



# 900 MHz 13 dBi 120 Degree Horizontal Polarized Sector Panel Antenna

## Antennas Technical Data Sheet

PE51SE1003

### Features

- Superior performance Horizontal Polarized 120° Sector Panel Antenna
- All weather operation
- 0° to 15° Down-Tilt Mounting Bracket , Includes Mast Mounting Hardware
- NF Connector integral to the antenna

### Applications

- SCADA
- 900 MHz ISM/GSM
- RFID
- ZigBee
- LPWAN, LoRA, IoT, M2M applications

### Description

The HyperGain PE51SE1003 Sector Panel Antenna provides 13 dBi gain, Horizontally Polarized, with a wide 120° beam-width. It is a professional quality “cell site” antenna designed primarily for service providers in the 900MHz band. It is ideally suited for 900MHz ISM and GSM bands. Typical applications include 900MHz Wireless LAN, SCADA, LPWAN, LoRA, IoT, M2M, and 900MHz Cellular.

This antenna features a heavy-duty plastic radome for all-weather operation. The mounting system adjusts from 0 to 15 degrees down tilt. This sector antenna is an ideal choice for Wireless Service Internet Provider “cell” sites since the cell size can be easily determined by adjusting the down-tilt angle. The 120° beam-width is ideal for covering large service areas.

### Configuration

Design	Sector
Band Type	Single
Radiation Pattern	Directional
Polarization	Horizontal
Connector Type	N Female
Number of Ports	1
Lightning Protection	DC Short

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Input VSWR			2:1	
Impedance		50		Ohms
Gain		13		dBi
Downtilt			15	Degrees
Input Power			250	Watts

### Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	900-930					MHz
Gain	13					dBi
Horizontal Beam Width	120					Degees
Vertical Beam Width	14					Degees

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 120 Degree Horizontal Polarized Sector Panel Antenna PE51SE1003](#)



900 MHz 13 dBi 120 Degree Horizontal Polarized Sector Panel Antenna

Antennas Technical Data Sheet

PE51SE1003

Maximum Input Power 250 Watts

**Mechanical Specifications**

Radome Material	Polymer
<b>Size</b>	
Overall Length	70.86 in [179.98 cm]
Width	7.88 in [200.15 mm]
Height	1.96 in [49.78 mm]
Mounting Mast Diameter	1.96 to 2.75 in [49.78 to 69.85 mm]
Weight	31 lbs [14.06 kg]
Mechanical Specification Notes: Radome material is UV-inhibited Polymer.	

**Environmental Specifications**

<b>Temperature</b>	
Operating Range	-40 to +65 deg C

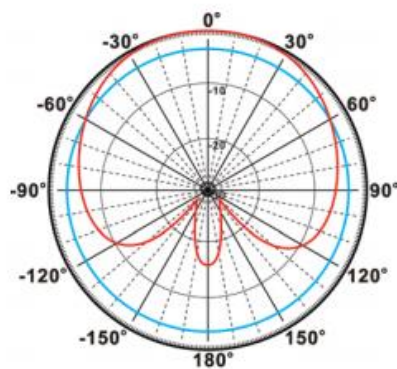
**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

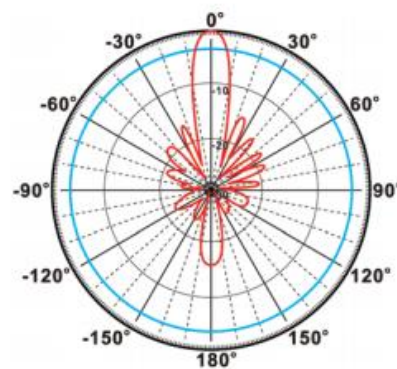
Notes:

**Typical Radiation Pattern**

**RF Antenna Gain Patterns**



H-Plane



V-Plane

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 120 Degree Horizontal Polarized Sector Panel Antenna PE51SE1003](#)



## 900 MHz 13 dBi 120 Degree Horizontal Polarized Sector Panel Antenna

### Antennas Technical Data Sheet

PE51SE1003

900 MHz 13 dBi 120 Degree Horizontal Polarized Sector Panel 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 120 Degree Horizontal Polarized Sector Panel Antenna PE51SE1003](https://www.pasternack.com/single-antenna-13-dbi-gain-n-pe51se1003-p.aspx)

