



## 2.4 GHz 9 dBi Yagi Antenna

### Antennas Technical Data Sheet

PE51YA1001

#### Features

- 12 inch coax lead terminated with a N-Female Connector
- UV-stable, UL flame rated radome with 60° beam-width
- DC Short lightning protection
- Light weight, & includes tilt and swivel mast mount
- Can be installed for either vertical or horizontal polarization

#### Applications

- 2.4 GHz ISM Band
- IEEE 802.11b, 802.11g, IEEE 802.11n Wireless LAN applications
- Directional and multipoint applications
- Bluetooth® & public wireless hotspot
- WiFi & wireless video systems

#### Description

The HyperGain PE51YA1001 Radome Enclosed Yagi WiFi Antenna features high gain and a 60° beam-width. It is ideally suited for directional and multipoint IEEE 802.11b, 802.11g and 802.11n wireless LANs, Bluetooth®, public wireless hotspot applications and other systems operating in the 2.4GHz ISM band. The unique design of this antenna allows it to be installed for either vertical or horizontal polarization.

This WiFi antenna is enclosed within a UV-stable, UL flame rated radome for all-weather operation. The PE51YA1001 antenna is supplied with a 60 degree tilt and swivel mast mount kit.

#### Configuration

Design	Yagi
Band Type	Single
Radiation Pattern	Directional
Polarization	Vertical or Horizontal
Cable Type	Coax Cable
Cable Length	12 in [304.8 mm]
Connector Type	N Female
Number of Ports	1
Lightning Protection	DC Short

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Input VSWR			1.5:1	
Impedance		50		Ohms
Gain		9		dBi
Input Power			50	Watts

#### Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	2,400-2,500					MHz
Gain	9					dBi
Horizontal Beam Width	60					Degees

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2.4 GHz 9 dBi Yagi Antenna PE51YA1001](#)



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Vertical Beam Width	60	Degees
Maximum Input Power	50	Watts

#### Mechanical Specifications

Radome Material

Polymer

#### Size

Overall Length

6 in [152.4 mm]

Width

3 in [76.2 mm]

Height

3 in [76.2 mm]

Mounting Mast Diameter

1.25 to 2 in [31.75 to 50.80 mm]

Weight

1.4 lbs [635.03 g]

Mechanical Specification Notes:

Radome material is UV -inhibited Polymer.

#### Environmental Specifications

##### Temperature

Operating Range

-20 to +60 deg C

Wind Loading

150 MPH [241.4 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: [2.4 GHz 9 dBi Yagi Antenna PE51YA1001](#)

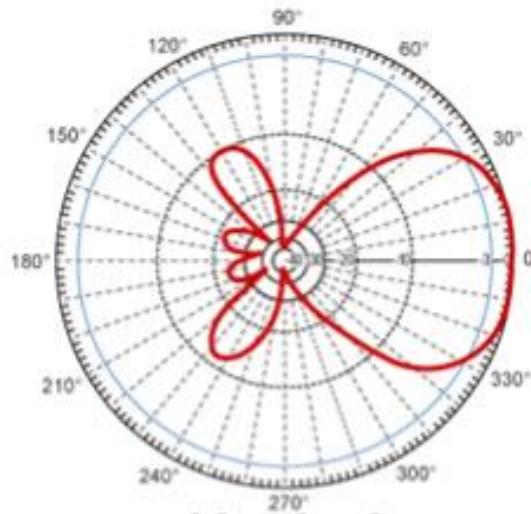


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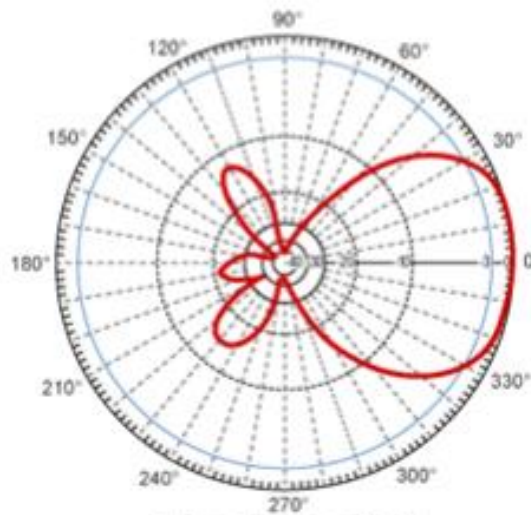
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#### Typical Radiation Pattern



