



900 MHz 9 dBi Al Yagi Antenna

Antennas Technical Data Sheet

PE51YA1009

Features

- 9 dBi gain & all weather Anodized Aluminum construction
- Can be installed for either vertical or horizontal polarization
- Solid Aluminum 1/8" elements
- Heavy-duty 1/2" Aluminum boom
- 15 inch coax lead & 1/8" thick plated steel mounting plate

Applications

- 900MHz ISM Band & Wireless LAN systems
- Point to multipoint & Non Line of Sight (NLOS) applications
- 900MHz Cellular and GSM
- RFID & SCADA
- LPWAN, LoRA, IoT, M2M

Description

The HyperGain PE51YA1009 High-Performance Yagi Antenna in an economical package combines accurate gain with a wide beam-width, ideally suited for directional applications in the 900 MHz ISM and GSM bands. This series of Yagi antennas provides the user with anodized aluminum boom, solid elements, low loss series 400 COAX, and rugged mounting hardware.

Configuration

Design	Yagi
Band Type	Wide
Radiation Pattern	Directional
Polarization	Vertical or Horizontal
Cable Type	400 series
Cable Length	15 in [381 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
Front to Back Ratio		15		dB
Input Power			100	Watts

Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	824-960					MHz
Gain	9					dBi
Horizontal Beam Width	53					Degrees
Vertical Beam Width	42					Degrees
Maximum Input Power	100					Watts

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [900 MHz 9 dBi Al Yagi Antenna PE51YA1009](#)



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Mechanical Specifications

Radome Material

ABS

Size

Overall Length

26.8 in [680.72 mm]

Mounting Mast Diameter

2 in [50.80 mm]

Weight

1.9 lbs [861.83 g]

Environmental Specifications

Temperature

Operating Range

-40 to +85 deg C

Wind Loading

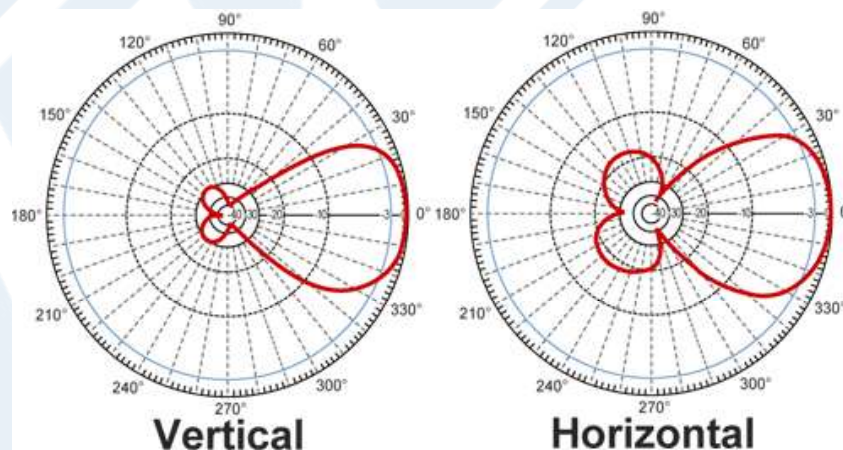
135 MPH [217.26 KPH]

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

Plotted and Other Data

Notes:

RF Antenna Gain Patterns



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900 MHz 9 dBi Al 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: [900 MHz 9 dBi Al Yagi Antenna PE51YA1009](#)

