



900 MHz 6 dBi Omnidirectional Antenna

Antennas Technical Data Sheet

PE510M1015

Features

- Rugged industrial grade design
- Lightweight fiberglass radome
- All weather operation
- Integral N-Female connector
- Includes heavy duty steel mast mounting brackets

Applications

- 900 MHz ISM band
- LPWAN, LoRA, IoT, M2M applications
- GSM, SCADA applications
- 900 MHz cellular band
- Point to multi-point and Non Line Of Sight (NLOS) applications

Description

The HyperLink PE510M1015 is a high performance omnidirectional antenna designed for the 900 MHz ISM band. It is ideally suited for multipoint, Non Line of Sight (NLOS) and mobile applications where high gain and wide coverage is desired. Typical applications include 900MHz Wireless LAN, SCADA, Wireless Video Links, LPWAN/IoT/M2M, and 900MHz Cellular band applications.

This antenna features an integral N-Female type connector that mounts through the wall of an equipment enclosure. Included with the PE510M1015 is a dual u-bolt mast mounting kit. Consisting of a heavy-duty steel bracket and a pair of U-bolts, this kit allows installation on masts up to 2.0" in diameter.

This omni antenna's construction features a rugged 1.58" diameter fiberglass radome for durability, aesthetics and long service life. It is designed for all weather operation.

Configuration

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

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	900		928	MHz
Input VSWR		1.5:1	1.5:1	
Impedance		50		Ohms
Gain		6		dBi
Horizontal (Azimuth) Beam Width		Omnidirectional		
Vertical (Elevation) Beam Width		19		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 6 dBi Omnidirectional Antenna PE510M1015](#)



900 MHz 6 dBi Omnidirectional Antenna

Antennas Technical Data Sheet

PE510M1015

Mechanical Specifications

Radome Material

Fiberglass

Size

Overall Length

38.1 in [967.74 mm]

Width

1.5 in [38.1 mm]

Height

1.5 in [38.1 mm]

Weight

3.86 lbs [1.75 kg]

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 6 dBi Omnidirectional Antenna PE510M1015](#)

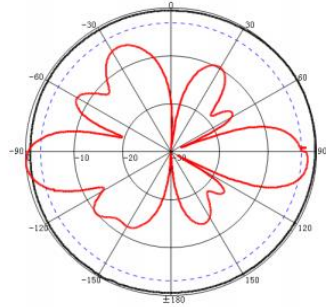


900 MHz 6 dBi Omnidirectional Antenna

Antennas Technical Data Sheet

PE510M1015

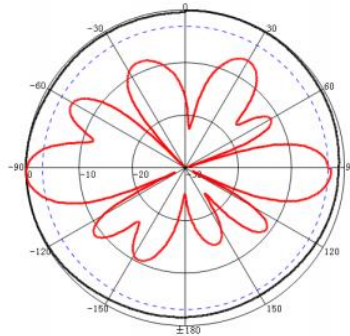
RF Antenna Patterns



Freq:900MHz
Date:2014-04-01
Elevation:H-plane
Polar:Across:Main
Polarization:Vertical
Max:-8.28dB
HPBW(3dB):360.00°
FBR:0.35dB

Freq:900MHz
Date:2014-04-01
Elevation:V-plane
Polar:Across:Main
Polarization:Vertical
Max:-8.20dB
HPBW(3dB):21.60°
FBR:1.79dB

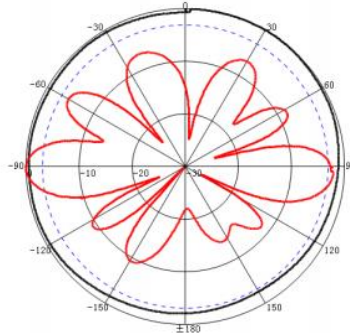
Gain:5.74dB



Freq:914MHz
Date:2014-04-01
Elevation:H-plane
Polar:Across:Main
Polarization:Vertical
Max:-8.24dB
HPBW(3dB):360.00°
FBR:0.53dB

Freq:914MHz
Date:2014-04-01
Elevation:V-plane
Polar:Across:Main
Polarization:Vertical
Max:-9.04dB
HPBW(3dB):19.65°
FBR:2.45dB

Gain:5.91dB



Freq:928MHz
Date:2014-04-01
Elevation:H-plane
Polar:Across:Main
Polarization:Vertical
Max:-8.26dB
HPBW(3dB):360.00°
FBR:0.59dB

Freq:928MHz
Date:2014-04-01
Elevation:V-plane
Polar:Across:Main
Polarization:Vertical
Max:-9.66dB
HPBW(3dB):18.07°
FBR:2.84dB

Gain:5.69dB

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [900 MHz 6 dBi Omnidirectional Antenna PE510M1015](#)



900 MHz 6 dBi Omnidirectional Antenna

Antennas Technical Data Sheet

PE51OM1015

900 MHz 6 dBi Omnidirectional 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 6 dBi Omnidirectional Antenna PE51OM1015](#)

