

## 2.4 GHz to 5.8 GHz Ultra-Wideband 8 dBi Log Periodic Antenna



### Antennas Technical Data Sheet

**PE51LP1002**

#### Features

- Ultra Wide Band design
- 2.3 to 6.5 GHz continuous coverage
- Ideal for use with multiband access points and routers

- Superior performance
- Compact size, low profile and easy to mount, 9 inch coax lead included

#### Applications

- 802.11a/b/g/n and 802.11ac access points and routers
- 802.16 and 802.20 WiMAX applications
- Distributed Antenna Systems, DAS, Ultra Wide Band, UWB applications

- Homeland Security and Public Safety Services: Fire, Police, Security
- WiFi Systems

#### Description

The HyperLink® PE51LP1002 is a high performance ultra wide band log periodic antenna designed to operate from 2.3 GHz to 6.5 GHz. This Ultra-Wideband design eliminates the need to purchase different antennas for each frequency. This simplifies installation since the same antenna can be used for a wide array of wireless applications where wide coverage is desired. The broadband characteristics of the antenna enables it to operate over a very wide frequency range with consistent gain. The PE51LP1002 is ideal for Distributed Antenna Systems, DAS. A DAS system is used to distribute signals operating in different frequency bands like 802.11ac or WiMAX throughout a building or area. This antenna features 8 dBi of gain and a 60 degree beam width.

The internal components of this antenna are enclosed within a UV-stable white fiberglass radome for all-weather operation. It is supplied with a swivel mast mount kit.

#### Configuration

Design	Log Periodic
Band Type	Wide
Radiation Pattern	Directional
Polarization	Vertical
Cable Type	Coax lead
Cable Length	9 in [228.6 mm]
Connector Type	N Female
Number of Ports	1

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Input VSWR			1.5:1	
Impedance	50			Ohms
Gain	8			dBi
Front to Back Ratio	20			dB
Input Power			50	Watts

#### Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	2,400-6,500					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 GHz to 5.8 GHz Ultra-Wideband 8 dBi Log Periodic Antenna PE51LP1002](#)

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Gain	8	dBi
Horizontal Beam Width	80	Degees
Vertical Beam Width	60	Degees
Maximum Input Power	50	Watts

#### Mechanical Specifications

Radome Material

Fiberglass

##### Size

Overall Length

6.3 in [160.02 mm]

Width

3.5 in [88.9 mm]

Height

1.3 in [33.02 mm]

Mounting Mast Diameter

1.5 to 1.9 in [38.10 to 48.26 mm]

Weight

1.5 lbs [680.39 g]

Mechanical Specification Notes:

Radome material is UV stable fiberglass

#### Environmental Specifications

##### Temperature

Operating Range

-40 to +85 deg C

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

#### Plotted and Other Data

Notes:

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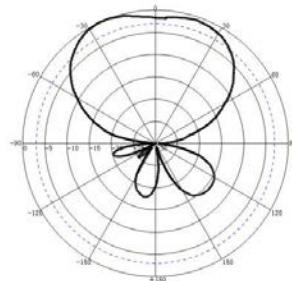
## 2.4 GHz to 5.8 GHz Ultra-Wideband 8 dBi Log Periodic Antenna



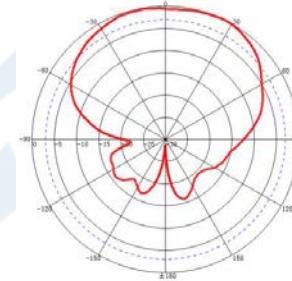
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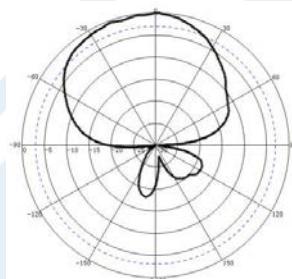
#### Horizontal Polarization



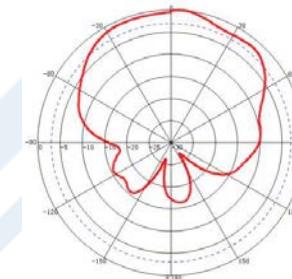
H-Plane: 2400 MHz



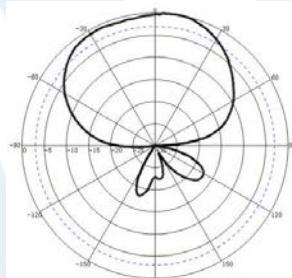
V-Plane: 2400 MHz



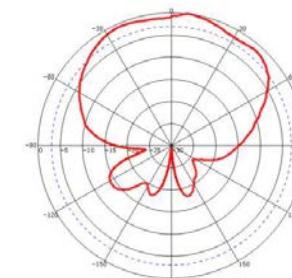
H-Plane: 2450 MHz



V-Plane: 2450 MHz



H-Plane: 2500 MHz



V-Plane: 2500 MHz

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2.4 GHz to 5.8 GHz Ultra-Wideband 8 dBi Log Periodic 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 to 5.8 GHz Ultra-Wideband 8 dBi Log Periodic Antenna PE51LP1002](https://www.pasternack.com/wide-antenna-8-dbi-gain-n-pe51lp1002-p.aspx)

