



5 dBi Rubber Duck Antenna 900-930 MHz RP-SMA Connector

Antennas Technical Data Sheet

PE51RD1010

Features

- 900 MHz Omnidirectional
- RIGID Connector RP-SMA Plug Installed
- Flexible Rubber Duck Antenna
- Improved Feed Thru to Protect Against Moisture

Applications

- 900 MHz Digital Spread Spectrum Radios
- 900 MHz ISM Band
- 900 MHz Telemetry Products
- Cellular Band Applications
- GSM

Description

The Pasternack PE51RD1010 high performance 900MHz omnidirectional “rubber-duck” antenna features a RIGID connection to the Reverse Polarity SMA-Plug (RP-SMA) connector, permitting upright solid installations to the radio or Coax. It is ideally suited for 900MHz ISM band applications as well as cellular applications.

Measuring almost 15.4 inches long, the PE51RD1010 from Pasternack provides broad coverage and 5 dBi gain. It is a coaxial sleeve design with an omnidirectional pattern. It is suitable as a replacement RF antenna for many 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	Single
Radiation Pattern	Omnidirectional
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	900		930	MHz
Input VSWR			2.5:1	
Impedance		50		Ohms
Gain		5		dBi
Horizontal (Azimuth) Beam Width		Omnidirectional		
Vertical (Elevation) Beam Width		30		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: [5 dBi Rubber Duck Antenna 900-930 MHz RP-SMA Connector PE51RD1010](#)



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Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	900-930					MHz
Gain	5					dBi
Horizontal Beam Width	360					Degrees
Vertical Beam Width	30					Degrees
Maximum Input Power	50					Watts

Mechanical Specifications

Size

Overall Length	16 in [406.4 mm]
Width	0.6 in [15.24 mm]
Height	0.6 in [15.24 mm]
Weight	0.13 lbs [58.97 g]

Mechanical Specification Notes:
Rigid

Environmental Specifications

Temperature

Operating Range	-40 to +55 deg C
Environment	UL-94HB

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

Plotted and Other Data

Notes:

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5 dBi Rubber Duck Antenna 900-930 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: [5 dBi Rubber Duck Antenna 900-930 MHz RP-SMA Connector PE51RD1010](#)

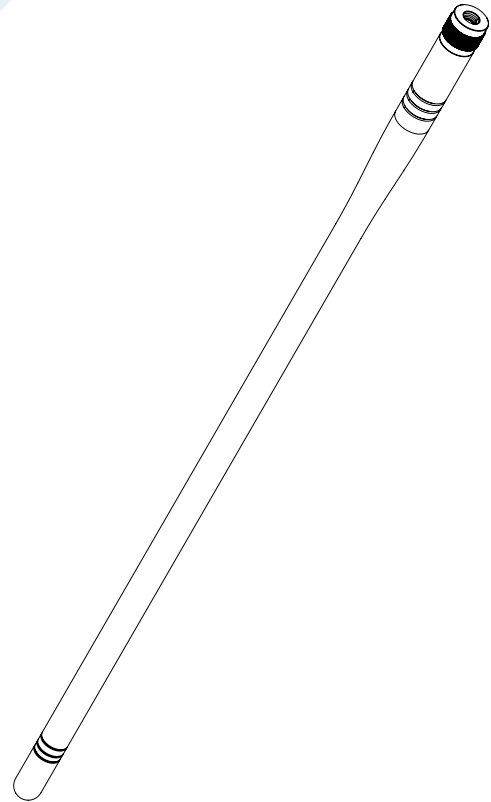
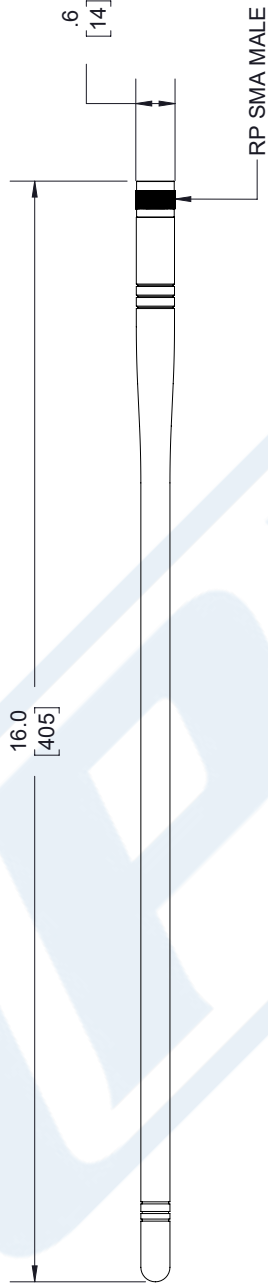
URL: <https://www.pasternack.com/single-antenna-900-930-mhz-5-dbi-gain-sma-pe51rd1010-p.aspx>

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.

PE51RD1010 CAD Drawing

5 dBi Rubber Duck Antenna 900-930 MHz RP-SMA Connector

REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	8/5/2020
		APPROVED
		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 INFINITI brand

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ITEM NO. PE51RD1010

SIZE A CAGE CODE 53919 DRAWN BY K.DANG REV A

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A