

FMANOM1143

Features

- · High Power, High Gain, Wideband
- N-type Female RF Connector
- MIL-STD-810

Applications

- · Electronic Warfare/Jamming
- · Military Communication/Jamming
- · Anti-UAV Operations

- US 4 hole or NATO 3/6 hole pattern
- · Low Profile
- TAA Compliant
- · Anti-Unmanned Operations
- · Anti-Reconnaissance and Surveillance Systems
- · Defense and Strategic Installations

Description

The FMANOM1143 from Fairview Microwave is a high power, high gain MIL-STD-810 omnidirectional antenna, specifically designed for 500 MHz to 6000 MHz vehicle mounted military applications. This wideband antenna is TAA compliant and features standard US 4 hole or NATO 3/6 hole pattern.

The FMANOM1143 antenna, available same day from Fairview Microwave, is tailored for applications in electronic warfare and jamming with its wideband dipole array, seamlessly operating across a wide range of frequencies. The radome-protected radiator enhances durability, and the absence of a ground plane requirement opens up diverse mounting possibilities, making it an ideal choice for electronic warfare and jamming scenarios where flexibility is paramount.

Designed to weather challenging conditions, the FMANOM1143 stands out as a durable communication solution. Operating in temperatures from -40 to +71 °C, this antenna meets MIL-STD-810 standards for humidity, shock, vibration, blowing rain, and immersion. With impact resistance at 40 km/h and a water immersion depth of 1 meter, the FMANOM1143 ensures unwavering connectivity in active hostile and harsh environments.

Configuration

Design
Application Band
Band Type
Radiation Pattern
Polarization
Ground Plane
Connector Type
Number of Ports

Bifilar UHF/SHF Single Omni Directional Vertical 0.5 x 0.5 m2 N Female

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	500		6,000	MHz
Input VSWR			3:1	
Impedance		50		Ohms
Gain		4		dBi
Input Power			200	Watts





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Mechanical Specifications

Size

 Length
 5 in [127 mm]

 Width
 5 in [127 mm]

 Height
 5.12 in [130.05 mm]

 Weight
 4.4 lbs [2 kg]

Environmental Specifications

Temperature

Operating Range -40 to +55 deg C
Storage Range -40 to +85 deg C
Environment MIL-STD-810F

Wind Survivability 124.27 MPH [199.99 KPH]

Humidity MIL-STD-810E, Method 507.3 Procedure III Shock MIL-STD-810F, Method 516.5 Procedure I Vibration MIL-STD-810F, Method 514.5 Category 24

Compliance Certifications (see product page for current document)

Plotted and Other Data

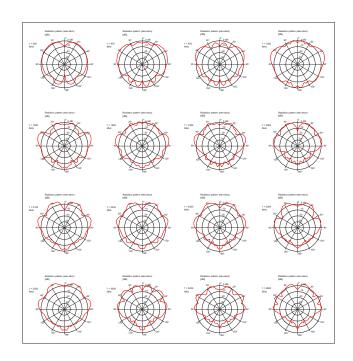
Notes:

• For perfect operation there should be free space around the antenna. The mounting bolts shall not portrude the upper edge of the mounting bold cavities.



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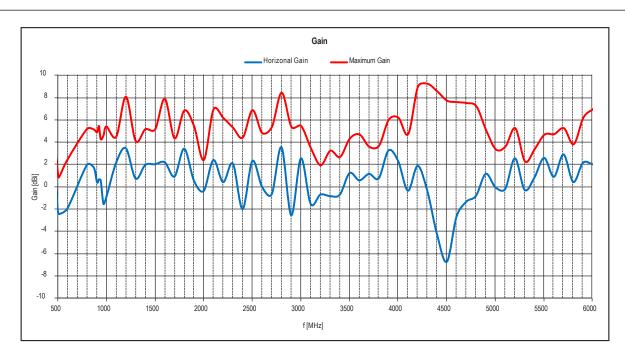
Typical Radiation Pattern







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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.

500 MHz to 6000 MHz Electronic Warfare Omni Antenna, 200W N-Type Female, MIL-STD-810 TAA Compliant 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: 500 MHz to 6000 MHz Electronic Warfare Omni Antenna, 200W N-Type Female, MIL-STD-810 TAA Compliant FMANOM1143

URL: https://www.fairviewmicrowave.com/product/antennas/500-mhz-to-6000-mhz-electronic-warfare-omni-antenna-200w-n-type-female-mil-std-810-taa-compliant-fmanom1143.html

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