

900 MHz 13 dBi SS Yagi Antenna

Antennas Technical Data Sheet

PE51YA1013

Features

- 13 dBi gain & all weather, heavy duty steel construction provides superior performance
- Heavy-duty 1/2" stainless steel boom
- Solid Stainless Steel 1/8" elements & 18 inch coax lead
- Can be installed for either vertical or horizontal polarization
- 1/8" thick plated steel mounting plate

Applications

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

Description

The PE51YA1013 High-Performance Yagi Antenna combines high gain with a wide beam-width. They are ideally suited for directional applications in the 900MHz ISM and GSM bands. Typical applications include 900MHz Wireless LAN, SCADA, LPWAN, LoRA, IoT, M2M, and 900 MHz Cellular, Non Line of Sight (NLOS) applications and point to multi-point systems. External interference of this antenna is minimized due to the excellent front to back ratio. These antennas come with a 18" coax lead terminated with an N-Female connector. It can be installed for either vertical or horizontal polarization.

This antenna features a heavy-duty 1/2" stainless steel boom and solid 1/8" elements. Secure mounting is assured by a 1/8" thick plated steel mounting plate and two plated steel U-bolts.

Configuration

Design	Yagi
Band Type	Wide
Radiation Pattern	Directional
Polarization	Vertical or Horizontal
Cable Length	18 in [457.2 mm]
Connector Type	N Female
Number of Ports	1
Lightning Protection	DC Short

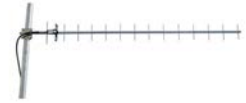
Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Input VSWR			1.5:1	
Impedance		50		Ohms
Gain		13		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	890-960					MHz
Gain	13					dBi

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [900 MHz 13 dBi SS Yagi Antenna PE51YA1013](#)



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

Mechanical Specifications

Radome Material	ABS
Size	
Overall Length	57 in [144.78 cm]
Mounting Mast Diameter	2 in [50.80 mm]
Weight	5.1 lbs [2.31 kg]

Environmental Specifications

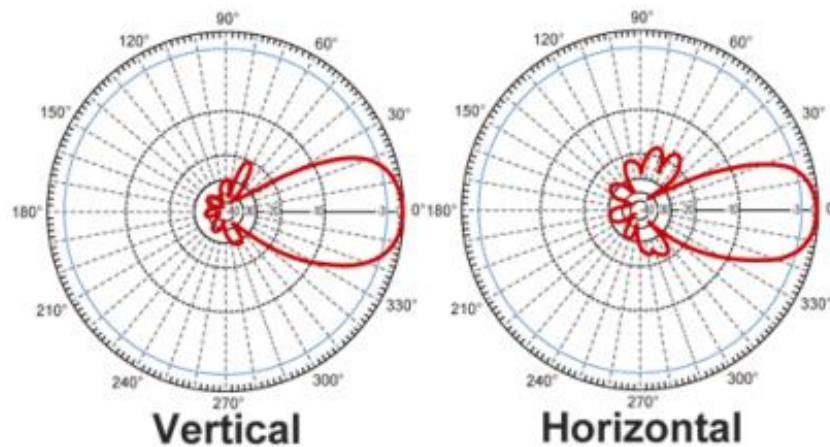
Temperature	
Operating Range	-40 to +85 deg C

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

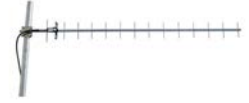
Plotted and Other Data

Notes:

Typical Radiation Pattern



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900 MHz 13 dBi SS 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 13 dBi SS Yagi Antenna PE51YA1013](#)

