

134 to 174 MHz, 4.5 dBi Collinear Omnidirectional Antenna with N Female, Vertical Polarization, 1 Port, 1.5 VSWR

Description

Fairview Microwave’s FMANOM1050 4.5 dBi omnidirectional antenna, with N female connector, is an economical yet high-Performance antenna designed for high-power applications. This high gain 4.5 dBi antenna transmits high-power signals, increasing the signal strength and thus providing improved coverage, better-broadcast control, and faster speed. This omnidirectional antenna can output frequencies from 134 to 174 MHz, which is useful for military communications, trunking, public safety, industrial communication, and amateur radio applications.

This omnidirectional antenna from Fairview Microwave FMANOM1050 uses vertical polarization to transmit signals, thus reducing interference and performing better at lower heights. All components of this 4.5 dBi antenna are DC grounded for lightning protection, rugged outdoor design, and have a high-power handling capacity. The omnidirectional antenna has 1 port to connect an external circuit with 100W maximum input power per port.

Fairview Microwave’s FMANOM1050 omnidirectional antenna is made of fiberglass, is omnidirectional, and covers good bandwidth and range. It has a 1.5 VSWR that results in the best power transfer and reduced losses. These 134 to 174 MHz VHF/UHF antennae radiates equal power in all directions Perpendicular to the axis, with power declining to zero on the axis, when graphed, the radiation pattern describes a doughnut shape. It comes with a N female connector, which is threaded and weatherproof that ensuring a reliable physical connection.

This Fairview Microwave’s FMANOM1050 with a 4.5 dBi maximum gain is ideal for LMR, military, airports, construction, mining, commercial applications, and radio users. This FMANOM1050 omnidirectional antenna from Fairview Microwave comes in compact packaging for lower shipping costs. Fairview Microwave’s 134 to 174 MHz, 4.5 dBi omnidirectional antenna with a N female connector is in stock and ready to ship the same day. Contact our knowledgeable and friendly technical support and sales staff for your answers on antennas or other Fairview Microwave products.

Configuration

Design	Omni
Polarization	Vertical
Connector Type	N Female
Number of Ports	1
Lightning Protection	DC Ground

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range (Tunable)	134		174	MHz
Operational Bandwidth		5		MHz
Input VSWR			1.5:1	
Impedance		50		Ohms
Gain			4.5	dBi
Input Power			100	Watts



Features:

