



2.4/5.8GHz 10 dBi Dual Polarity MIMO Panel Antenna

Antennas Technical Data Sheet

PE51FP1001

Features

- Compact size, 4 x 4 x 3.5 in.
- Durable UV-stable ABS radome
- All weather operations
- Dual polarity feed system in single enclosure
- MIMO - Multiple Input/Multiple Output

Applications

- 2.4/5.8 GHz ISM Band
- IEEE 802.11a/b/g/n Wireless LAN
- IEEE 802.11ac Wireless systems
- WiFi and public wireless hotspots
- 802.11n MIMO applications

Description

This very compact panel 2.4/5.8 GHz multiple-input and multiple-output (MIMO) patch antenna is designed to operate with many manufacturers' enterprise-class 802.11n MIMO access points (APs). It features two independent dual-band, vertically polarized antennas in a single housing, making it an ideal and aesthetically pleasing antenna to support demanding indoor or outdoor applications in next generation IEEE 802.11n and 802.11ac wireless communication systems.

The antenna is fed via two N-Female ports, one for vertically polarized and one for horizontally polarized signals. This feature makes this antenna ideal for polarization diversity systems.

Designed for all weather operation, the PE51FP1001 features drain holes in the radome to help prevent moisture build-up inside the antenna. The antenna is supplied with a 30 degree tilt and swivel mast mount kit. This allows the antenna to be positioned for optimal performance. It can be adjusted up or down from 0° to 30°. It can be mounted to a 1" (25.4 mm) to 1.7" (43.2 mm) dia. masts.

Configuration

Design	Panel
Band Type	Multi
Radiation Pattern	Directional
Polarization	Vertical/Horizontal
Connector Type	N Female
Interface 2	N Female
Number of Ports	2
Lightning Protection	DC Ground

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Impedance		50		Ohms
Isolation	28			dB
Front to Back Ratio		15		dB
Input Power			50	Watts

Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	2,400-2,500	4,900-5,850				MHz

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2.4/5.8GHz 10 dBi Dual Polarity MIMO Panel Antenna PE51FP1001](#)



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Gain	8	10	dBi
Horizontal Beam Width	57	42	Degees
Vertical Beam Width	90	70	Degees
Maximum Input Power	50	50	Watts

Mechanical Specifications

Radome Material

ABS

Size

Overall Length

4 in [101.6 mm]

Width

4 in [101.6 mm]

Height

3.5 in [88.9 mm]

Mounting Mast Diameter

1 to 1.7 in [25.40 to 43.18 mm]

Weight

1.1 lbs [498.95 g]

Mechanical Specification Notes:

Radome material is UV-protected ABS.

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:

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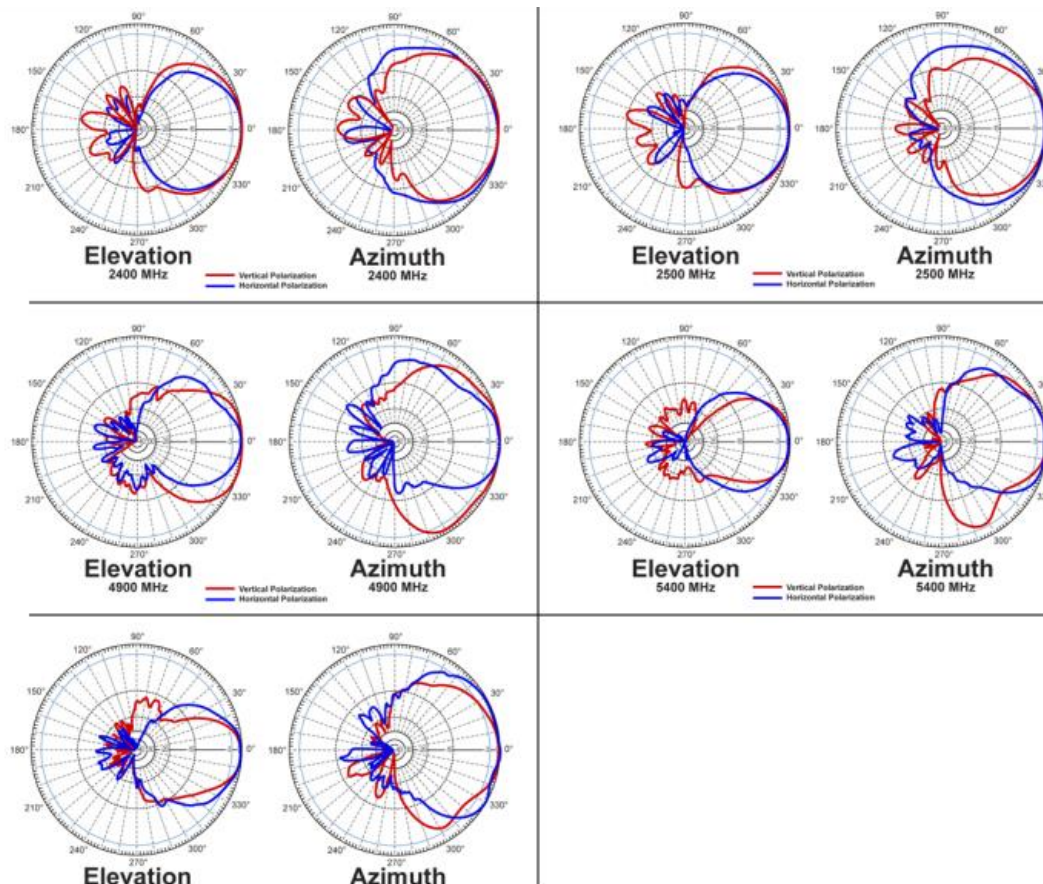


