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

LCANOM1143

Features

- High Power, High Gain, Wideband
- N-type Female RF Connector
- MIL-STD-810
- US 4 hole or NATO 3/6 hole pattern
- Low Profile
- TAA Compliant

Applications

- Electronic Warfare/Jamming
- Military Communication/Jamming
- Anti-UAV Operations
- Anti-Unmanned Operations
- Anti-Reconnaissance and Surveillance Systems
- Defense and Strategic Installations

Description

The LCANOM1143 from L-com 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 LCANOM1143 antenna, available same day from L-com, 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 LCANOM1143 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 LCANOM1143 ensures unwavering connectivity in active hostile and harsh environments.

Configuration

Design	Mobile
Application Band	UHF/SHF
Band Type	Single
Radiation Pattern	Omni Directional
Polarization	Vertical
Ground Plane	0.5 x 0.5 m2
Connector Type	N Female
Number of Ports	1

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

Electrical Specification Notes:
800 MHz to 6000 MHz without a ground plane. 500 MHz to 6000 MHz on a ground plane = 0.5 x 0.5 m2

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Mechanical Specifications

Mounting Application	4-hole US and 3/6-hole NATO pattern mount
Size	
Length	5 in [127 mm]
Width	5 in [127 mm]
Height	5.12 in [130.05 mm]
Weight	2.2 lbs [997.9 g]

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

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 L-com has same day shipment for domestic and International orders. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

URL: https://www.l-com.com/500-mhz-to-6000-mhz-electronic-warfare-omni-antenna-200w-n-type-female-mil-std-810-taa-compliant-lca-nom1143.html

LCANOM1143 CAD Drawing

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