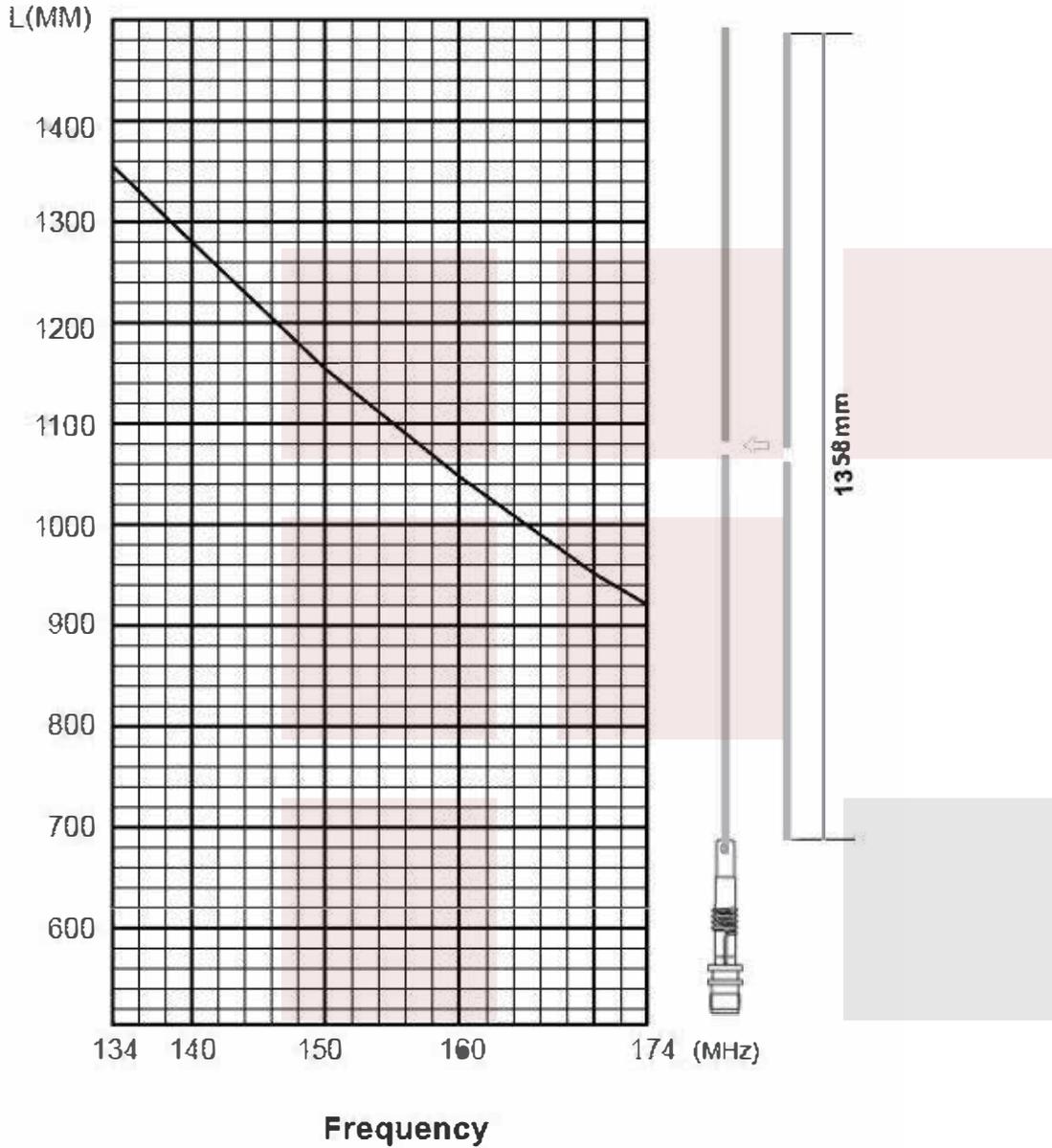
- Frequency coverage for 134 MHz to 174 MHz with Type N Female connector
- Moderate Gain 4.5 dBi / 2.35 dBd antennas
- Easy and quick time to installations
- Industrially tuned antenna allows plug and play
- Environmentally friendly strong fiberglass radome material
- Direct ground lightning protection
- 100 W max input power per port
- Vertical Polarization
- Tunable Frequency

Applications:

- Outdoor point-to-point (PtP) or point-to-multipoint (PtMP) applications
- VHF radio applications supported with Trunking for two-way radio communications
- Public Safety / Emergency services / Marine communications / Rail road communications
- Tetra and P-25 Applications exclusively supported
- Land Mobile Radio (LMR) and Private Mobile Radio (PMR)
- Fixed and mobile services for paging/voice/data in full duplex and half duplex mode

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CUTTING CHART



Mechanical Specifications

Radome Material	Fiberglass
Size	
Length	65 in [165.1 cm]
Width	1.2 in [30.48 mm]
Height	1.2 in [30.48 mm]
Weight	10.56 lbs [4.79 kg]

Environmental Specifications

Temperature

Operating Range -40 to +80 deg C

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

Plotted and Other Data

Notes:

- Remove the bolt and washer holding the support tube in place.
 - Lower the support tube to expose the N connector.
 - Using an Allen wrench, loosen the set screw holding the N Connector assembly in place.
 - Withdraw the radiating element from the fiberglass tube.
 - Measure and Cut.
 - Reassemble and re-mount.

