



4.9-5.8 GHz Dual Polarized/X-Polarity 25dBi Dish Antenna

Antennas Technical Data Sheet

PE51PD1001

Features

- Adjustable dual polarity feed horn system allows the antenna to be configured for Dual Polarization (horizontal and vertical) or for X-Polarization (+45° and -45°)
- (2) N-Female connectors
- Includes tilt and swivel mast mount kit
- Optional radome cover kits available
- Aluminum reflector dish with UV stable light gray polymer finish

Applications

- 5.1/5.3/5.4/5.8 GHz ISM and UNII Band Applications
- 4.9 GHz Public Safety Band
- MIMO and 802.11 n Applications
- WiMAX Applications
- Long Distance Backhaul and Point to Point Data Links

Description

The HyperLink model PE51PD1001 is a high performance broadband dual polarized solid dish antenna. Because of its' superb electrical performance and mechanical stability, the parabolic dish antenna can be used in a wide variety of high performance 4.9 GHz and 5 GHz range (5.1/5.3/5.4/5.8 GHz) wireless applications. The wide band design of this antenna eliminates the need to purchase different antennas for each frequency. This simplifies installations since the same antenna can be used for a wide array of wireless applications. This antenna features 25 dBi of gain with a 7° horizontal beam-width and vertical beam-width.

The PE51PD1001 features an adjustable dual polarity feed horn system which allows the antenna to be configured for Dual Polarization (horizontal and vertical) or for X-Polarization (+45° and -45°). It is fed via two N-Female connectors, one for each polarized signals. This feature makes it ideal for MIMO/802.11n and polarization diversity systems.

The reflector dish of the PE51PD1001 is constructed from high quality aluminum which gives it superior strength. The dish is coated in a light gray UV-inhibited polymer for durability and aesthetics. The small diameter of the dish helps minimize wind loading.

The PE51PD1001 is supplied with a tilt and swivel mast mount kit. This allows installation at various degrees of incline for easy alignment. It can be adjusted up or down from 0° to 30°.

Configuration

Design	Dish
Band Type	Wide
Radiation Pattern	Directional
Polarization	H/V or 45 Deg. Slant
Connector Type	N Female
Interface 2	N Female
Number of Ports	2

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Input VSWR			1.5:1	
Impedance		50		Ohms
Gain		25		dBi
Front to Back Ratio		30		dB

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [4.9-5.8 GHz Dual Polarized/X-Polarity 25dBi Dish Antenna PE51PD1001](#)



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Input Power 100 Watts

Electrical Specification Notes:

Polarization is adjustable - Dual Polarized (Vertical and Horizontal) or X-Polarized (+45degree and -45degree Slant)

Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	4,750-5,850					MHz
Gain	25					dBi
Horizontal Beam Width	7					Degees
Vertical Beam Width	7					Degees
Maximum Input Power	100					Watts

Mechanical Specifications

Size

Overall Length 15.7 in [398.78 mm]
 Width 15.7 in [398.78 mm]
 Mounting Mast Diameter 1.5 to 2.3 in [38.10 to 58.42 mm]
 Weight 5 lbs [2.27 kg]

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

Plotted and Other Data

Notes:

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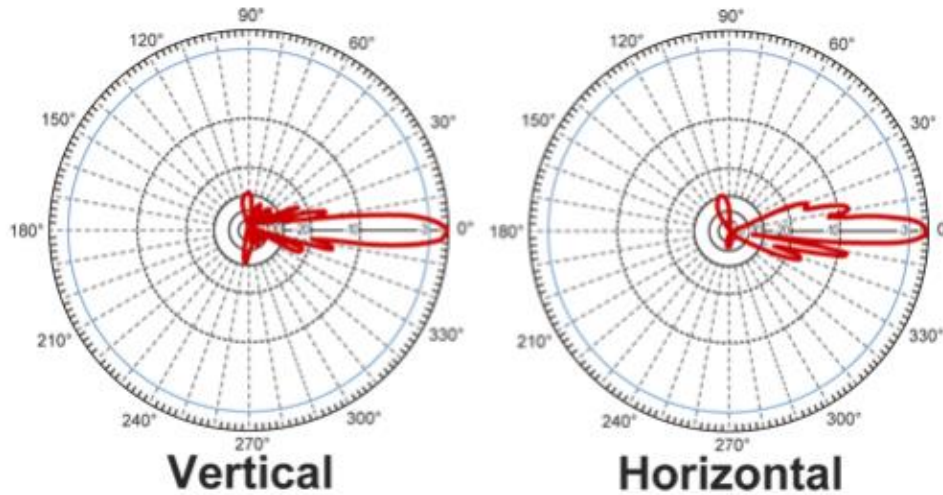