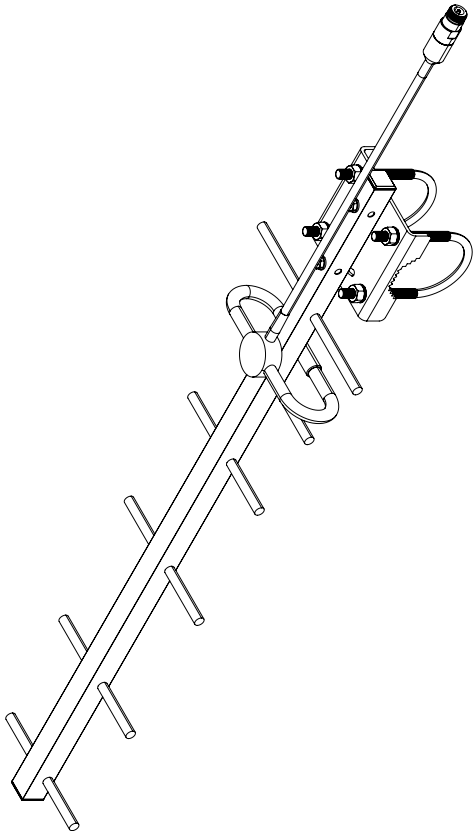
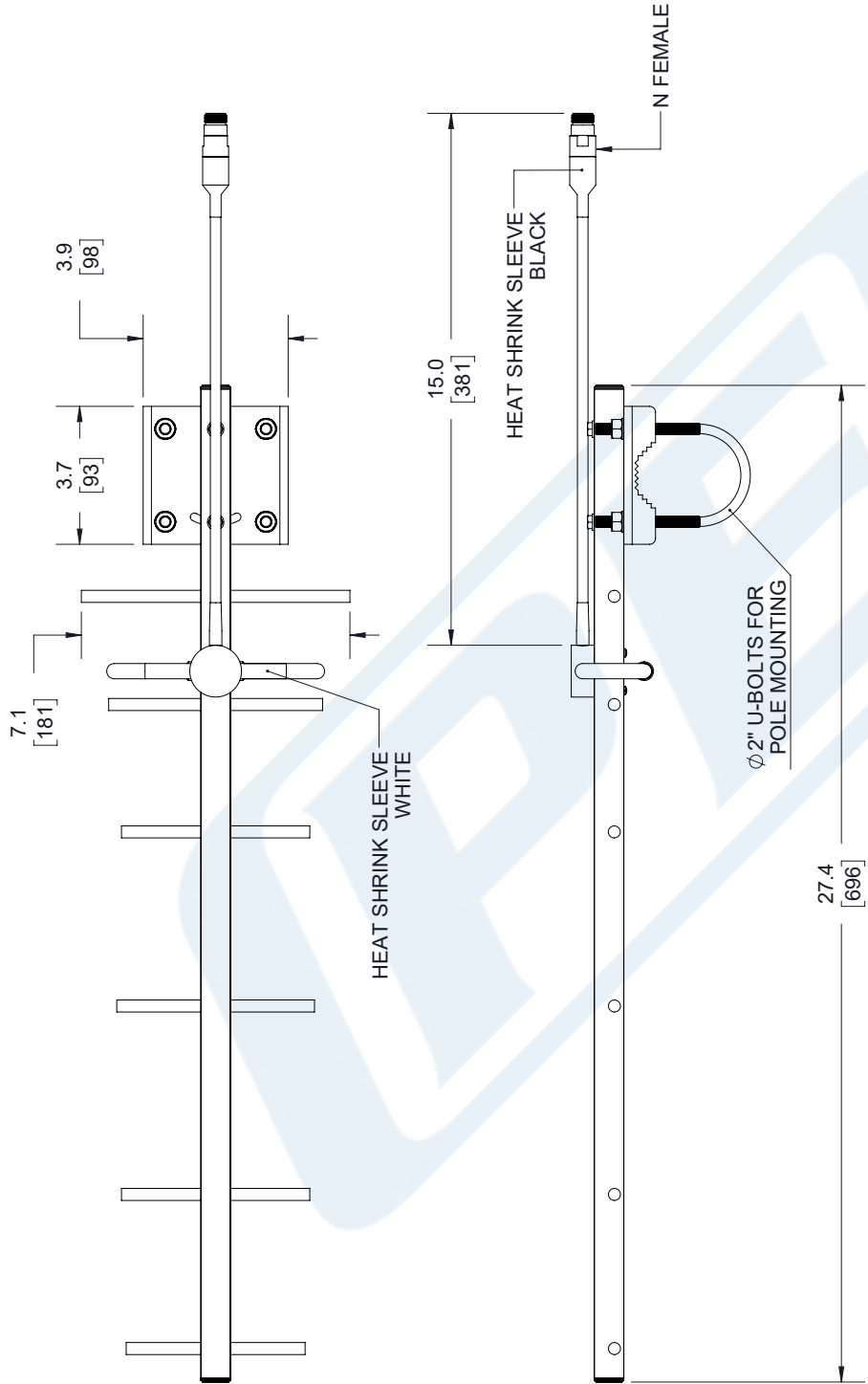
URL: <https://www.pasternack.com/wide-antenna-9-dbi-gain-n-pe51ya1009-p.aspx>

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.

9dBi is the peak gain of the antenna under normal operating conditions

PE51YA1009 CAD Drawing
900 MHz 9 dBi AI Yagi Antenna

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	2/21/2020	S.E.L.I.S



THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

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

TOLERANCES:

.X = ± .2	[.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.

ITEM NO. PE51YA1009

REV. A

DRAWN BY K.DANG

CAGE CODE A 53919

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