



800/900 MHz 3 dBi Omnidirectional Antenna

Antennas Technical Data Sheet

PE51OM1013

Features

- Superior all weather performance
- Rugged industrial grade design
- Lightweight fiberglass radome
- Integral N-Female connector
- Heavy-duty steel mounting bracket

Applications

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

Description

The HyperLink PE51OM1013 is a high performance omnidirectional antenna designed for the 800 MHz / 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 900 MHz Wireless LAN, SCADA, Wireless Video Links, LPWAN/IoT/M2M, and 800 MHz as well as 900 MHz Cellular band applications.

This antenna features an integral N-Female bulkhead type connector that mounts through the wall of an equipment enclosure. Included with the PE51OM1013 is a 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 1.3" diameter white high intensity fiberglass radome for durability and aesthetics. It is designed for all weather operation.

Configuration

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

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	824		960	MHz
Input VSWR		1.5:1		
Impedance		50		Ohms
Gain		3		dBi
Horizontal (Azimuth) Beam Width		Omnidirectional		
Vertical (Elevation) Beam Width		70		Degrees
Input Power			100	Watts

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [800/900 MHz 3 dBi Omnidirectional Antenna PE51OM1013](#)



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Mechanical Specifications

Radome Material

Fiberglass

Size

Overall Length

13.4 in [340.36 mm]

Width

1.3 in [33.02 mm]

Height

1.3 in [33.02 mm]

Mounting Mast Diameter

1.2 to 2 in [30.48 to 50.80 mm]

Weight

1.5 lbs [680.39 g]

Environmental Specifications

Temperature

Operating Range

-40 to +85 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: [800/900 MHz 3 dBi Omnidirectional Antenna PE510M1013](#)

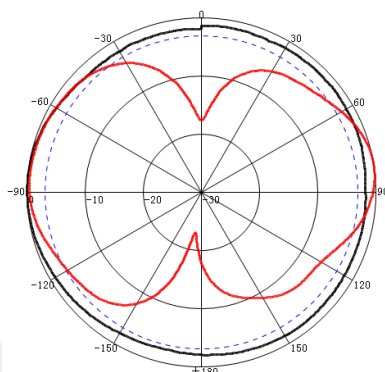
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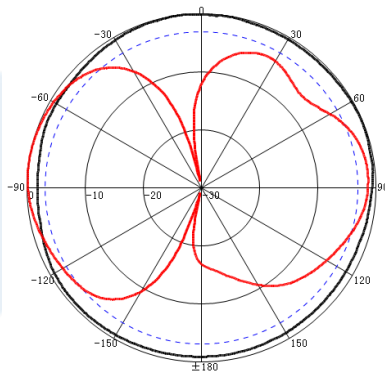
RF Antenna Patterns – PE510M1013



Freq: 824MHz
Date: 2014-04-10
Elevation: H-plane
Polar-Across: Main
Polarization: Vertical
Max: 12.30dB
HPBW(3dB): 360.00°
FBR: 1.24dB

Freq: 824MHz
Date: 2014-04-10
Elevation: V-plane
Polar-Across: Main
Polarization: Vertical
Max: 15.65dB
HPBW(3dB): 49.17°
FBR: 0.33dB

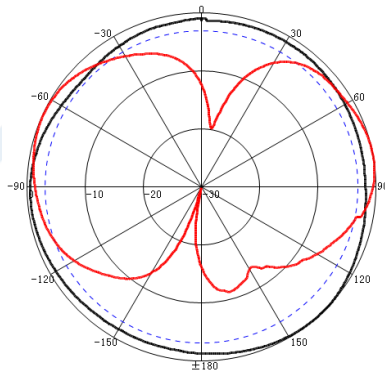
Gain: 3.58dBi



Freq: 880MHz
Date: 2014-04-10
Elevation: H-plane
Polar-Across: Main
Polarization: Vertical
Max: 12.22dB
HPBW(3dB): 360.00°
FBR: 0.75dB

