



## 4.52 dBi Rubber Duck Antenna 2,400-2,500 MHz RP-TNC Connector

### Antennas Technical Data Sheet

PE51RD1016

#### Features

- Flexible “Rubber Duck” Antenna
- Optional Magnetic Mount Available
- High Performance 4.5 dBi
- Reverse Polarity TNC Plug Connector
- Tilt and Swivel Design

#### Applications

- Multipoint and Mobile Applications & Bluetooth®
- 2.4 GHz ISM Band
- IEEE 802.11b, 802.11g, 802.11x (WiFi 6) Wireless LAN & IEEE 802.11n (Pre-N, Draft-N) Applications
- Public Wireless Hotspot
- Wireless Video Systems
- IoT Systems

#### Description

The Pasternack PE51RD1016 is a high performance economical “rubber-duck” antenna designed for the 2.4 GHz ISM band with omnidirectional coverage. It features a tilt-and-swivel Reverse Polarity TNC (RP-TNC) 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 IEEE 802.11b, 802.11g, 802.11n and 802.11ax (WiFi 6) Wireless LANs, Bluetooth, IoT and other applications.

The high performance PE51RD1016 rubber-duck from Pasternack is a flexible antenna providing broad coverage and 4.5 dBi gain. Measuring 8.0 inches long, this 4.5 dBi antenna makes a great upgrade to OEM supplied antennas. It is suitable as a replacement RF antenna for 2.4 GHz radios that are equipped with RP-TNC connectors.

In addition to shipping the same day, our rubber duck antennas are high-quality components backed by expert technical support and sales personnel. Contact our knowledgeable and friendly technical support and sales staff for your answers on antennas or other Pasternack products.

#### Configuration

Design	Rubber Duck
Band Type	Single
Polarization	Linear
Connector Type	TNC Male Reverse Polarity
Number of Ports	1
Housing Material and Plating	TPEE, Black

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	2.4		2.5	GHz
Input VSWR			2:1	
Impedance		50		Ohms
Gain		4.52		dBi

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications: [4.52 dBi Rubber Duck Antenna 2,400-2,500 MHz RP-TNC Connector PE51RD1016](#)



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**Mechanical Specifications**

Housing Material	TPEE
Housing Plating/Color	Black
Radiator Material	Copper

**Size**

Overall Length	8.19 in [208.03 mm]
Width	0.51 in [12.95 mm]
Height	0.51 in [12.95 mm]
Weight	0.5 lbs [226.8 g]

**Environmental Specifications**

**Temperature**

Operating Range	-40 to +65 deg C
Storage Range	-40 to +80 deg C

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

**Plotted and Other Data**

Notes:

4.52 dBi Rubber Duck Antenna 2,400-2,500 MHz RP-TNC 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: [4.52 dBi Rubber Duck Antenna 2,400-2,500 MHz RP-TNC Connector PE51RD1016](#)

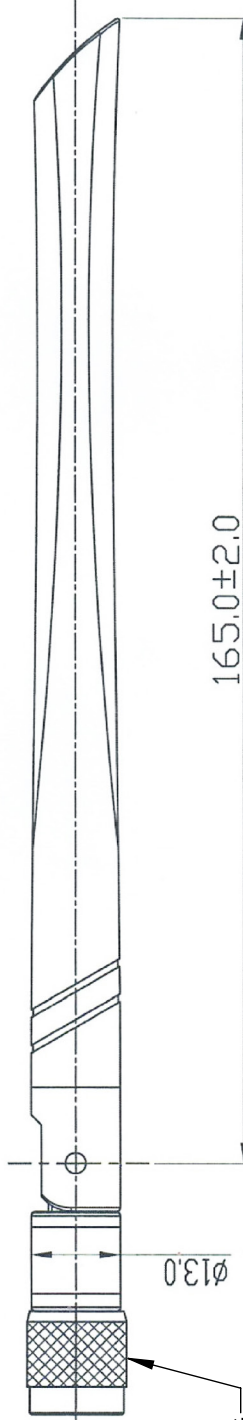
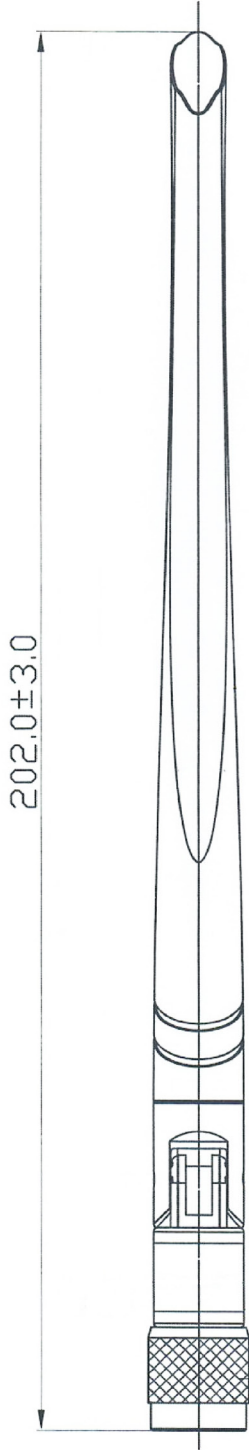
URL: <https://www.pasternack.com/single-antenna-2.4-2.5-ghz-4.52-dbi-gain-tnc-pe51rd1016-p.aspx>

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# PE51RD1016 CAD Drawing

4.52 dBi Rubber Duck Antenna 2,400-2,500 MHz RP-TNC Connector

REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	09/14/2020
		APPROVED
		KHIETPAS



DIMENSIONS ARE MILLIMETERS

RP-TNC PLUG CONNECTOR

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS	
TOLERANCES:	FRACTIONS
.X = ±.2 [ .008 ]	± 1/32
.XX = ±.02 [ .51 ]	± 1/16
.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% [ ] / -0
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.	

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SIZE: A | CAGE CODE: 53919 | DRAWN BY: DZINN | ITEM NO.: PE51RD1016

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SHEET 1 OF 1	
SCALE N/A	
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