz to 5.9 GHz
- 3.75 dBic 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 FMANOM1172 from Fairview Microwave 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. Fairview Microwave's FMANOM1172 single-band antenna has a maximum gain of 3.75 dBic. 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 FMANOM1172 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.

Fairview Microwave 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	Bifilar
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 MaterialG10 Fiberglass

Size

Radome Diameter0.812 in [20.62 mm]
Length9.94 in [252.48 mm]
Width0.812 in [20.62 mm]
Height0.812 in [20.62 mm]
Weight0.2 lbs [90.72 g]

Environmental Specifications

Temperature

Operating Range-40 to +85 deg C
Wind Survivability100.041 MPH [161 KPH]

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

Plotted and Other Data

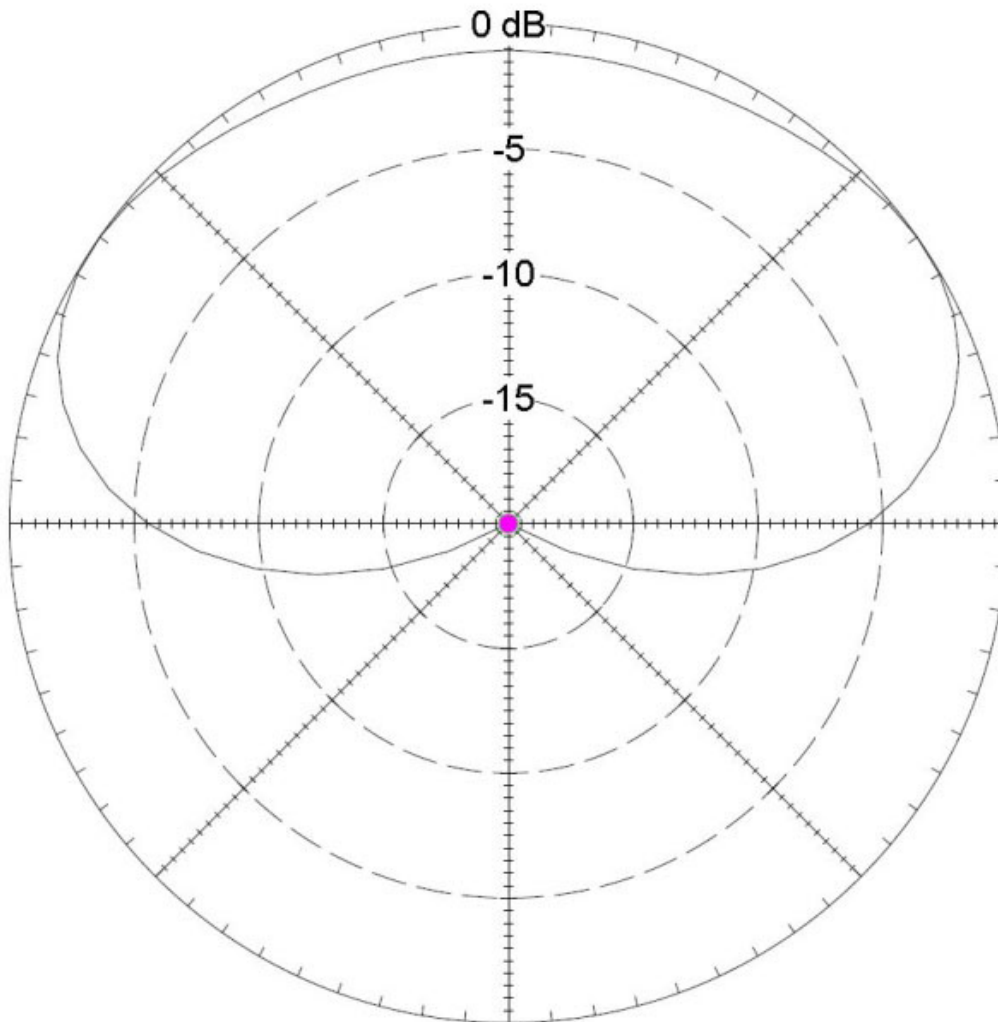
Notes:

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Typical Radiation Pattern



Elevation Pattern

referenced to 4 dBic

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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 ±30° 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 dBic Gain, Ultra Flex Spring SMA Male and Black G10 Radome from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [4.4 GHz to 5.9 GHz, Bifilar Omni Antenna, RHCP with 3.75 dBic Gain, Ultra Flex Spring SMA Male and Black G10 Radome FMANOM1172](https://www.fairviewmicrowave.com/product/antennas/dbic-bifilar-antenna-4400-5900-mhz-sma-connector-fmanom1172.html)

URL: <https://www.fairviewmicrowave.com/product/antennas/dbic-bifilar-antenna-4400-5900-mhz-sma-connector-fmanom1172.html>

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FMANOM1172 CAD Drawing

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