



Antennas Technical Data Sheet

PE510M1019

Features

- Superior all weather performance
- Rugged industrial grade design
- Lightweight slim fiberglass radome
- Integral N-Female connector
- Extruded aluminum mounting bracket

Applications

- 902 MHz ISM band and Wireless LAN systems
- Multipoint applications
- Non Line of Sight (NLOS)
- M2M, LPWAN, LoRA, IoT applications
- SCADA applications

Description

The 900 MHz UP-series are lightweight, low profile, high performance Omni-directional antennas designed for the 900 MHz ISM band. They are ideally suited for multipoint, Non Line of Sight (NLOS) and mobile applications where compact form factor, high gain and wide coverage is desired. Typical applications for these antennas include 900 MHz Wireless LAN, SCADA, Wireless Video Links, M2M, LPWAN, LoRA and M2M applications. The UP-series antennas feature an integral N-Female type connector and include a mast mounting kit. The kit consists of an extruded aluminum bracket and a pair of U-bolts which allows installation on masts up to 2.0" in diameter. To ease installation, the bracket can be installed first without the antenna which can then be mounted after the bracket is installed. The UP-series antennas feature a slim 20 mm diameter white UV-stable fiberglass radome providing durability. Additionally, these antennas are designed with a sealed aluminum end cap and includes drain holes at the aluminum base to help prevent condensation build-up inside the antenna providing trouble-free performance.

Configuration

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

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	900		928	MHz
Input VSWR		1.6:1	1.6:1	
Impedance		50		Ohms
Gain		8		dBi
Horizontal (Azimuth) Beam Width		Omnidirectional		
Vertical (Elevation) Beam Width		15		Degrees
Input Power			50	Watts

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [900 MHz 8 dBi Omni-directional Antenna PE510M1019](#)



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Mechanical Specifications

Radome Material	Fiberglass
Size	
Overall Length	57.3 in [145.54 cm]
Width	0.79 in [20.07 mm]
Height	0.79 in [20.07 mm]
Mounting Mast Diameter	2 in [50.80 mm]
Weight	1.79 lbs [811.93 g]

Environmental Specifications

Temperature	
Operating Range	-40 to +60 deg C
Wind Loading	130 MPH [209.21 KPH]

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

Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [900 MHz 8 dBi Omni-directional Antenna PE510M1019](#)

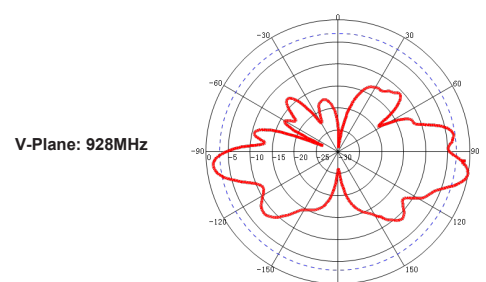
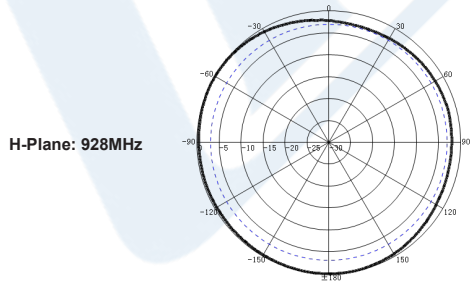
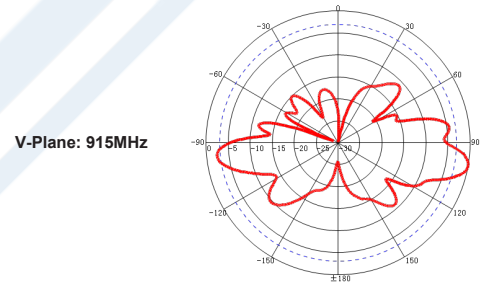
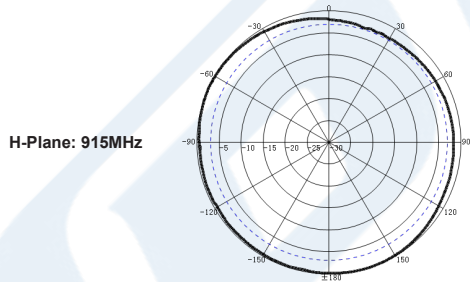
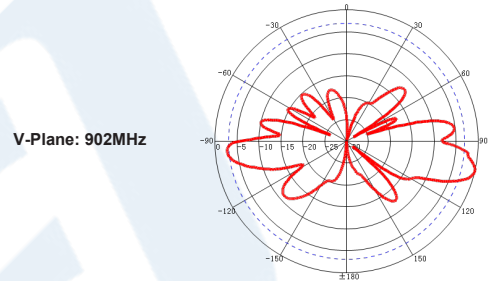
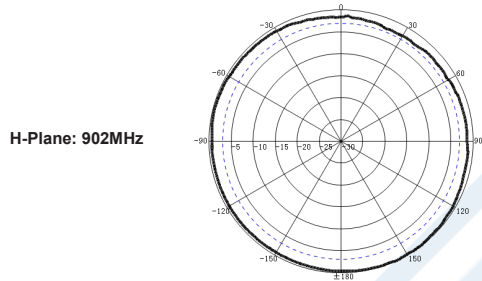
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RF Antenna Patterns – PE510M1019



