



## Antennas Technical Data Sheet

**PEANOM1142**

### 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 PEANOM1142 is an S-band Omnidirectional Antenna, proudly presented by Pasternack 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 PEANOM1142 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 PEANOM1142 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 Pasternack 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	dBi
Input Power			20	Watts

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [S-band Omni Antenna 2 GHz to 2.5 GHz, N Type Male, IP65 Rated PEANOM1142](#)

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



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### Mechanical Specifications

#### Size

Overall Length	12.9 in [327.66 mm]
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

Wind Loading	MIL-STD-820F 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:

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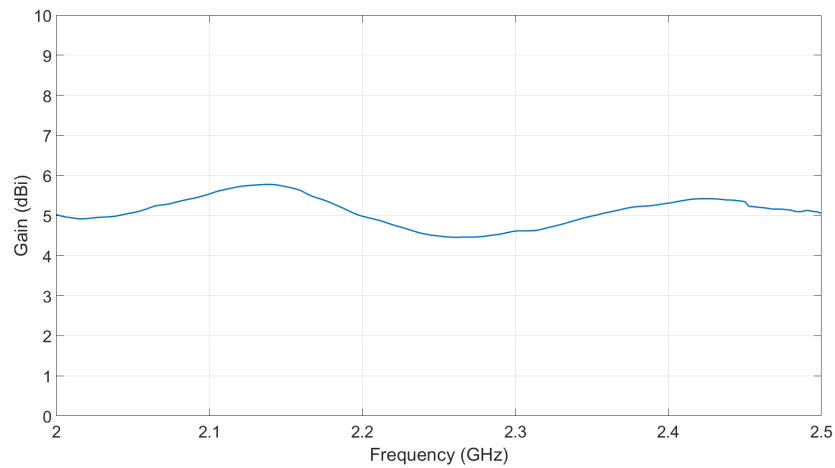
S-band Omni Antenna 2 GHz to 2.5 GHz,  
N Type Male, IP65 Rated



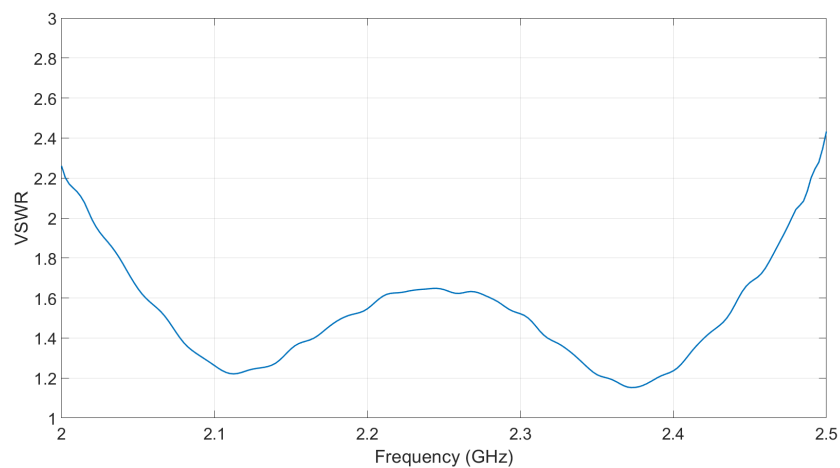
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**Gain**



**VSWR**



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**PEANOM1142**

S-band Omni Antenna 2 GHz to 2.5 GHz, N Type Male, IP65 Rated from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