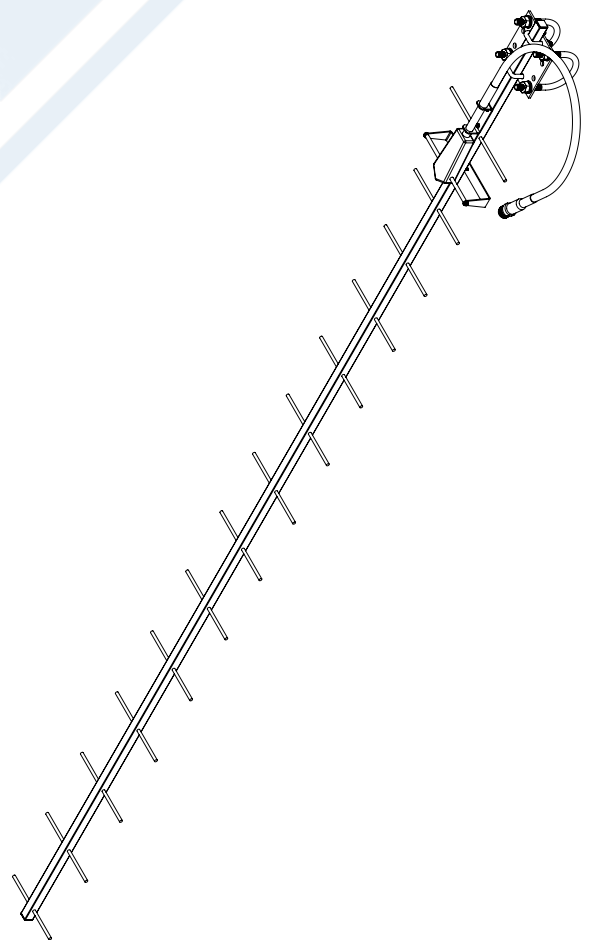
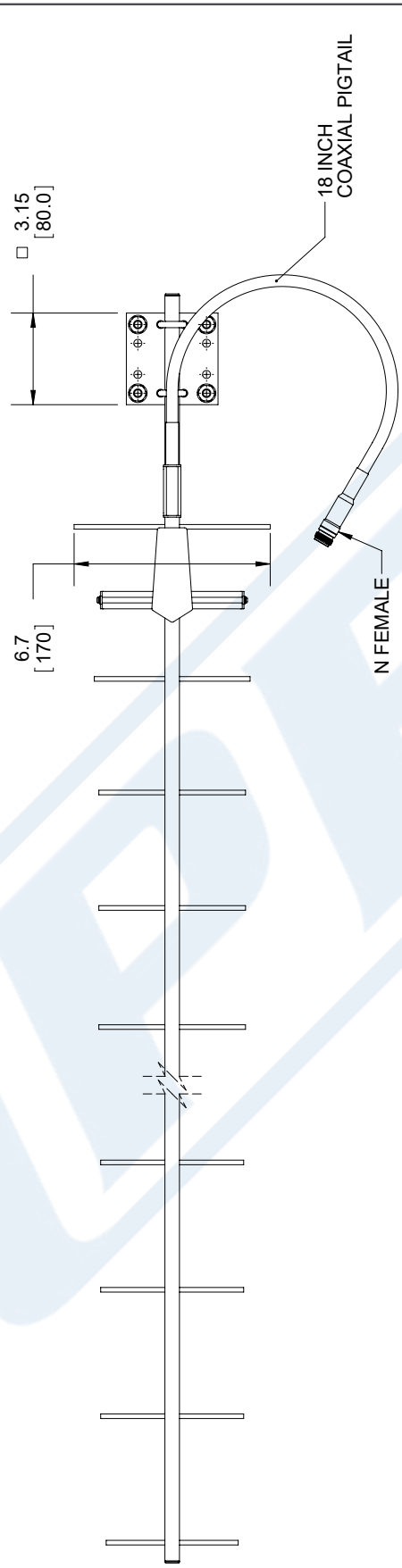
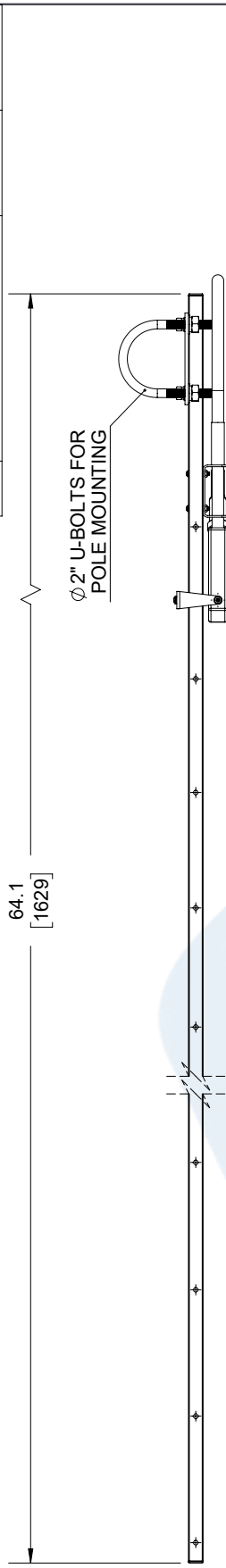
URL: <https://www.pasternack.com/wide-antenna-13-dbi-gain-n-pe51ya1013-p.aspx>

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PE51YA1013 CAD Drawing

900 MHz 13 dBi SS Yagi Antenna

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	11/11/2011	BPUCHASKI



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 [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]

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SIZE	CAGE CODE	DRAWN BY	ITEM NO
A	53919	K.DANG	PE51YA1013
REV	REV		
A	A		

REGULATORY COMPLIANCE:
EU RoHS DIRECTIVE (MOST RECENT RELEASED VERSION)

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