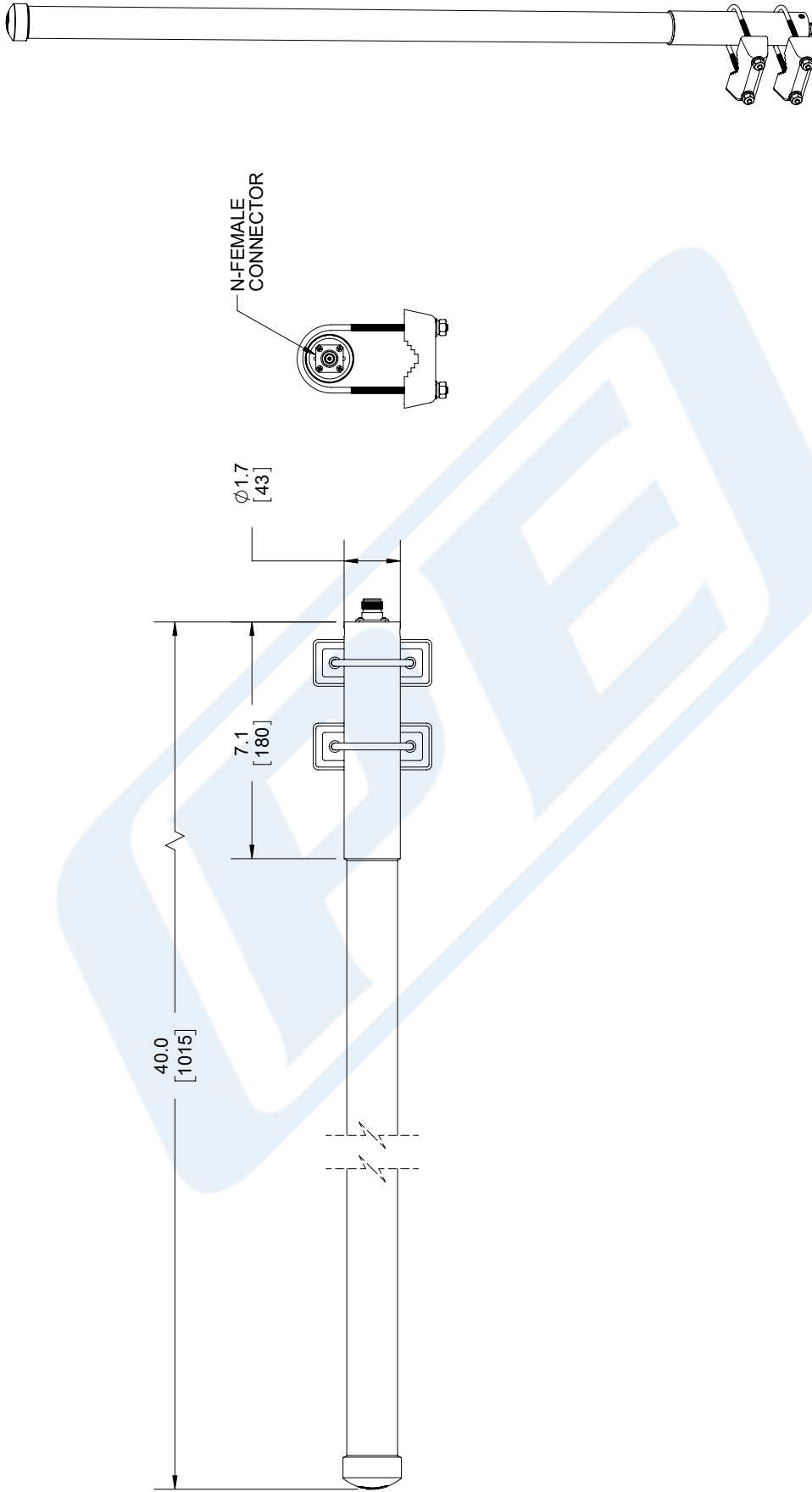
URL: <https://www.pasternack.com/single-antenna-6-dbi-gain-n-pe51om1015-p.aspx>

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.

PE51OM1015 CAD Drawing

900 MHz 6 dBi Omnidirectional Antenna

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



<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS</p> <p>TOLERANCES:</p> <table style="font-size: small;"> <tr> <td>.X = ±.2</td> <td>[.08]</td> <td>FRACTIONS</td> </tr> <tr> <td>.XX = ±.02</td> <td>[.51]</td> <td>± 1/32</td> </tr> <tr> <td>.XXX = ±.005</td> <td>[.13]</td> <td>ANGLES ± 1°</td> </tr> </table> <p>CABLE LENGTH (L) TOLERANCES:</p> <table style="font-size: small;"> <tr> <td>L ≤ 12</td> <td>[305]</td> <td>= +1 [25] / -0</td> </tr> <tr> <td>12 [305] < L ≤ 60</td> <td>[1524]</td> <td>= +2 [51] / -0</td> </tr> <tr> <td>60 [1524] < L ≤ 120</td> <td>[3048]</td> <td>= +4 [102] / -0</td> </tr> <tr> <td>120 [3048] < L ≤ 300</td> <td>[7620]</td> <td>= +6 [152] / -0</td> </tr> <tr> <td>300 [7620] < L ≤ ∞</td> <td></td> <td>= +5% / L / -0</td> </tr> </table> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p>	.X = ±.2	[.08]	FRACTIONS	.XX = ±.02	[.51]	± 1/32	.XXX = ±.005	[.13]	ANGLES ± 1°	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% / L / -0	<p>Pasternack Enterprises, Inc. P. O. Box 16759, Irvine, CA 92623. Phone: 1.949.261.1920 1.866.727.8376 Fax: 1.949.261.7451 Website: www.pasternack.com E-mail: sales@pasternack.com</p>	<p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION. ALL RIGHTS RESERVED.</p> <p>SHEET 1 OF 1</p> <p>SCALE N/A</p>
.X = ±.2	[.08]	FRACTIONS																								
.XX = ±.02	[.51]	± 1/32																								
.XXX = ±.005	[.13]	ANGLES ± 1°																								
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% / L / -0																								
SIZE [CAGE CODE] DRAWN BY A 53919 K.DANG	ITEM NO. PE51OM1015	REV A																								

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

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.