



1 Folded Dipole antenna, 406 MHz - 512 MHz, 4.6 dBi gain,
 1/4 Wave Offset pattern, V-pol, Type N Female Connector

Antennas Technical Data Sheet

PEANED1009

Features

- Frequency coverage for 406 MHz to 512 MHz with Type N Female connector
- Very High Gain 4.6 dBi / 2.45 dBd antennas
- Easy and quick time to installations
- Industrially tuned dipoles made of high-grade aluminum alloys
- 1-Folded dipole antenna has offset pattern with 1/4 wave spacing
- 210° horizontal beamwidth, and 68° vertical beamwidth with Vertical Polarization
- 100 W max input power

Applications

- Outdoor point-to-point (PtP) or point-to-multipoint (PtMP) applications
- UHF radio applications supported with Trunking for two-way radio communications
- Wireless LAN systems, IOT and IIOT low data high coverage applications
- TV Broadcasts and FM radio applications
- Air traffic controllers / Public Safety / Emergency services / Marine communications
- Tetra and P-25 Applications exclusively supported
- Land Mobile Radio (LMR) and Private Mobile Radio (PMR)

Description

Pasternack's PEANED1009 is a high performance, single element exposed folded dipole antenna designed to operate from 406 to 512 MHz has 4.6 dBi / 2.45 dBd of high gain. The PEANED1009 is ideal for boosting radar, GPR/WPR, FM Radio, TV broadcasts, public safety, LMR / PMR and aviation. The PEANED1009 can be used for long distance communications over a wide range of applications for UHF frequency band communication systems.

The PEANED1009 from Pasternack exposed dipole antennas are robust, outdoor, weatherproof, and high velocity wind sustainable antennas made up of high-grade aluminum alloys for longevity and resistant to corrosion. The PEANED1009 has Vertical polarization, 210 horizontal beamwidth, and 68 vertical beamwidth. The included mounting kit allows for very easy and quick time installations with less effort. These exposed dipoles are already tuned to be Quarter wavelength away from the mast and do not require any further field adjustments. Pasternack's dipole antennas PEANED1009 are premium quality 1-bay dipole antenna has offset pattern with 100W maximum power handling capability which are side mounted with 1/4 wave spacing from the mast and has a pigtail terminated with 1 Type N female connector.

The 4.6 dBi/ 2.45 dBd max gain single element Quarter wave exposed folded dipole PEANED1009 antennas operates in UHF bands. This 406 to 512 MHz antenna have central support mast precisely designed for easy dipole attachments which fit tightly for error free and quick installations and ease for transportation.

Pasternack's Quarter wave dipole antenna with Type N connector is in stock and ready to ship the same day. Contact Pasternack's knowledgeable and friendly technical support and sales staff for your answers on antennas or other products.

Configuration

Band Type	Single
Radiation Pattern	Directional
Polarization	Vertical
Connector Type	N Female
Number of Ports	1

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
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Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1 Folded Dipole antenna, 406 MHz - 512 MHz, 4.6 dBi gain, 1/4 Wave Offset pattern, V-pol, Type N Female Connector PEANED1009](#)



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Frequency Range	406	512	MHz
Input VSWR		1.8:1	
Gain	4.6		dBi
Horizontal (Azimuth) Beam Width	210		Degrees
Vertical (Elevation) Beam Width	68		Degrees
Input Power		100	Watts

Mechanical Specifications

Radome Material	Aluminum Alloy
Size	
Overall Length	43.3 in [109.98 cm]
Width	13.8 in [350.52 mm]
Height	2.4 in [60.96 mm]
Mounting Mast Diameter	1.5748 to 1.9685 in [40.00 to 50.00 mm]
Weight	39.5 lbs [17.92 kg]

Environmental Specifications

Wind Loading	124.274 MPH [200 KPH]
Humidity	5 to 95

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

Plotted and Other Data

Notes:

1 Folded Dipole antenna, 406 MHz - 512 MHz, 4.6 dBi gain, 1/4 Wave Offset pattern, V-pol, Type N Female Connector 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.