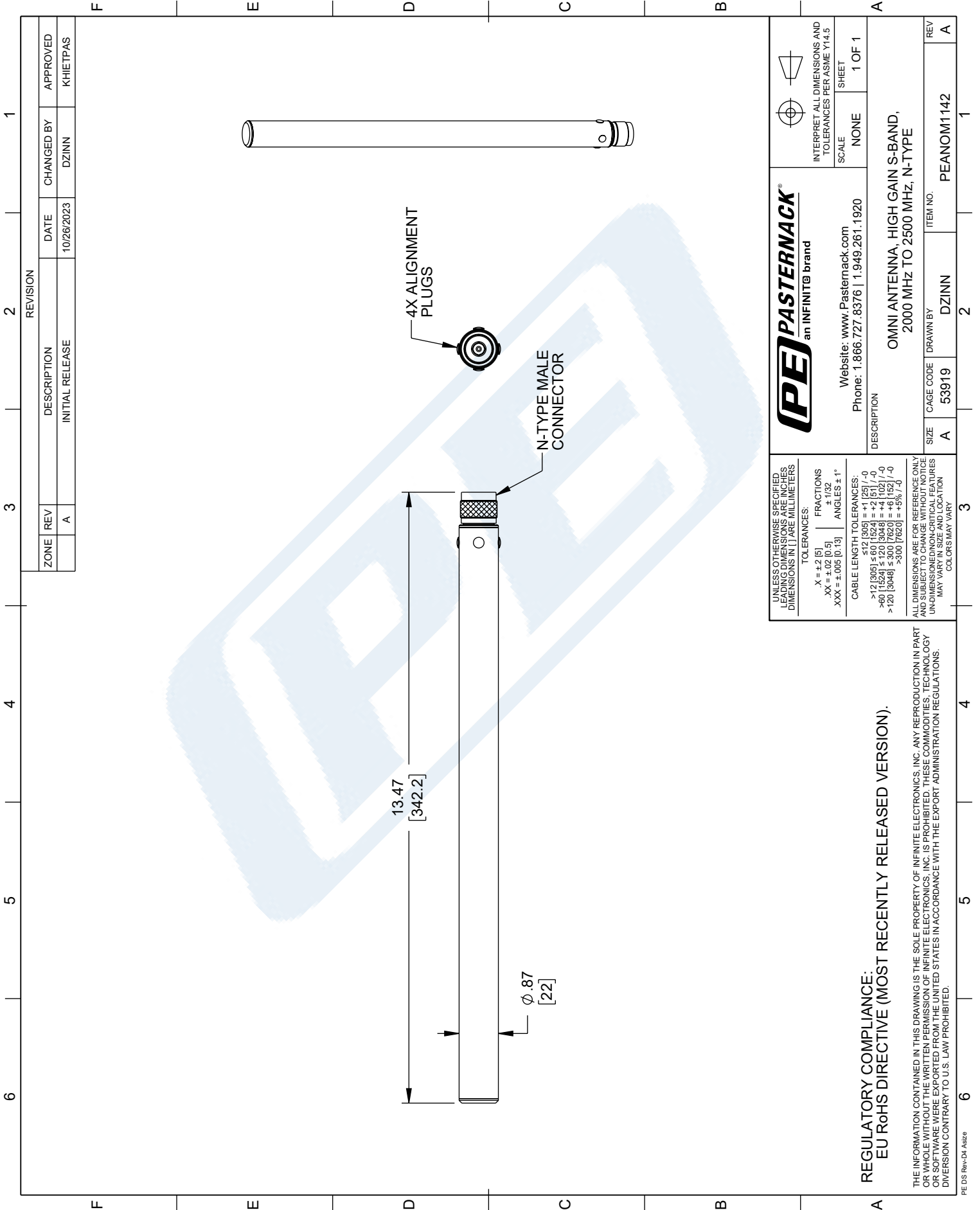
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [S-band Omni Antenna 2 GHz to 2.5 GHz, N Type Male, IP65 Rated PEANOM1142](https://www.pasternack.com/s-band-omni-antenna-2-ghz-to-2.5-ghz-n-type-male-ip65-rated-peanom1142-p.aspx)

URL: <https://www.pasternack.com/s-band-omni-antenna-2-ghz-to-2.5-ghz-n-type-male-ip65-rated-peanom1142-p.aspx>

The information contained in 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 implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

# PEANOM1142 CAD Drawing

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



ZONE		REVISION		DATE		APPROVED	
REV	DESCRIPTION	DATE	CHANGED BY	DATE	CHANGED BY	DATE	APPROVED
A	INITIAL RELEASE	10/26/2023	DZINN				KHIE/TPAS

<b>PASTERNAK</b> an INFINIT® brand		Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a> Phone: 1.866.727.8376   1.949.261.1920		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1	
DESCRIPTION <b>OMNI ANTENNA, HIGH GAIN S-BAND, 2000 MHz TO 2500 MHz, N-TYPE</b>				REV: A	
UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND DIMENSIONS IN [ ] ARE MILLIMETERS.		TOLERANCES: .X = ±.2 [5]      FRACTIONS ± 1/32 .XX = ±.02 [0.5]      ANGLES ± 1° .XXX = ±.005 [0.13]		CAGE CODE: A 53919 DRAWN BY: DZINN ITEM NO.: PEANOM1142	
CABLE LENGTH TOLERANCES: ≤12 [305] = +1 [25] / -0 >12 [305] ≤60 [1524] = +2 [51] / -0 >60 [1524] ≤120 [3048] = +4 [102] / -0 >120 [3048] ≤300 [7620] = +6 [152] / -0 >300 [7620] = +9% / -0		ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN LOCATION. COLORS MAY VARY.		1 OF 1	

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 EU RoHS DIRECTIVE (MOST RECENTLY RELEASED VERSION).

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