

## 4.4 GHz to 5 GHz, Bifilar Omni Antenna, RHCP with 4 dBic Gain, Flange Mount Type N Female and Black G10 Radome



### FMANOM1178

#### Features

- Bifilar Omni Antenna
- 4.4 GHz to 5 GHz
- 4 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 FMANOM1178 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 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 VSWR of 2:1. 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 FMANOM1178 single-band antenna has a maximum gain of 4 dBic. This antenna has an overall length of 6.63 inches, a height of 0.812 inches, and a weight of 0.37 lbs.

Our bifilar antenna has a vertical beam width of 30 degrees and a horizontal beam width of 360 degrees at 3 dB. This RHCP polarized C-band antenna has maximum input power of 20 Watts and is suitable for aerial vehicle communications and satellite communications. The FMANOM1178 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		5,000	MHz
Input VSWR			2:1	
Impedance		50		Ohms
Gain			4	
Horizontal (Azimuth) HPBW		360		Degrees

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Vertical (Elevation) HPBW		30		Degrees
Input Power			20	Watts

Mechanical Specifications

Radome MaterialG10 Fiberglass

Size

Base Diameter2.362 in [59.99 mm]  
Radome Diameter0.812 in [20.62 mm]  
Length6.63 in [168.4 mm]  
Width2.362 in [59.99 mm]  
Height2.362 in [59.99 mm]  
Weight0.2 lbs [90.72 g]

Environmental Specifications

Temperature

Wind Survivability124.274 MPH [200 KPH]

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

Plotted and Other Data

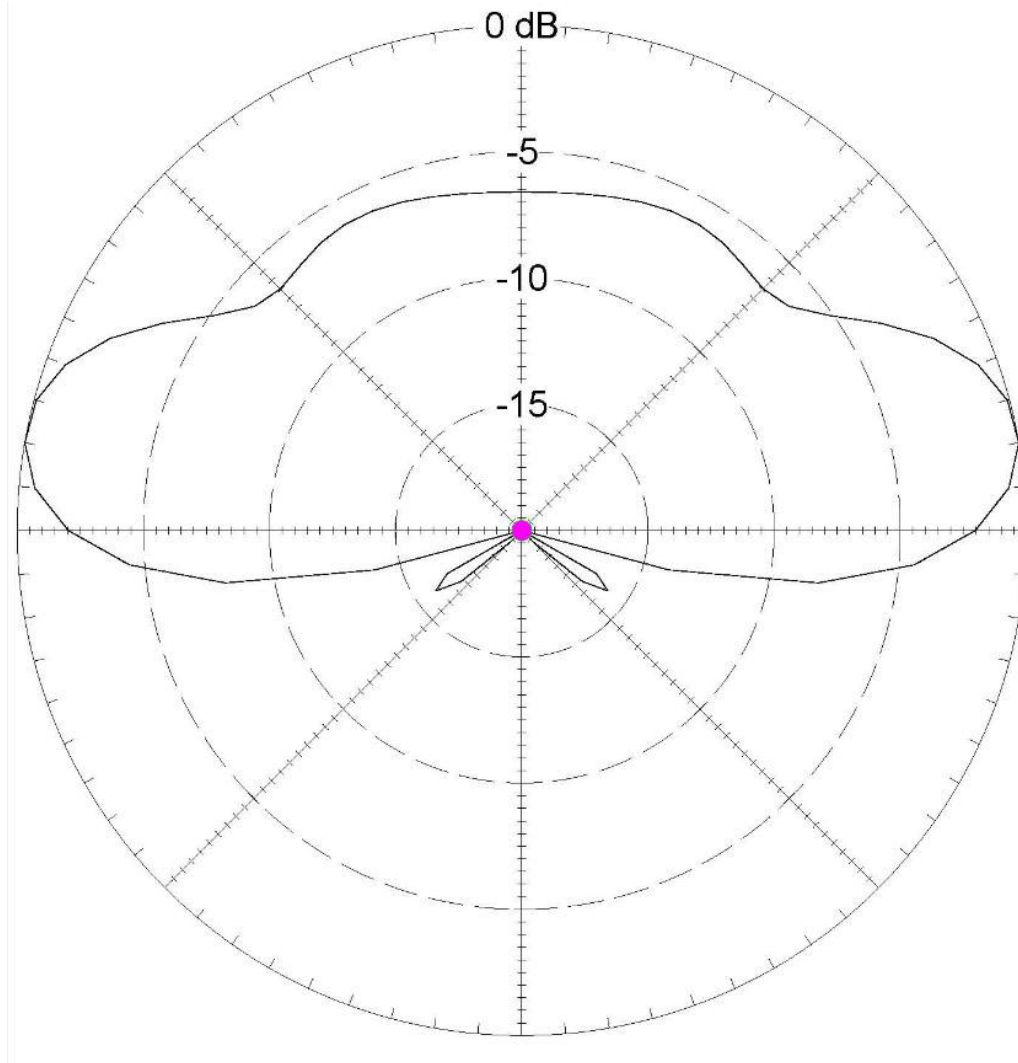
Notes:

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## FMANOM1178

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 @  $180^\circ \pm 30^\circ$ :** 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 GHz, Bifilar Omni Antenna, RHCP with 4 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 GHz, Bifilar Omni Antenna, RHCP with 4 dBic Gain, Flange Mount Type N Female and Black G10 Radome FMANOM1178](https://www.fairviewmicrowave.com/product/antennas/dbic-bifilar-antenna-4400-5000-mhz-n-type-connector-fmanom1178.html)

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FMANOM1178 CAD Drawing

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