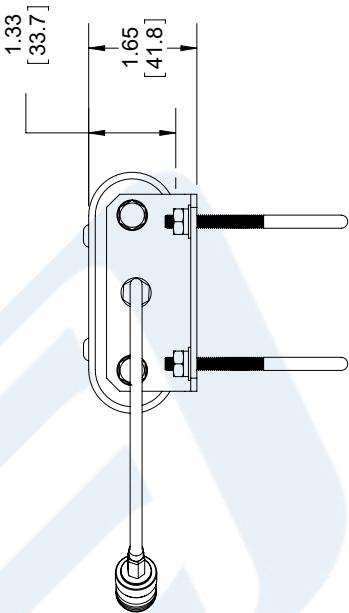
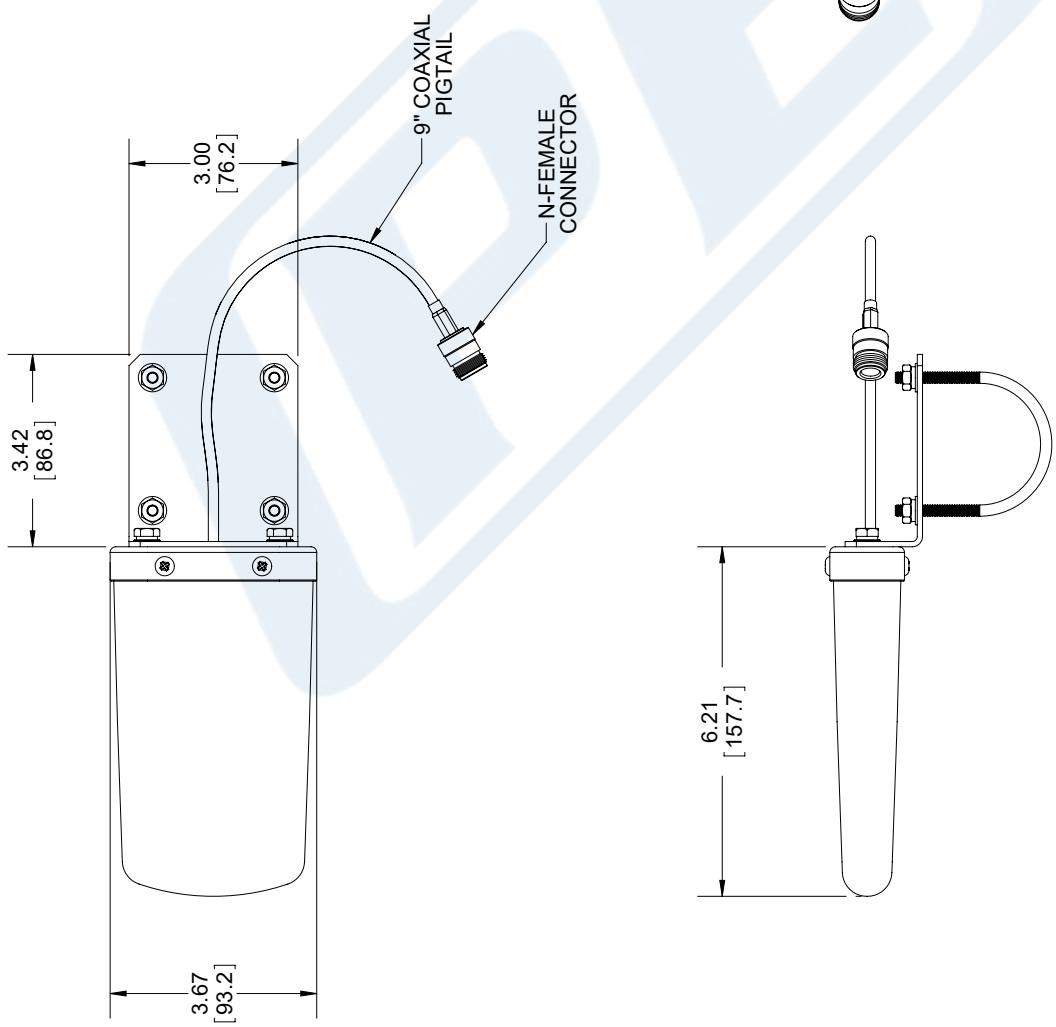
URL: <https://www.pasternack.com/wide-antenna-8-dbi-gain-n-pe51lp1002-p.aspx>

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# PE51LP1002 CAD Drawing

2.4 GHz to 5.8 GHz Ultra-Wideband 8 dBi Log Periodic Antenna

REVISIONS				
REV.	DESCRIPTION	DATE	APPROVED	
A	INITIAL RELEASE	2/12/2020	M.MILLER	



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X = $\pm 2$ [5.08] FRACTIONS .XX = $\pm .02$ [.51] $\pm 1/32$ .XXX = $\pm .005$ [.13] ANGLES $\pm 1^\circ$		Pasternak Enterprises, Inc. P.O. Box 16759, Irvine, CA 92623. Phone: 1.949.261.1920   1.866.727.8376 Fax: 1.949.261.7451 Website: www.pasternak.com E-mail: sales@pasternak.com
CABLE LENGTH (L) TOLERANCES: L $\leq$ 12 [305] = $\pm 1$ [25] / -0 12 [305] < L $\leq$ 60 [1524] = $\pm 2$ [51] / -0 60 [1524] < L $\leq$ 120 [3048] = $\pm 4$ [102] / -0 120 [3048] < L $\leq$ 300 [7620] = $\pm 6$ [152] / -0 300 [7620] < L = $\pm 5\%$ L / -0		SHEET 1 OF 1 SCALE N/A ITEM NO. PE51LP1002 DRAWN BY K.DANG CAGE CODE 53919 REV A
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