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900 MHz 8 dBi Omni-directional Antenna



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PE51OM1019

900 MHz 8 dBi Omni-directional Antenna 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: [900 MHz 8 dBi Omni-directional Antenna PE51OM1019](#)

URL: <https://www.pasternack.com/single-antenna-8-dbi-gain-n-pe51om1019-p.aspx>

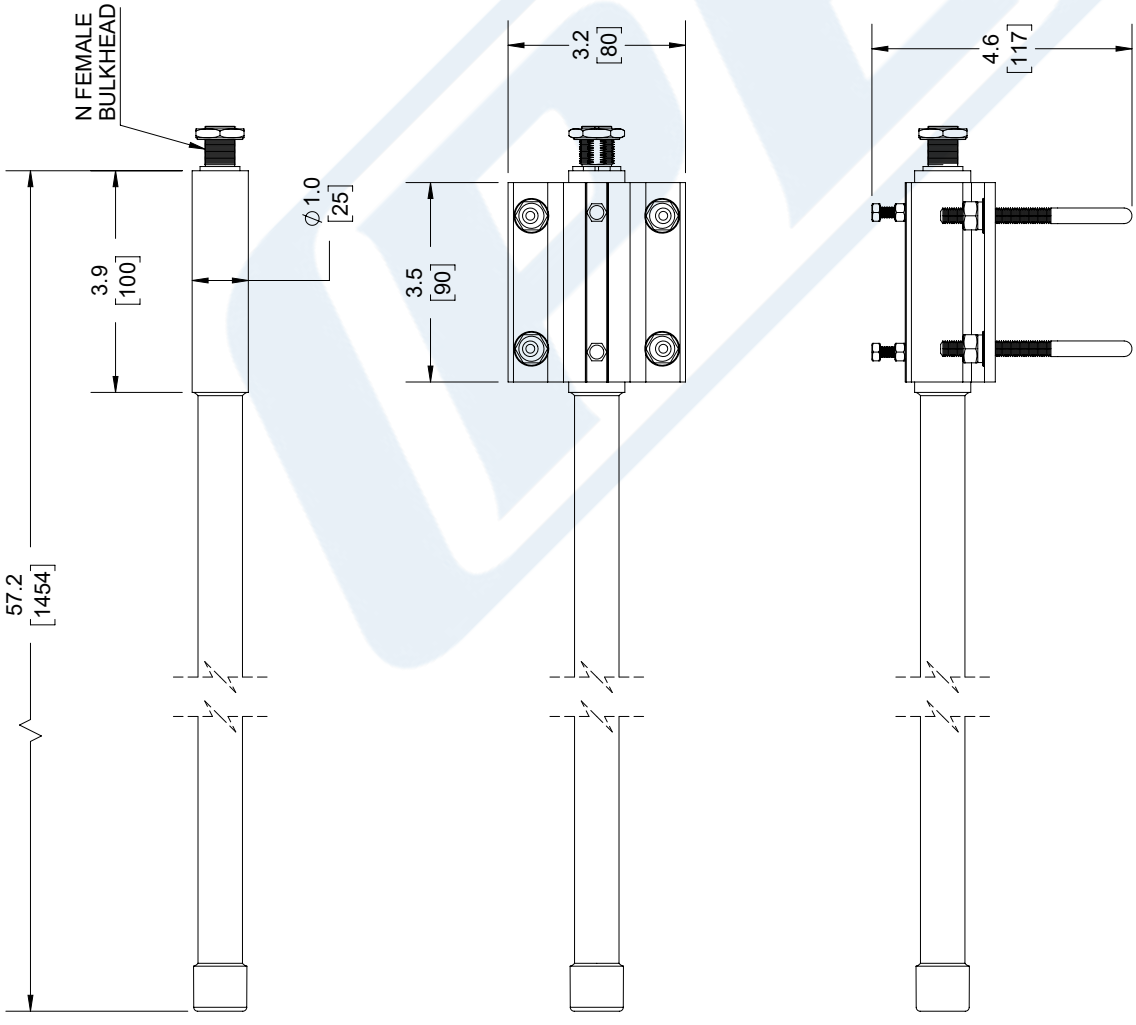
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such 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.

PE510M1019 CAD Drawing

900 MHz 8 dBi Omni-directional Antenna

REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	2/13/2020	M.MILLER

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A	INITIAL RELEASE	2/13/2020	M.MILLER



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an INFINIT brand

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

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

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1
SCALE N/A

REV A

ITEM NO PE510M1019

DRAWN BY K.DANG

CAGE CODE A 53919

REGULATORY COMPLIANCE:
EU RoHS Directive (Most Recent Released Version)

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