



5.8 GHz 16.5 dBi Yagi Antenna

Antennas Technical Data Sheet

PE51YA1005

Features

- Lightweight Superior Performance YAGI Antenna
- All Weather Operation, UV Stable ABS Radome provides Protection
- 30° Beam Width Coverage
- Can be installed for either vertical or horizontal polarization
- Includes tilt and swivel mast mount

Applications

- 5.8GHz UNII applications
- 5.8GHz ISM applications
- 5.8GHz Wireless LAN systems
- Long-range Directional Applications
- Point to Point, Point to Multi-point Systems

Description

The HyperLink PE51YA1005 radome enclosed yagi antenna features high gain and a 30° beam width. It is ideally suited for directional and multipoint IEEE 802.11a/n WiFi and wireless LAN applications and other systems operating in the 5.8GHz ISM band.

The PE51YA1005 is enclosed within a UV-stable ABS radome for all-weather operation. Included with the antenna is a 60° tilt and swivel mast mount kit. This allows the installer to make accurate alignment over a wide range of pointing angles. The PE51YA1005 features a 10 inch (25.4mm) coax cable terminated with an N-Female connector. Additional connector type are available, please inquire when ordering for options.

Configuration

Design	Yagi
Band Type	Single
Radiation Pattern	Directional
Polarization	Vertical
Cable Length	10 in [254 mm]
Connector Type	N Female
Number of Ports	1
Lightning Protection	DC Ground

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Input VSWR			1.5:1	
Impedance		50		Ohms
Gain		16.5		dBi
Front to Back Ratio		18		dB
Input Power			100	Watts

Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	5,725-5,825					MHz
Gain	16.5					dBi

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [5.8 GHz 16.5 dBi Yagi Antenna PE51YA1005](#)



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Horizontal Beam Width	30	Degees
Vertical Beam Width	25	Degees
Maximum Input Power	100	Watts

Mechanical Specifications

Radome Material	ABS
Size	
Overall Length	13.6 in [345.44 mm]
Width	4.6 in [116.84 mm]
Height	2.6 in [66.04 mm]
Mounting Mast Diameter	1.6 to 2 in [40.64 to 50.80 mm]
Weight	0.82 lbs [371.95 g]
Mechanical Specification Notes:	
Radome material is weatherproof ABS.	

Environmental Specifications

Temperature	
Operating Range	-40 to +65 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: [5.8 GHz 16.5 dBi Yagi Antenna PE51YA1005](#)

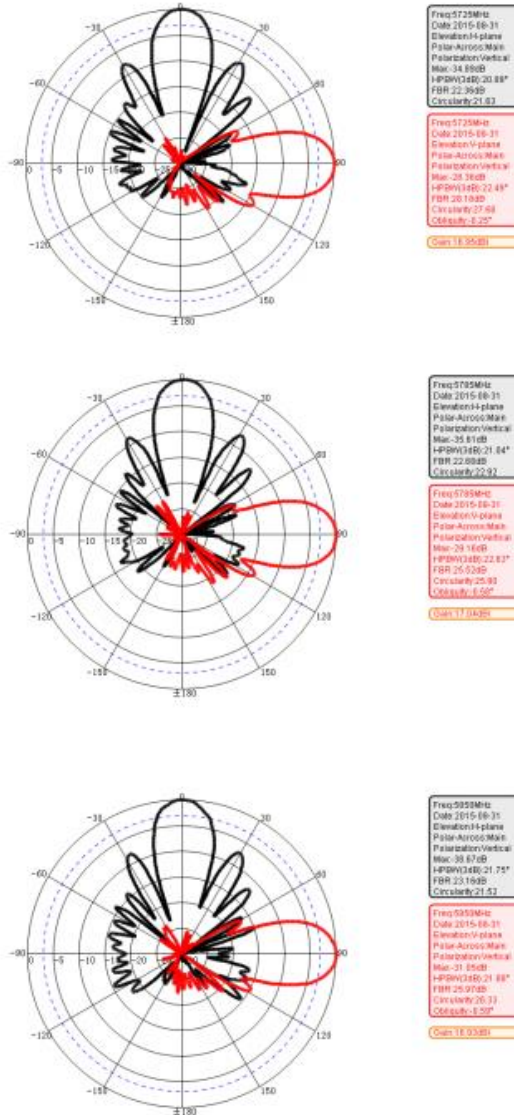


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Typical Radiation Pattern



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PE51YA1005

5.8 GHz 16.5 dBi Yagi 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: [5.8 GHz 16.5 dBi Yagi Antenna PE51YA1005](https://www.pasternack.com/single-antenna-16.5-dbi-gain-n-pe51ya1005-p.aspx)