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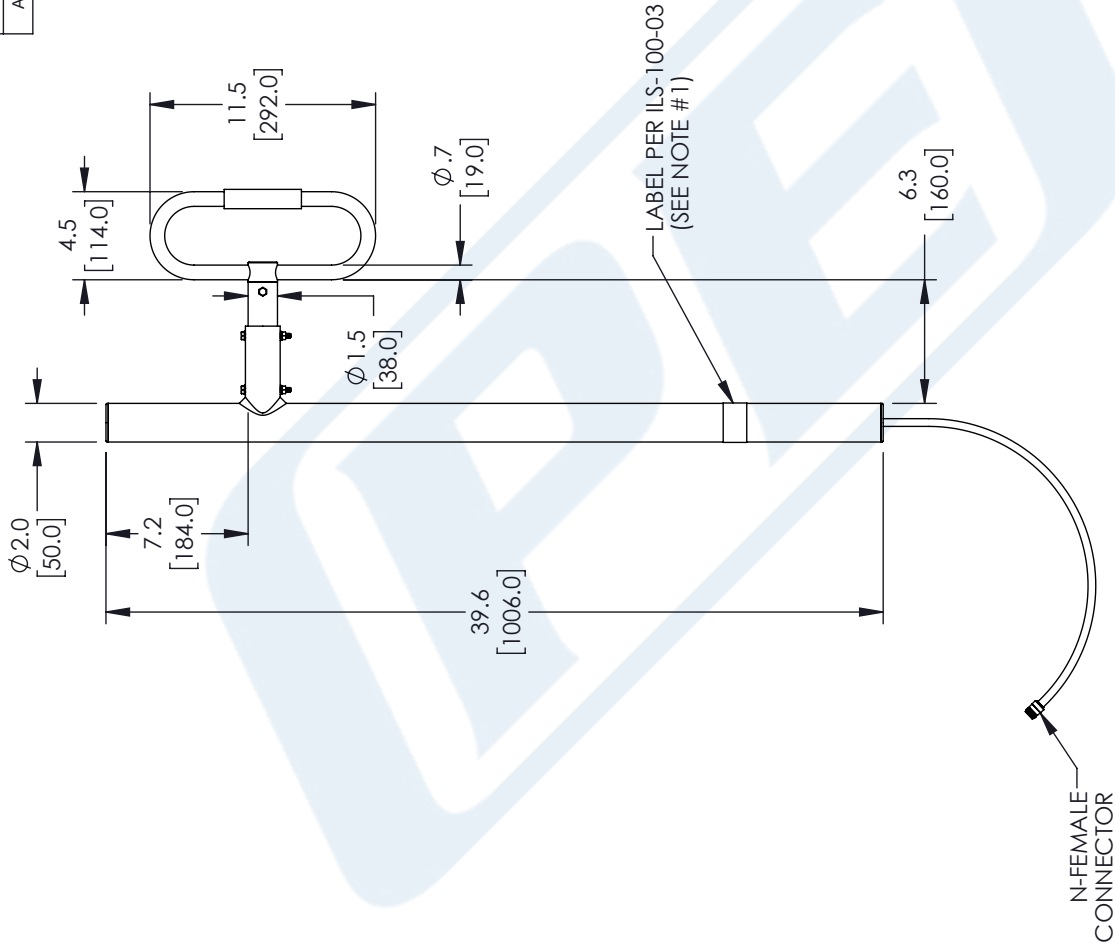
URL: <https://www.pasternack.com/4.6-dbi-antenna-406-512-mhz-n-type-female-connector-peaned1009-p.aspx>

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.

PEANED1009 CAD Drawing

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	3/31/22	KHIETPAS



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

REGULATORY COMPLIANCE:
EU RoHS DIRECTIVE (MOST RECENT RELEASED VERSION)

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

TOLERANCES:

X = ±.2 [5.08] FRACTIONS
.XX = ±.02 [.51] ±1/32
.XXX = ±.005 [.13] ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = ±1 [25] / -0
12 [305] < L ≤ 60 [1524] = +2 [51] / -0
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
300 [7620] < L = +5% / -0

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.



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SHEET 1 OF 1
SCALE N/A

REV A

ITEM NO. PEANED1009

SIZE A
CAGE CODE 53919
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REV A