



## 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					Degees
Vertical Beam Width	42					Degees
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](#)



## 900 MHz 9 dBi AI Yagi Antenna

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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

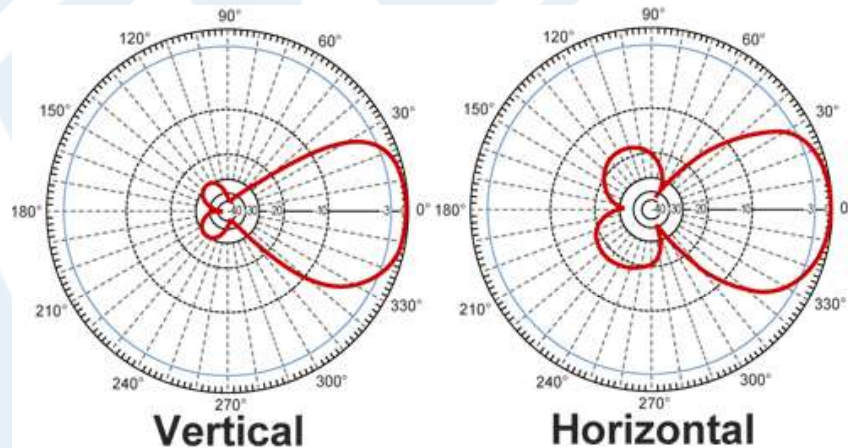
135 MPH [217.26 KPH]

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

#### Plotted and Other Data

Notes:

##### RF Antenna Gain Patterns



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PE51YA1009

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](https://www.pasternack.com/wide-antenna-9-dbi-gain-n-pe51ya1009-p.aspx)

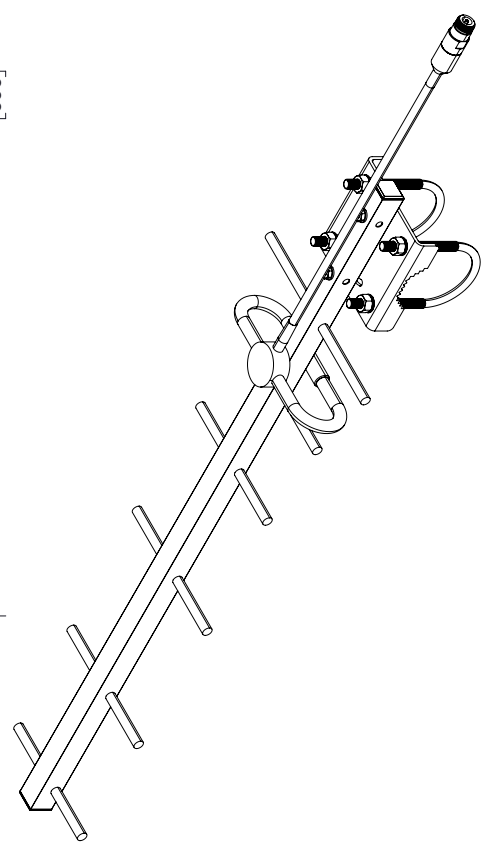
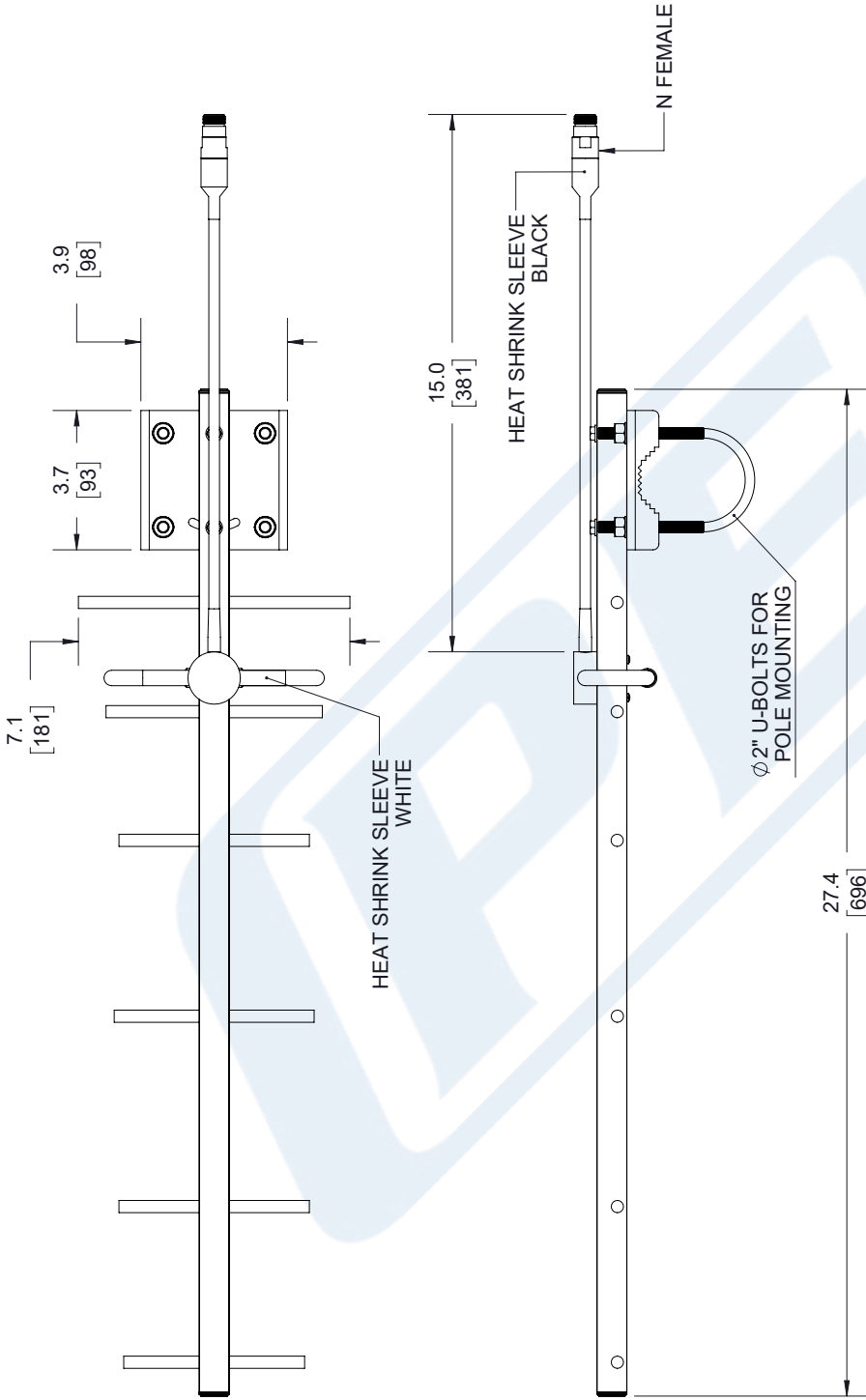
URL: <https://www.pasternack.com/wide-antenna-9-dbi-gain-n-pe51ya1009-p.aspx>

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# PE51YA1009 CAD Drawing

## 900 MHz 9 dBi Ai Yagi Antenna

REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	2/21/2020
		APPROVED
		S. ELLIS



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]
12 [305] < L ≤ 60 [1524]	±.2 [51]
60 [1524] < L ≤ 120 [3048]	±.4 [102]
120 [3048] < L ≤ 300 [7620]	±.6 [152]
300 [7620] < L	±.9% L / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A

ITEM NO PE51YA1009

SIZE A

CAGE CODE 53919

DRAWN BY K. DANG