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Typical Radiation Pattern



4.9-5.8 GHz Dual Polarized/X-Polarity 25dBi Dish 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: [4.9-5.8 GHz Dual Polarized/X-Polarity 25dBi Dish Antenna PE51PD1001](https://www.pasternack.com/wide-antenna-25-dbi-gain-n-pe51pd1001-p.aspx)

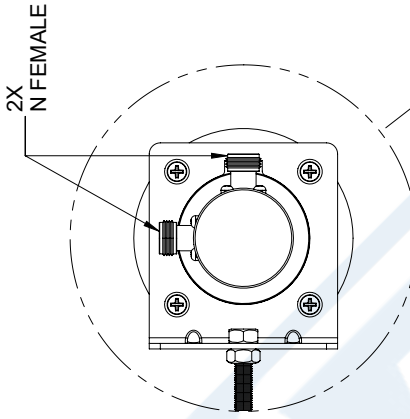
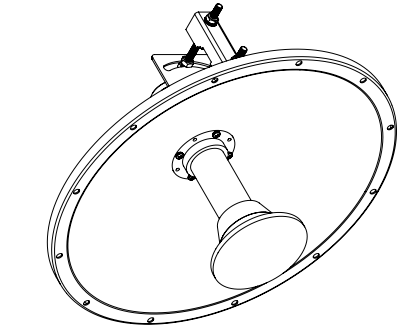
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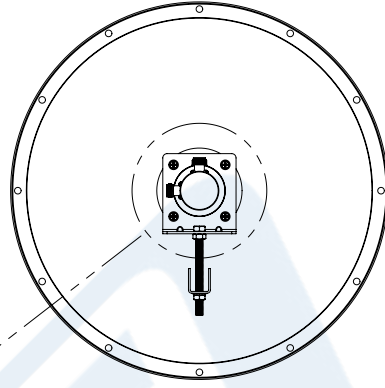
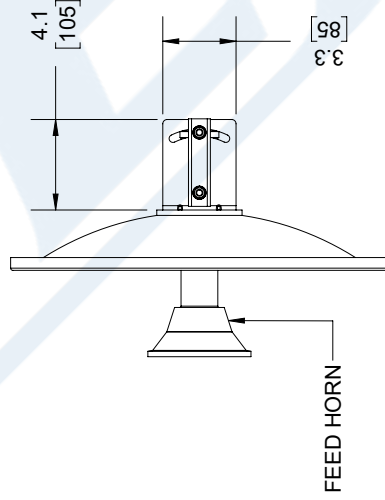
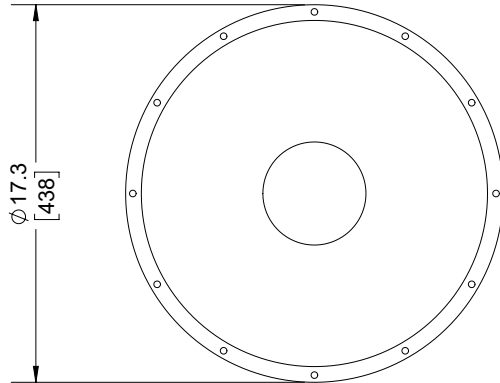
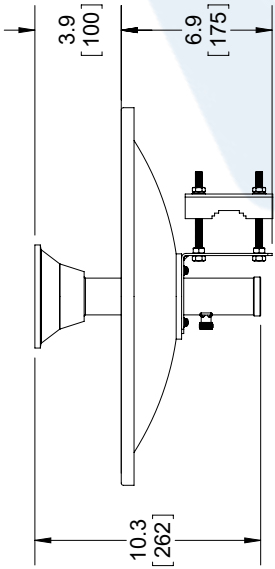
PE51PD1001 CAD Drawing

4.9-5.8 GHz Dual Polarized/X-Polarity 25dBi Dish Antenna

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	2/17/2020	M.MILLER



DETAIL A



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

TOLERANCES:

.X = ±.2	[5.08]	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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an INFINIT brand

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ITEM NO: PE51PD1001
CAGE CODE: A
DRAWN BY: K.DANG
SCALE: N/A
SHEET 1 OF 1

THIRD-ANGLE PROJECTION

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