Freq: 880MHz
Date: 2014-04-10
Elevation: V-plane
Polar-Across: Main
Polarization: Vertical
Max: 16.25dB
HPBW(3dB): 87.37°
FBR: 1.27dB

Gain: 3.46dBi



Freq: 960MHz
Date: 2014-04-10
Elevation: H-plane
Polar-Across: Main
Polarization: Vertical
Max: 13.42dB
HPBW(3dB): 360.00°
FBR: 1.35dB

Freq: 960MHz
Date: 2014-04-10
Elevation: V-plane
Polar-Across: Main
Polarization: Vertical
Max: 16.20dB
HPBW(3dB): 63.92°
FBR: 0.18dB

Gain: 3.83dBi

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [800/900 MHz 3 dBi Omnidirectional Antenna PE510M1013](#)



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800/900 MHz 3 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.

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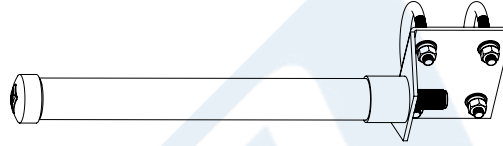
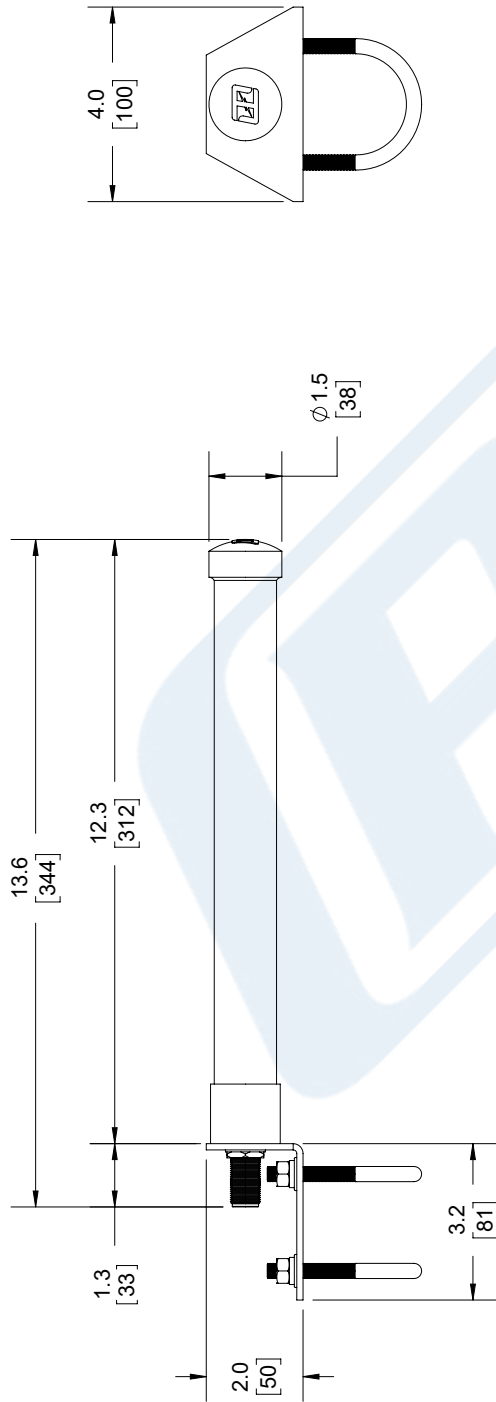
URL: <https://www.pasternack.com/wide-antenna-3-dbi-gain-n-pe51om1013-p.aspx>

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.

PE51OM1013 CAD Drawing

800/900 MHz 3 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.

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SHEET 1 OF 1

SCALE N/A

SIZE A

CAGE CODE 53919

DRAWN BY K.DANG

ITEM NO. PE51OM1013

REV A

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EU RoHS DIRECTIVE (MOST RECENT RELEASED VERSION)

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