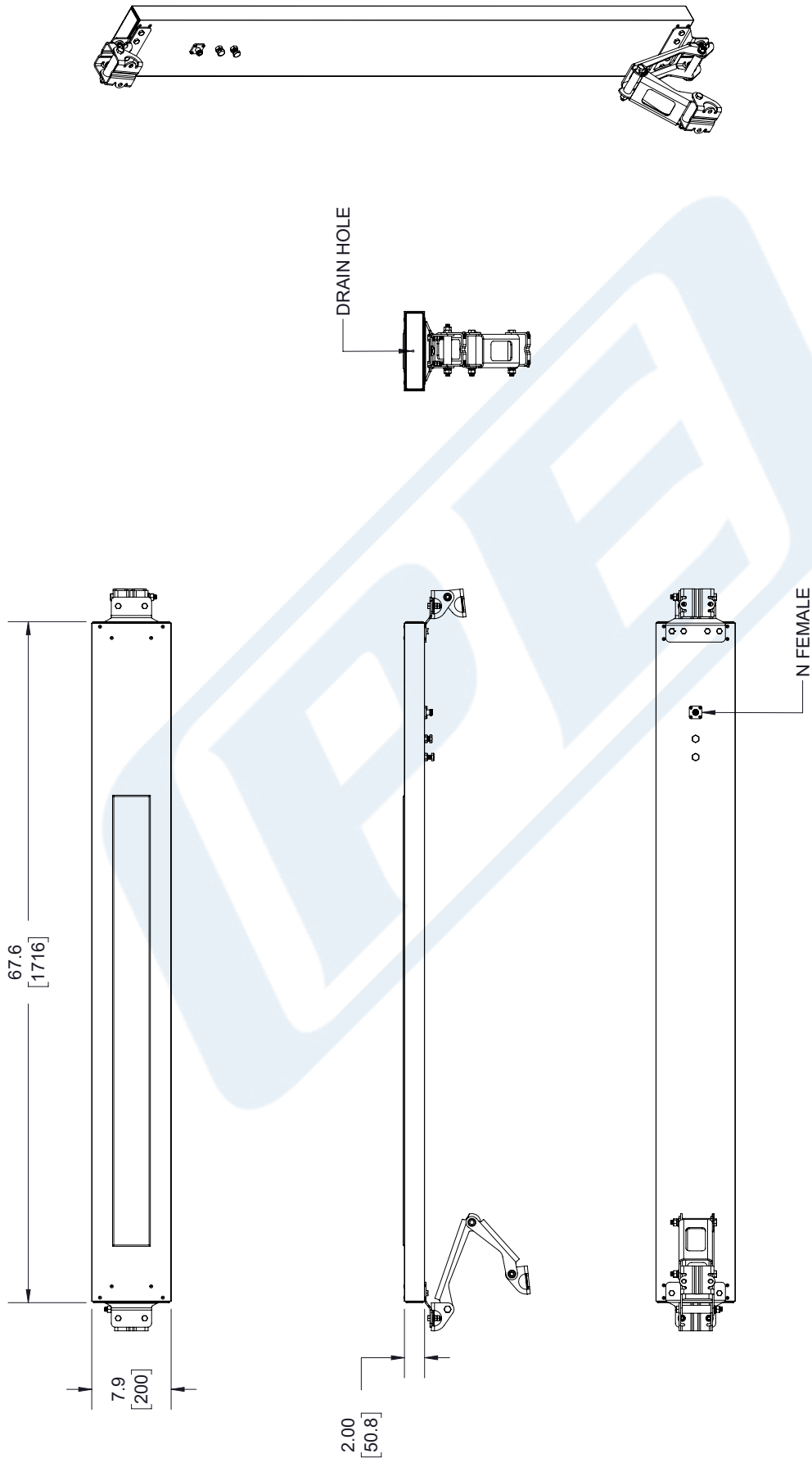
URL: <https://www.pasternack.com/single-antenna-13-dbi-gain-n-pe51se1003-p.aspx>

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.

# PE51SE1003 CAD Drawing

900 MHz 13 dBi 120 Degree Horizontal Polarized Sector Panel Antenna

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	2/18/2020	M.MILLER



**PE PASTERNAK**  
an INFINITO brand

Pasternack 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.pasternack.com  
E-mail: sales@pasternack.com

THIRD-ANGLE PROJECTION

THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION. ALL RIGHTS RESERVED.

SHEET 1 OF 1  
SCALE N/A

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

TOLERANCES:

.X = ±.2	[5.08]	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.

SIZE A  
CAGE CODE 53919  
DRAWN BY K.DANG  
ITEM NO. PE51SE1003  
REV. A