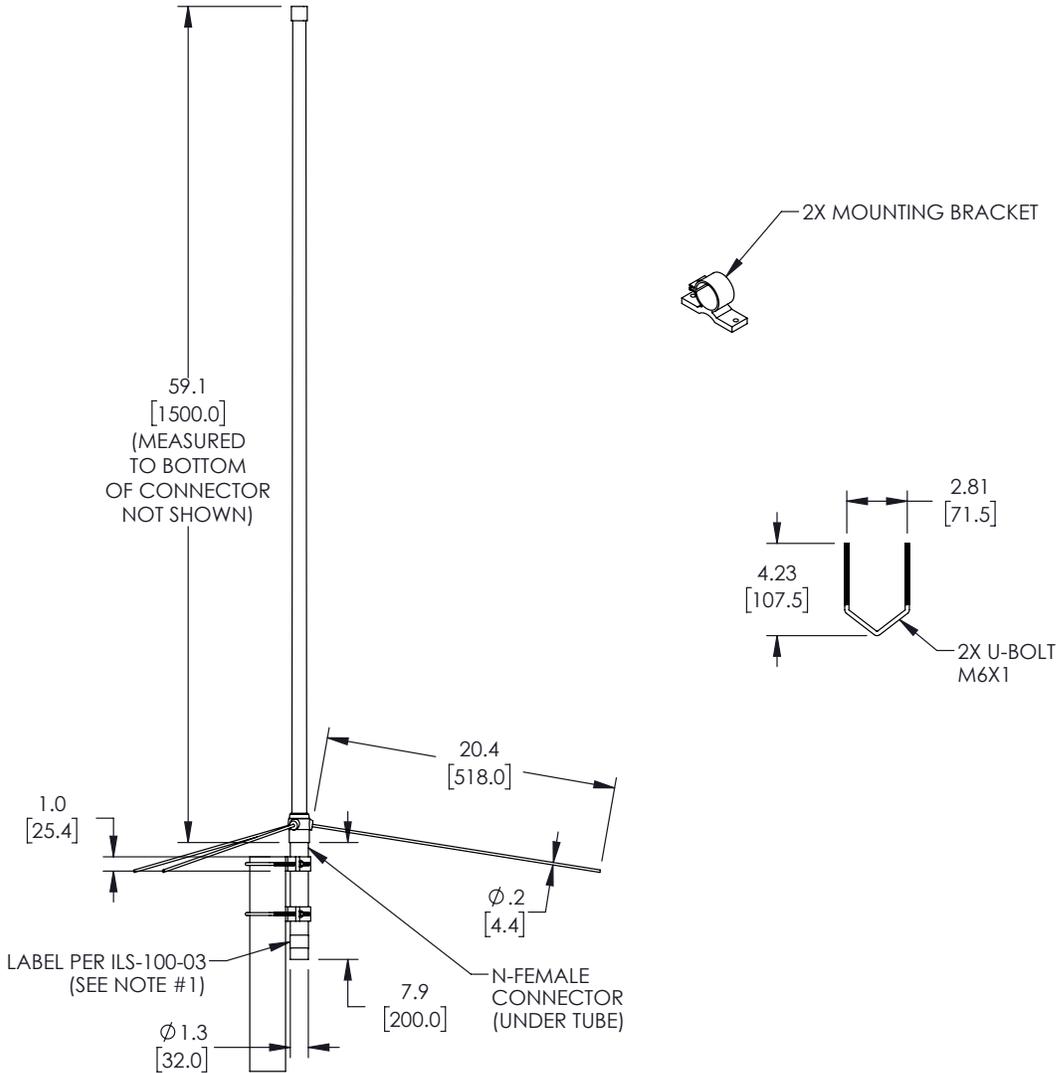
134 to 174 MHz, 4.5 dBi Collinear Omnidirectional Antenna with N Female, Vertical Polarization, 1 Port, 1.5 VSWR from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [134 to 174 MHz, 4.5 dBi Collinear Omnidirectional Antenna with N Female, Vertical Polarization, 1 Port, 1.5 VSWR FMANOM1050](#)

URL: <https://www.fairviewmicrowave.com/dbi-antenna-134-174-mhz-n-type-connector-fmanom1050-p.aspx>

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	5/5/2022	KHIETPAS



- NOTES:
1. LABEL PER ILS-100-03 (FOR INTERNAL REFERENCE ONLY). LABEL LOCATION FOR REFERENCE ONLY.

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TITLE

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:

CABLE LENGTH (L) TOLERANCES:

.X = ±.2 [5.08]	FRACTIONS ± 1/32	L ≤ 12 [305] = +1 [25] / -0
.XX = ±.02 [.51]		12 [305] < L ≤ 60 [1524] = +2 [51] / -0
.XXX = ±.005 [.13]	ANGLES ± 1°	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
		300 [7620] < L = +5%L / -0

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

SCALE N/A

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SIZE A	CAGE CODE 3FKR5	DRAWN BY DMAY	ITEM NO. FMANOM1050	REV A
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