



900 MHz 6 dBi Omnidirectional Antenna

Antennas Technical Data Sheet

PE51OM1015

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 PE51OM1015 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 PE51OM1015 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
Input VSWR		1.5:1	1.5:1	
Impedance		50		Ohms
Gain		6		dBi
Input Power			50	Watts

Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	900-928					MHz
Gain	6					dBi

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](#)



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Horizontal Beam Width	360	Degrees
Vertical Beam Width	19	Degrees
Maximum Input Power	50	Watts

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 PE51OM1015](#)



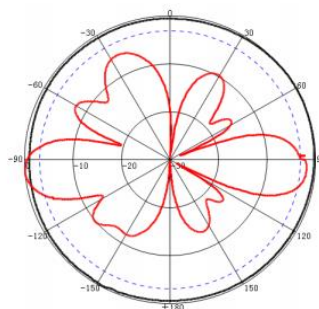
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Typical Radiation Pattern

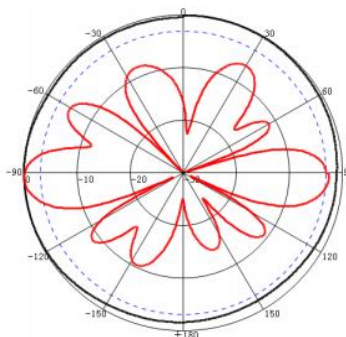
RF Antenna Patterns



Freq: 900MHz
Date: 2014-04-01
Elevation: H-plane
Polar: Across Main
Polarization: Vertical
Max: -9.04dB
HPBW(3dB): 360.00°
VBR: 0.35dB

Freq: 900MHz
Date: 2014-04-01
Elevation: V-plane
Polar: Across Main
Polarization: Vertical
Max: -9.04dB
HPBW(3dB): 21.60°
VBR: 1.75dB

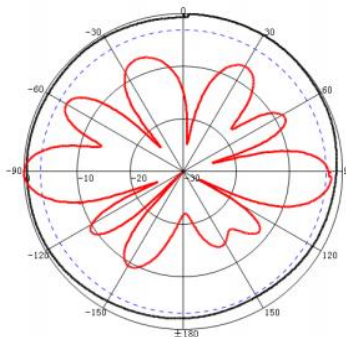
Gain: 5.74dB



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

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

Gain: 5.91dB



Freq: 926MHz
Date: 2014-04-01
Elevation: H-plane
Polar: Across Main
Polarization: Vertical
Max: -8.26dB
HPBW(3dB): 360.00°
VBR: 0.59dB

Freq: 926MHz
Date: 2014-04-01
Elevation: V-plane
Polar: Across Main
Polarization: Vertical
Max: -9.96dB
HPBW(3dB): 16.07°
VBR: 2.34dB

Gain: 5.89dB

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](#)



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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.

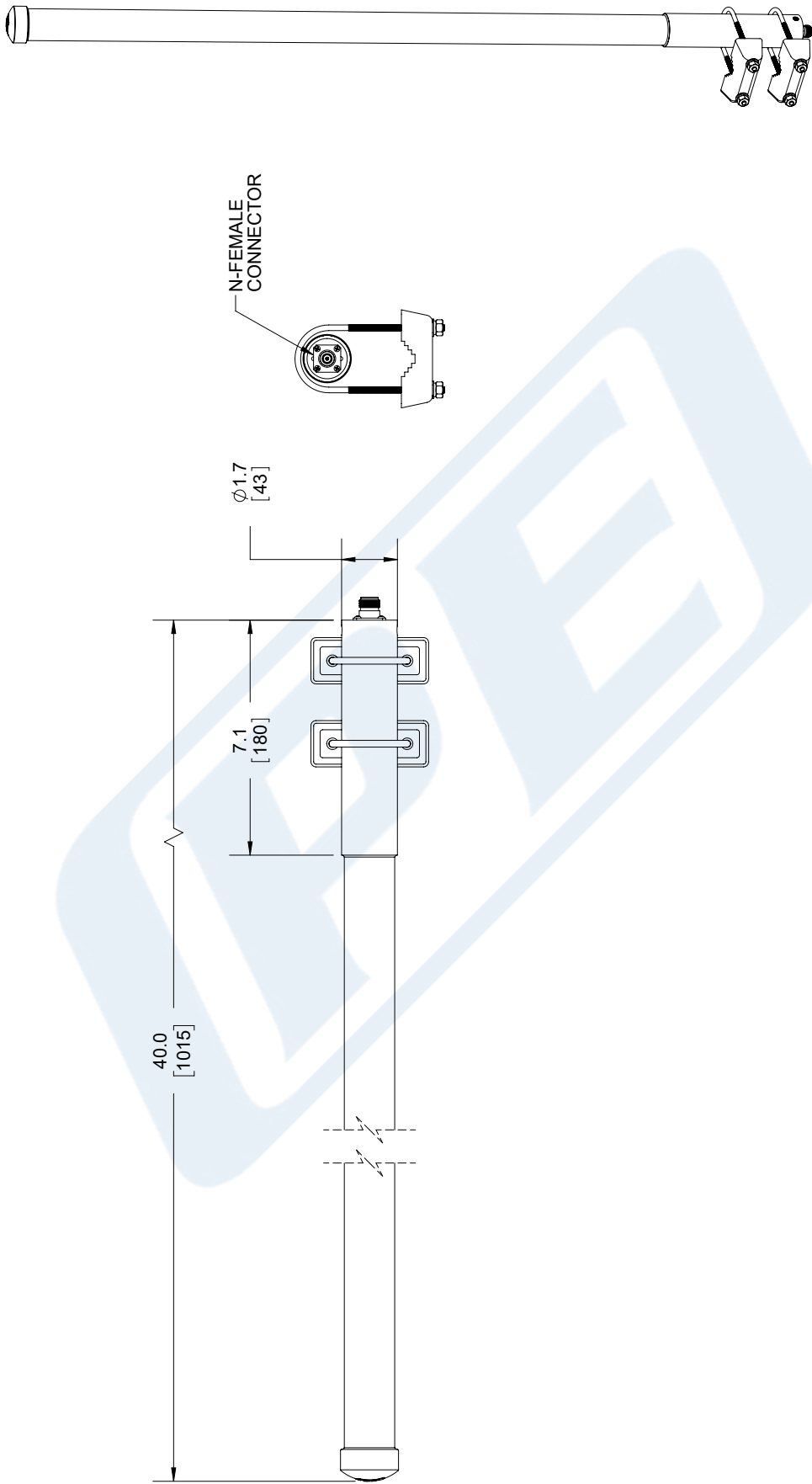
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [900 MHz 6 dBi Omnidirectional Antenna PE51OM1015](#)

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

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PE51OM1015 CAD Drawing
900 MHz 6 dBi Omnidirectional Antenna

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



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

TOLERANCES:

.X = ± .2	[.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% L	/ -0

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

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SCALE N/A

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SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	K.DANG	PE51OM1015

REV A

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