

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



Antennas Technical Data Sheet

PE51RD1009

Features

- 900 MHz Omnidirectional
- Flexible Rubber Duck Antenna
- SMA Male 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 PE15RD1009 high performance 900 MHz omnidirectional “rubber-duck” antenna features a tilt-and-swivel SMA-Male 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 PE51RD1009 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 900 MHz radios that are equipped with SMA-Male connectors such as wireless video transmitters and receivers, 900 MHz 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
Cable Type	Coax Cable
Connector Type	SMA Male
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 SMA Connector PE51RD1009](#)

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



Antennas Technical Data Sheet

PE51RD1009

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 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 SMA Connector PE51RD1009](#)

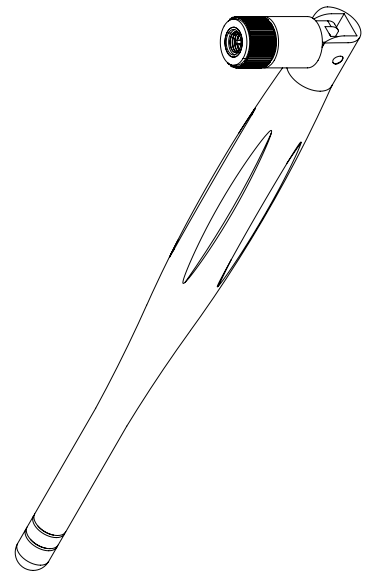
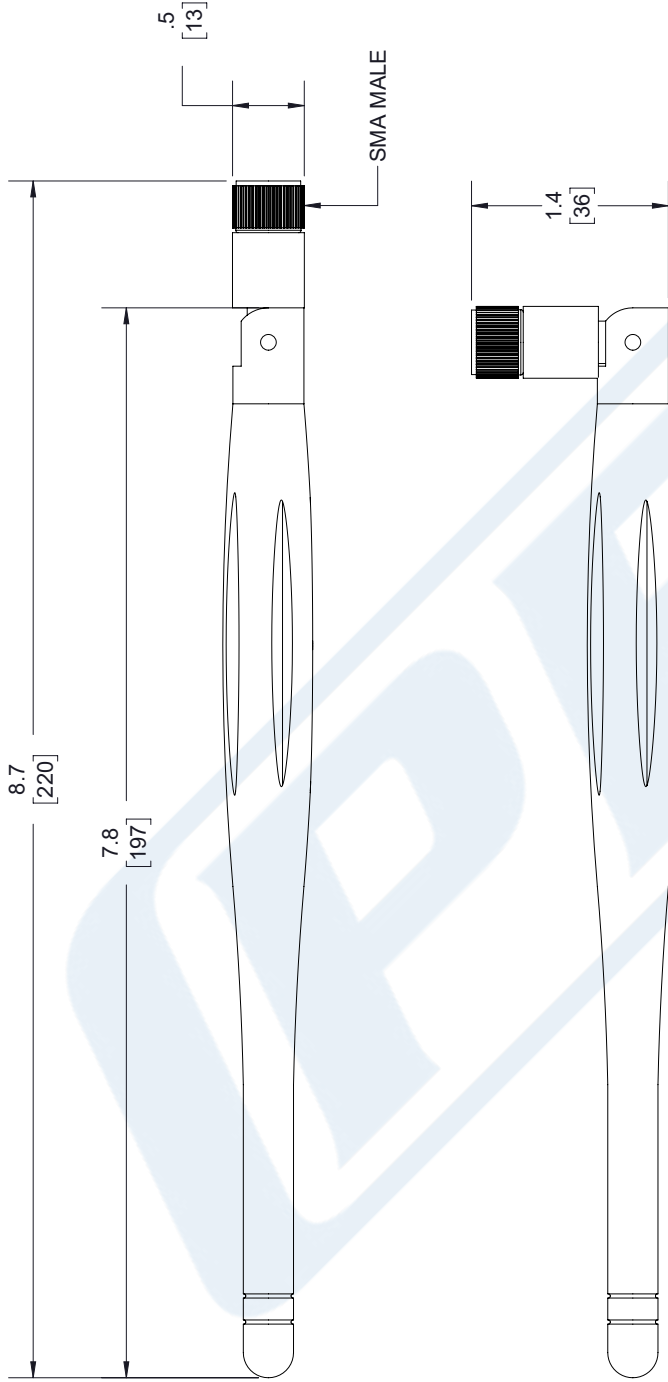
URL: <https://www.pasternack.com/wide-antenna-860-960-mhz-3-dbi-gain-sma-pe51rd1009-p.aspx>

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.

PE51RD1009 CAD Drawing

3 dBi WideBand Rubber Duck Antenna 860-960 MHz 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

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

SIZE: A CAGE CODE: 53919 DRAWN BY: K.DANG ITEM NO: PE51RD1009

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

REV: A