S-band Omni Antenna 2 GHz to 2.5 GHz, N Type Male, IP65 Rated



LCANOM1142

Features

- S-band 2000 MHz to 2500 MHz
- N-type Male RF Connector
- Stable 3.5 dBi gain typical
- Ground plane independent
- Precision Construction
- IP65 Rated

Applications

- S-band
- Military Communication
- Unmanned Operations
- Manpack Radio Systems
- Secure Communications
- Defense and Strategic Installations
- Surveillance Systems

Description

The LCANOM1142 is an S-band omnidirectional antenna, proudly presented by L-com cutting-edge solution for military antennas and unmanned vehicle applications. Operating in the frequency range of 2 GHz to 2.5 GHz, this antenna ensures superior communication performance. Constructed with precision using top-tier materials, the LCANOM1142 features a robust N-male connector, providing unparalleled connectivity. Its stable 3.5 dBi gain makes it a reliable choice for mission-critical operations.

The LCANOM1142 utilizes a collinear dipole array radiator with an integrated balun, ensuring ground plane independence and suitability for any mounting platform, such as manpacks and mobile electronic devices. Designed and intended for use in extreme operational conditions, this antenna from L-com sets the standard for excellence in military communication and unmanned vehicle applications. The 2 to 2.5 GHz frequency band is strategically chosen, aligning with crucial military and government communication requirements. Additionally, S-band antennas, known for their versatility, find wide application in military and avionics systems, including radar, navigation, and data link systems.

Configuration

Design	Portable
Application Band	S-band
Band Type	Single
Radiation Pattern	Omni Directional
Polarization	Vertical
Ground Plane	Groundplane independent
Connector Type	N Male
Number of Ports	1

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	2,000		2,500	MHz
Input VSWR			2:1	
Impedance		50		Ohms
Gain	4		5	
Input Power			20	Watts

Mechanical Specifications

Size

Length	12.9 in [327.66 mm]

© 2025 Infinite Electronics, Inc. L-com is a registered trademark of Infinite Electronics, Inc.

S-band Omni Antenna 2 GHz to 2.5 GHz, N Type Male, IP65 Rated



LCANOM1142

Width	1 in [25.4 mm]
Height	1 in [25.4 mm]
Weight	0.5 lbs [226.8 g]

Environmental Specifications

Temperature	
Operating Range	-31 to +51 deg C
Storage Range	-31 to +71 deg C
Environment	MIL-STD-820F
Wind Survivability	62.14 MPH [100 KPH]
Shock	20 G / 10 mS X, Y, Z axes
Vibration	MIL-STD-167-1 type 1

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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.

S-band Omni Antenna 2 GHz to 2.5 GHz, N Type Male, IP65 Rated 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.

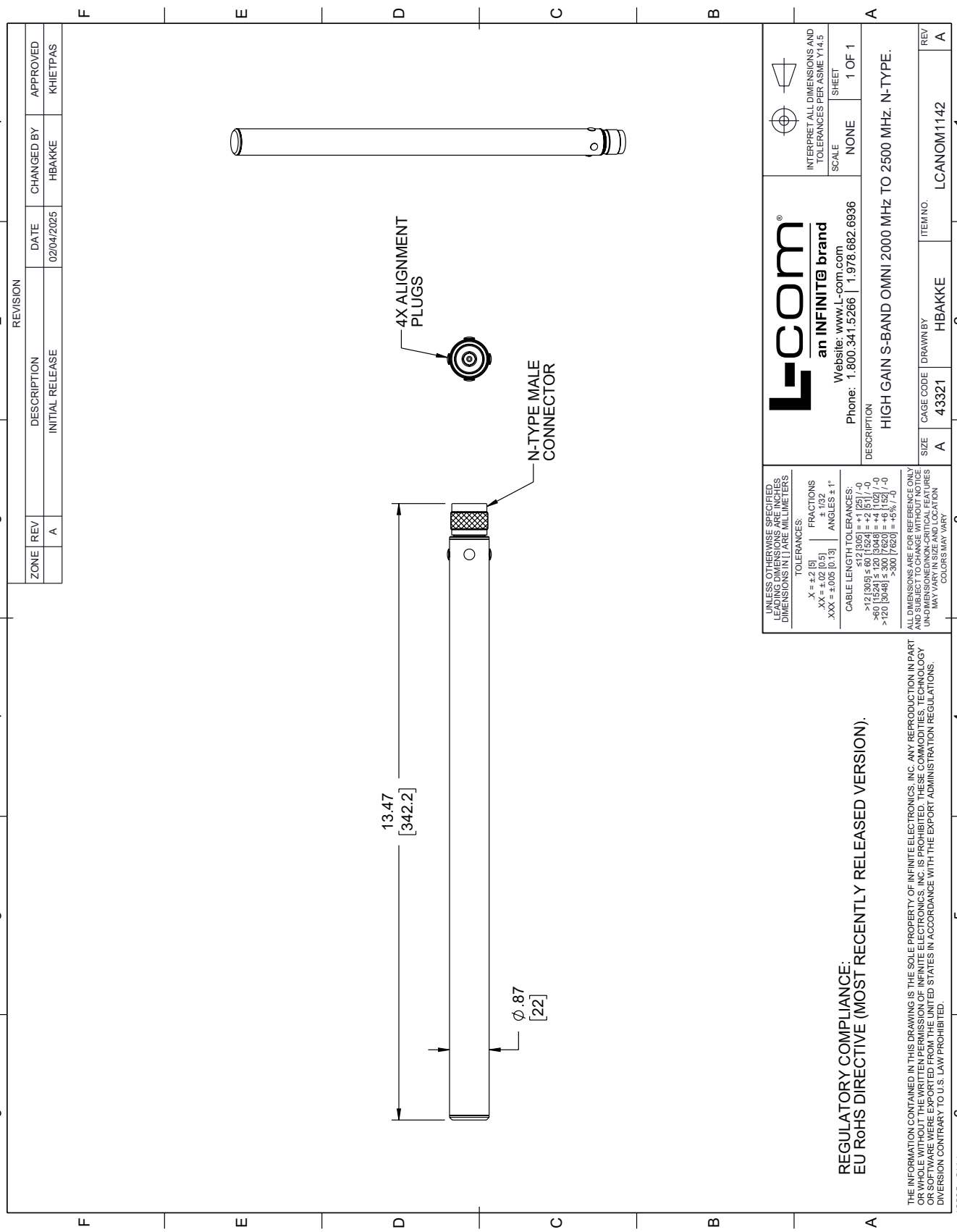
URL: https://www.l-com.com/s-band-omni-antenna-2-ghz-to-2.5-ghz-n-type-male-ip65-rated-lcanom1142.html

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 impliment improvements. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document.

© 2025 Infinite Electronics, Inc. L-com is a registered trademark of Infinite Electronics, Inc.

LCANOM1142 CAD Drawing

S-band Omni Antenna 2 GHz to 2.5 GHz, N Type Male, IP65 Rated



© 2025 Infinite Electronics, Inc. L-com is a registered trademark of Infinite Electronics, Inc.