

# 3 dBi WideBand Rubber Duck Antenna 860-960 MHz RP-SMA Connector



## Antennas Technical Data Sheet

PE51RD1008

### Features

- 900 MHz Omnidirectional
- Flexible Rubber Duck Antenna
- Reverse Polarity SMA-Plug (RP-SMA) Connector
- Tilt and Swivel Design

### Applications

- 900 MHz Digital Spread Spectrum Radios
- 900 MHz ISM Band
- 900 MHz Telemetry Products
- LoRA, IoT, M2M Applications
- Cellular Band Applications

### Description

The Pasternack PE51RD1008 high performance 900 MHz omnidirectional “rubber-duck” antenna features a tilt-and-swivel Reverse Polarity SMA-Plug (RP-SMA) connector, allowing them to be used vertically, at a right angle, or any angle in-between. It is a coaxial sleeve design with an omni-directional pattern. It is ideally suited for 900MHz ISM band applications as well as cellular applications.

The high performance rubber-duck PE51RD1008 from Pasternack, measuring 8.62” long, is a flexible antenna providing broad coverage and 3 dBi gain. It is suitable as a replacement RF antenna for 900MHz radios that are equipped with RP-SMA connectors such as wireless video transmitters and receivers, 900MHz digital spread spectrum radios and more.

This rubber duck antenna, as well as our wide selection of superior quality RF devices, ship same day. Contact our knowledgeable and friendly technical support and sales staff for your answers on antennas or other Pasternack products.

### Configuration

Application Band	RFID  LPWAN  ISM
Band Type	Wide
Radiation Pattern	Omni Directional
Polarization	Vertical
Connector Type	SMA Plug Reverse Polarity
Number of Ports	1
Lightning Protection	DC Ground

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	860		960	MHz
Input VSWR			2:1	
Impedance		50		Ohms
Gain		3		dBi
Horizontal (Azimuth) Beam Width		Omnidirectional		
Vertical (Elevation) Beam Width		62		Degrees
Input Power			50	Watts

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications: [3 dBi WideBand Rubber Duck Antenna 860-960 MHz RP-SMA Connector PE51RD1008](#)

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Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	860-960					MHz
Gain	3					dBi
Horizontal Beam Width	360					Degrees
Vertical Beam Width	62					Degrees
Maximum Input Power	50					Watts

Mechanical Specifications

Size

Overall Length	8.62 in [218.95 mm]
Width	0.66 in [16.76 mm]
Height	0.66 in [16.76 mm]
Weight	0.1 lbs [45.36 g]

Environmental Specifications

Temperature

Operating Range	-40 to +60 deg C
Environment	UL 94HB

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

Plotted and Other Data

Notes:

3 dBi WideBand Rubber Duck Antenna 860-960 MHz RP-SMA Connector 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: [3 dBi WideBand Rubber Duck Antenna 860-960 MHz RP-SMA Connector PE51RD1008](#)

URL: <https://www.pasternack.com/wide-antenna-860-960-mhz-3-dbi-gain-sma-pe51rd1008-p.aspx>

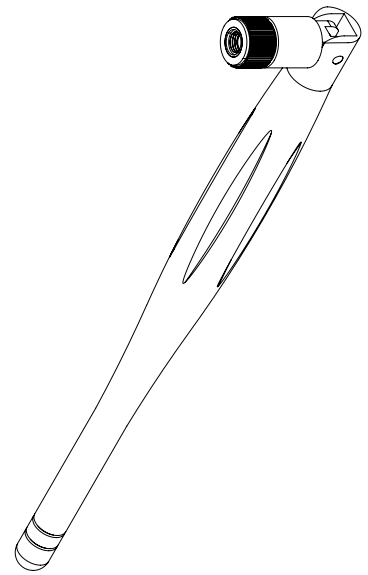
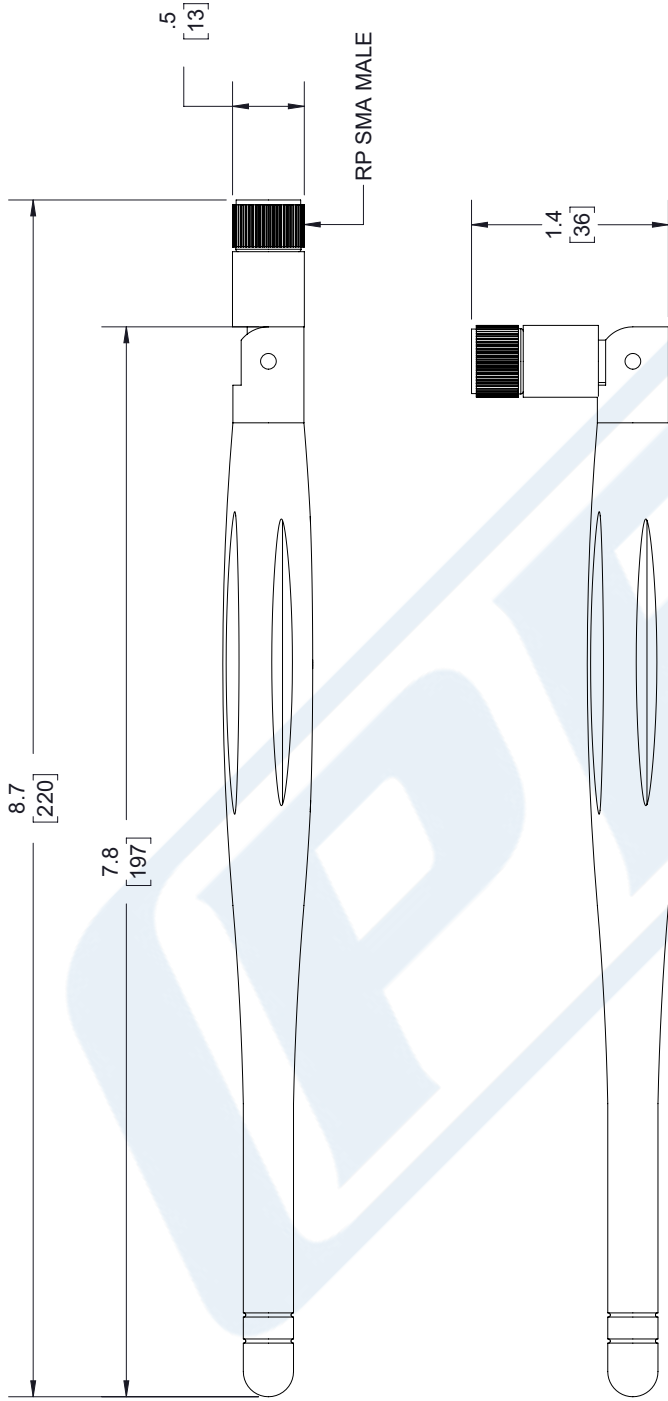
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such 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.

# PE51RD1008 CAD Drawing

3 dBi WideBand Rubber Duck Antenna 860-960 MHz RP-SMA Connector

### REVISIONS

REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	8/5/2020	K.HIETPAS



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] / -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.

**PE PASTERNAK**  
 an INFINIT brand

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SIZE A    CAGE CODE 53919    DRAWN BY K.DANG    ITEM NO. PE51RD1008

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A