

4.4 GHz to 5.9 GHz, Bifilar Omni Antenna,
RHCP with 3.75 dBic Gain, Flange Mount
Type N Female and Black G10 Radome



FMANOM1176

Features

- Bifilar Omni Antenna
- 4.4 GHz to 5.9 GHz
- 3.75 dBic Gain
- 3 Turn (3T) Bifilar
- RHCP
- Flange Mount
- Type N Female
- Black G10 Radome
- Made in USA

Applications

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

Description

The FMANOM1176 from Fairview Microwave is a bifilar omni antenna designed for ground-to-air vehicle communication, including manned and unmanned aircraft. This omnidirectional antenna has a type N female 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 50 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 FMANOM1176 single-band antenna has a maximum gain of 3.75 dBic and is suitable for aerial vehicle communications and satellite communications. This antenna has an overall length of 5 inches, a height of 0.812 inches, and a weight of 0.25 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. The FMANOM1176 omnidirectional antenna features a flange mount base with lock-wired screws. 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	N Female

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			50	Watts

Mechanical Specifications

Radome Material	G10 Fiberglass
Size	
Base Diameter	3.5 in [88.9 mm]
Radome Diameter	0.812 in [20.62 mm]
Length	5 in [127 mm]
Width	3.5 in [88.9 mm]
Height	3.5 in [88.9 mm]
Weight	0.2 lbs [90.72 g]

Environmental Specifications

Temperature	
Operating Range	-40 to +85 deg C
Wind Survivability	124.274 MPH [200 KPH]

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

Plotted and Other Data

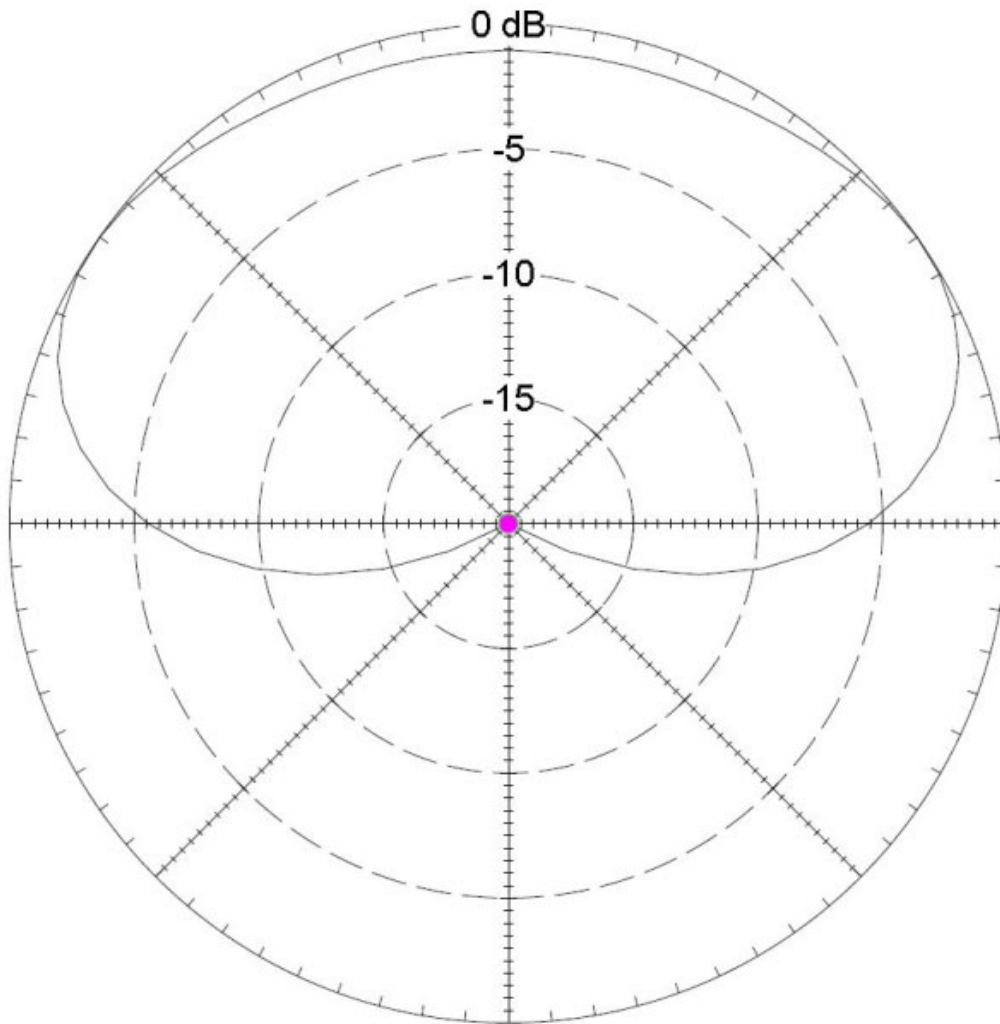
Notes:

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Typical Radiation Pattern



Elevation Pattern

referenced to 3.75 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, Flange Mount Type N Female 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, Flange Mount Type N Female and Black G10 Radome FMANOM1176](https://www.fairviewmicrowave.com/product/antennas/dbic-bifilar-antenna-4400-5900-mhz-n-type-connector-fmanom1176.html)

URL: <https://www.fairviewmicrowave.com/product/antennas/dbic-bifilar-antenna-4400-5900-mhz-n-type-connector-fmanom1176.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. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume liability arising out of the use of any part or document.

FMANOM1176 CAD Drawing

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