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Typical Radiation Pattern



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2.4/5.8GHz 10 dBi Dual Polarity MIMO Panel 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: [2.4/5.8GHz 10 dBi Dual Polarity MIMO Panel Antenna PE51FP1001](https://www.pasternack.com/multi-antenna-0-dbi-gain-n-pe51fp1001-p.aspx)

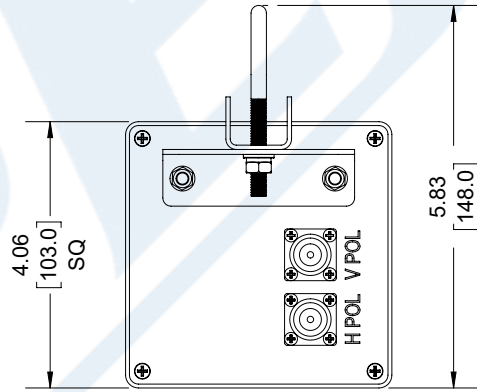
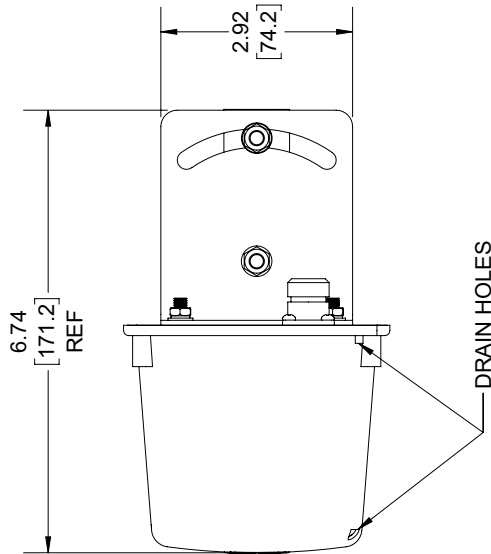
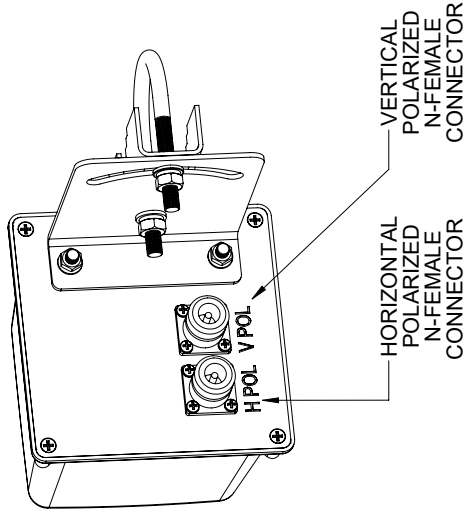
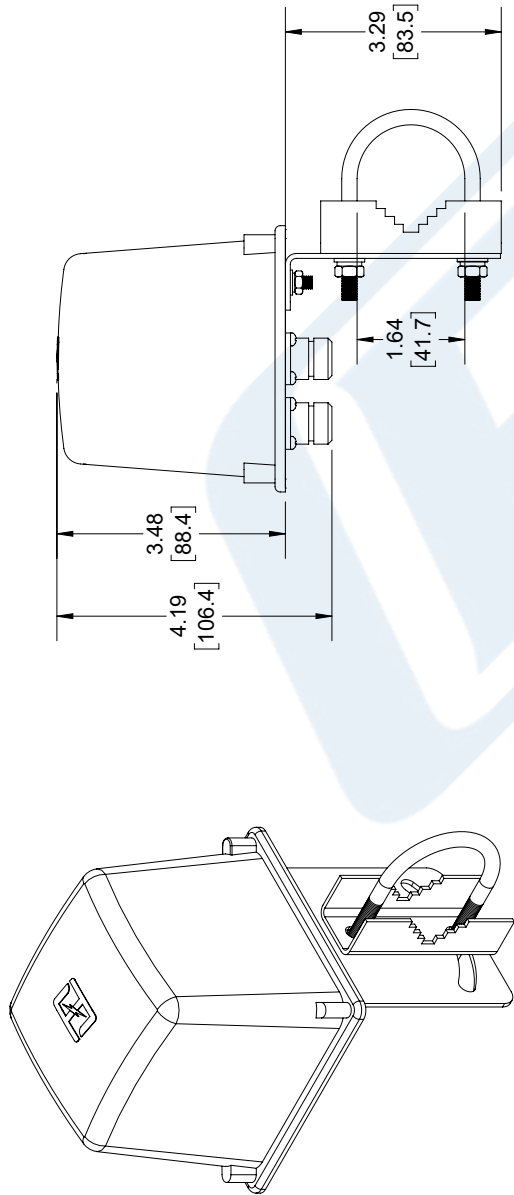
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PE51FP1001 CAD Drawing

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	2/26/2020	M.MILLER



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

TOLERANCES:

FRACCTIONS	ANGLES	CABLE LENGTH (L)
.X = ± .2	± 1/32	L ≤ 12 [305] = ± 1 [25] / -0
.XX = ± .02	± .13	12 [305] < L ≤ 60 [1524] = ± 2 [51] / -0
.XXX = ± .005	± .13	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.

PE PASTERNAK
an INFINITI brand

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SIZE: A 53919 K.DANG
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ITEM NO: PE51FP1001
REV: A

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1
SCALE N/A