**Vertical**



**Horizontal**

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PE51YA1001

2.4 GHz 9 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: [2.4 GHz 9 dBi Yagi Antenna PE51YA1001](https://www.pasternack.com/single-antenna-9-dbi-gain-n-pe51ya1001-p.aspx)

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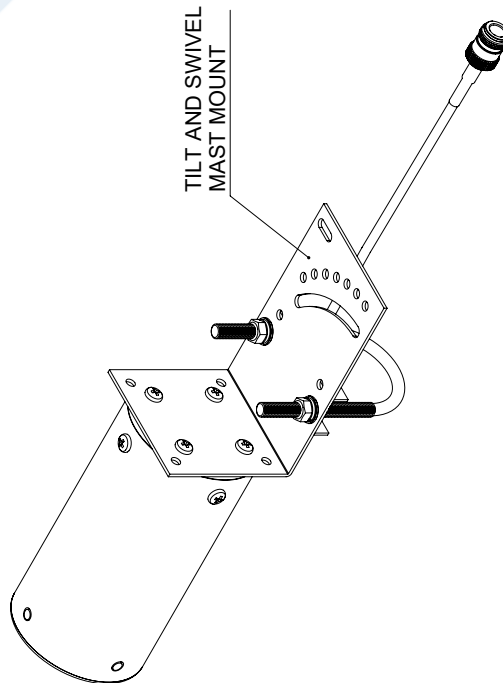
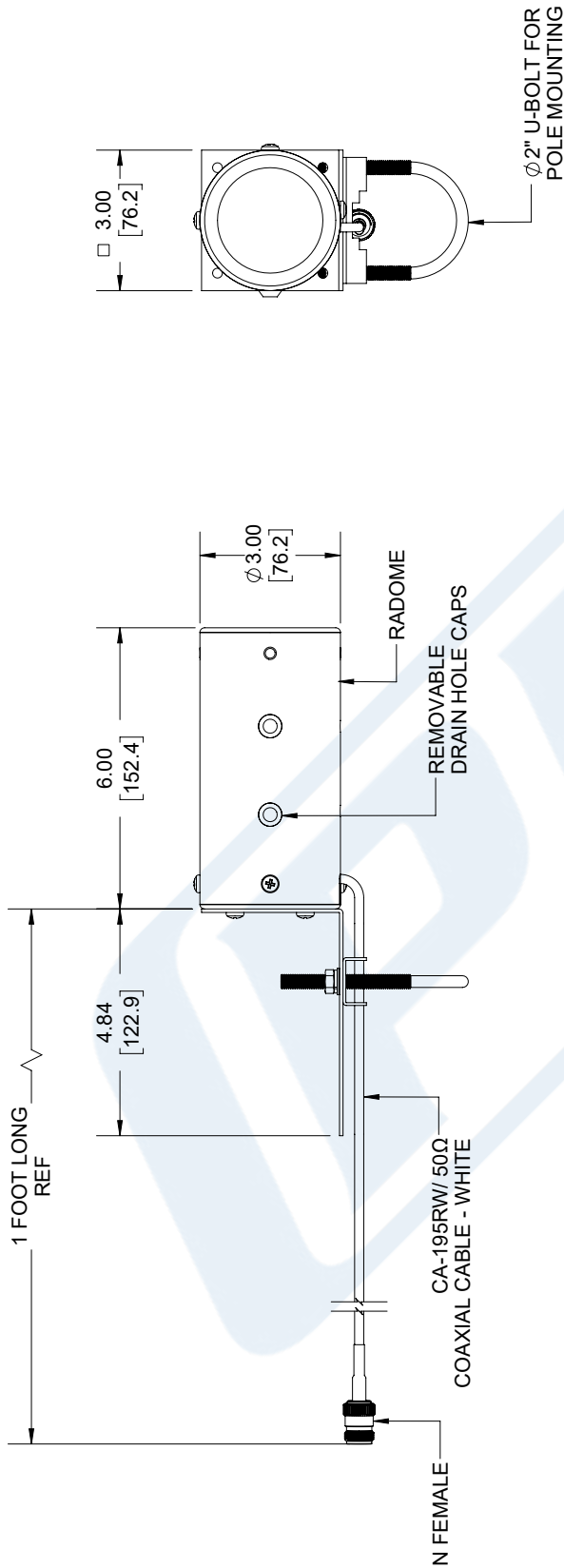
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# PE51YA1001 CAD Drawing

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## REVISIONS

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



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

ITEM NO PE51YA1001

DRAWN BY K.DANG

CAGE CODE A 53919

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