URL: <https://www.pasternack.com/single-antenna-16.5-dbi-gain-n-pe51ya1005-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.

PE51YA1005 CAD Drawing

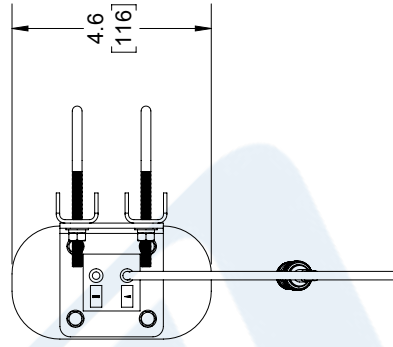
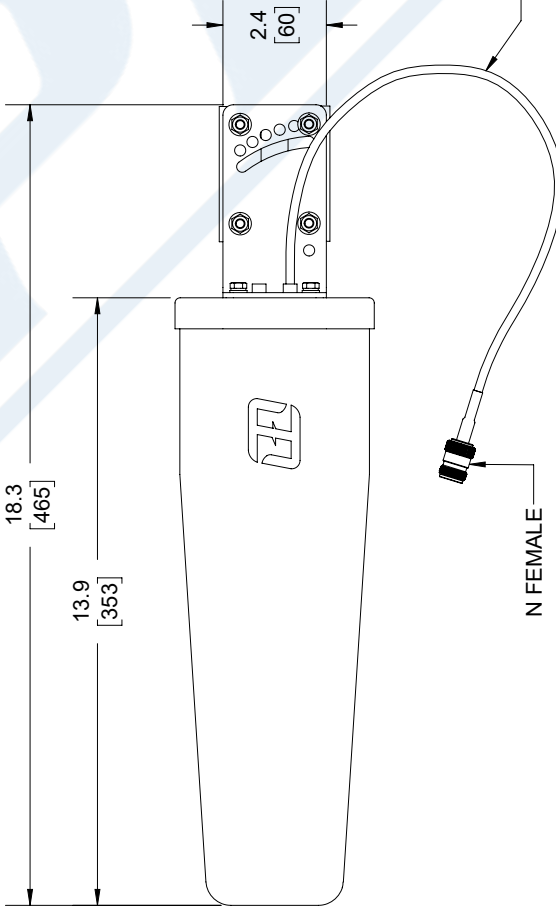
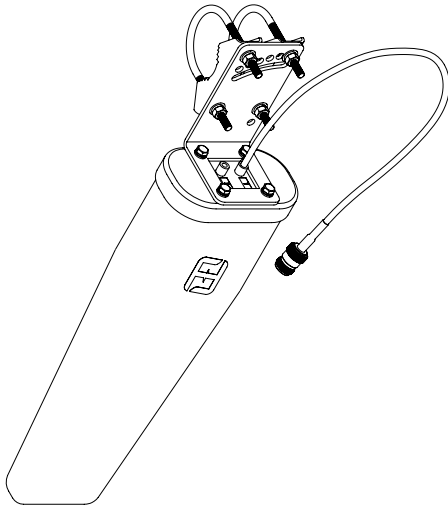
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REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	2/20/2020	M.MILLER

U-BOLTS FOR
POLE MOUNTING

Ø 2"
MAX

2.6
[66]



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

TOLERANCES:
 .X = ±.2 [5.08] FRACTIONS ± 1/32
 .XX = ±.02 [.51] ANGLES ± 1°
 .XXX = ±.005 [.13]

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.

PE PASTERNAK
an INFINIT brand

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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1
SCALE N/A

REV	A
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