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2.4/4.9/5.8 GHz 3 dBi Multi-band Rubber Duck Antenna - TNC-Male Connector



Antennas Technical Data Sheet PE51RD1003

Features

- Three frequency ranges in one antenna
- Flexible rubber duck design
- Tilt and swivel design
- SMA Male connector
- Provides better performance than most stock access point antennas

Applications

- 2.4 GHz, 4.9 GHz and 5.8 GHz band applications
- IEEE 802.11a/b/g/n and 802.11ac WiFi access points and routers
- 4.9 GHz homeland security, public safety services, fire, police and security applications
- 5.8 GHz wireless video and security systems

Description

The HyperLink PE51RD1003 series is a high performance tri-band rubber-duck antenna designed to operate from 2.4 GHz to 2.5 GHz, 4.9 GHz to 5.3 GHz and 5.7 GHz to 5.8 GHz which eliminates the need to purchase different antennas for each frequency. The tri-band design of this antenna helps reduce interference and noise since it will reject out-of-band signals between the three bands of this antenna. This omnidirectional “rubber-duck” antenna provides broad coverage and 3 dBi gain.

Measuring 7.79” long, this flexible antenna features a tilt-and-swivel connector which allows them to be used vertically, at a right angle, or any angle in-between. It is suitable as a replacement RF antenna for many wireless access points and routers that are equipped with similar type antennas. The PE51RD1003 features a TNC Male connector.

Configuration

Design	Rubber Duck
Band Type	Multi
Radiation Pattern	Omni Directional
Polarization	Vertical
Connector Type	TNC Male Reverse Polarity
Number of Ports	1

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Input VSWR			2:1	
Impedance		50		Ohms
Gain		3		dBi
Input Power			50	Watts

Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	2,400-2,500	4,900-5,350	5,725-5,850			MHz
Gain	3	3	3			dBi
Horizontal Beam Width	360	360				Degees
Vertical Beam Width	70	70				Degees
Maximum 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: 2.4/4.9/5.8 GHz 3 dBi Multi-band Rubber Duck Antenna - TNC-Male Connector PE51RD1003

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
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Mechanical Specifications

Radome Material	ABS

Size

Overall Length	7.79 in [197.87 mm]
Width	0.51 in [12.95 mm]
Height	0.51 in [12.95 mm]
Weight	0.6 lbs [272.16 g]

Environmental Specifications

Temperature

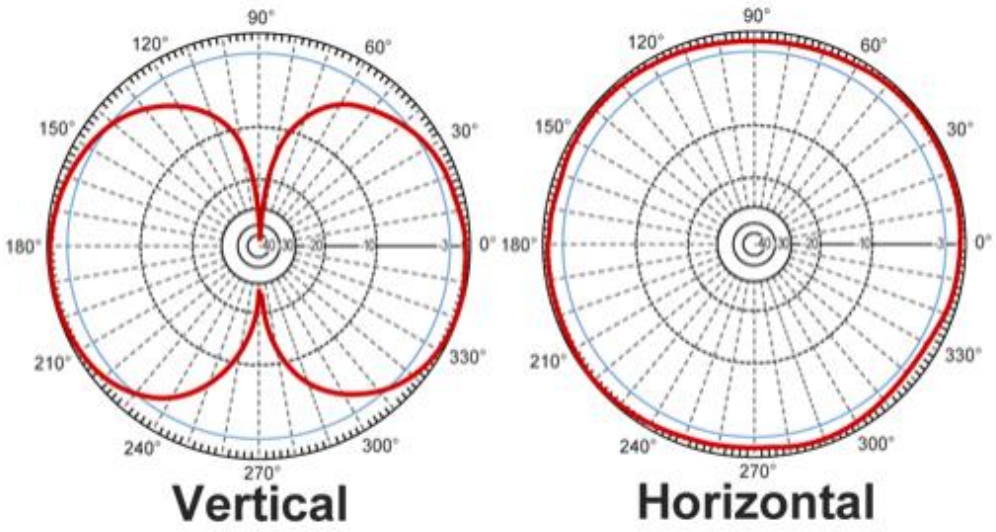
Operating Range	-40 to +60 deg C
Environment	UL-94HB

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

Typical Radiation Pattern



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2.4/4.9/5.8 GHz 3 dBi Multi-band Rubber Duck Antenna - TNC-Male 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.

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URL: https://www.pasternack.com/multi-antenna-3-dbi-gain-tnc-pe51rd1003-p.aspx

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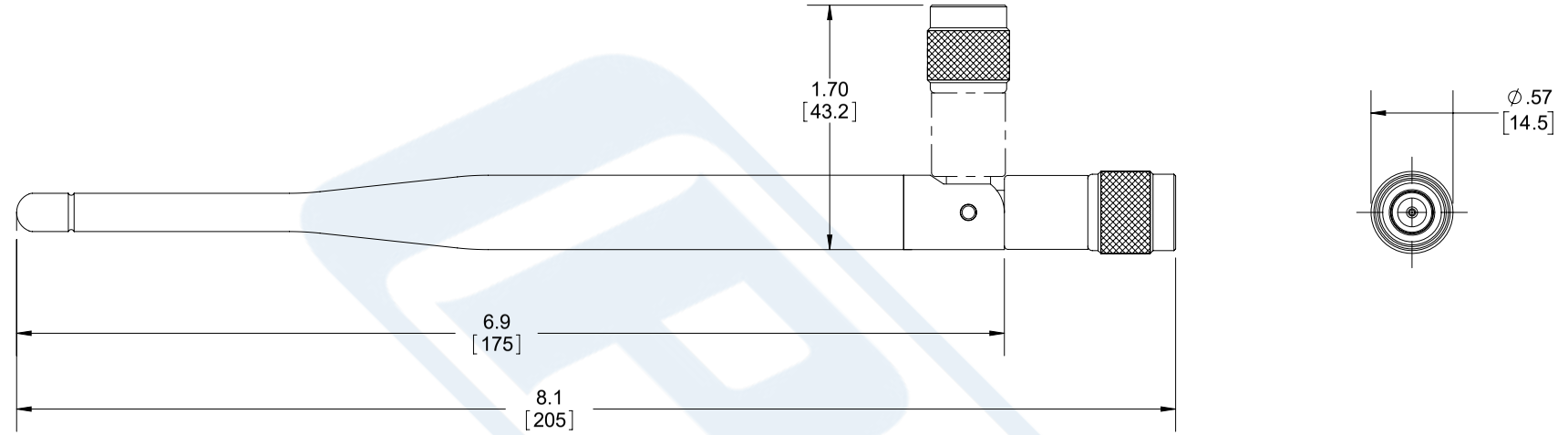
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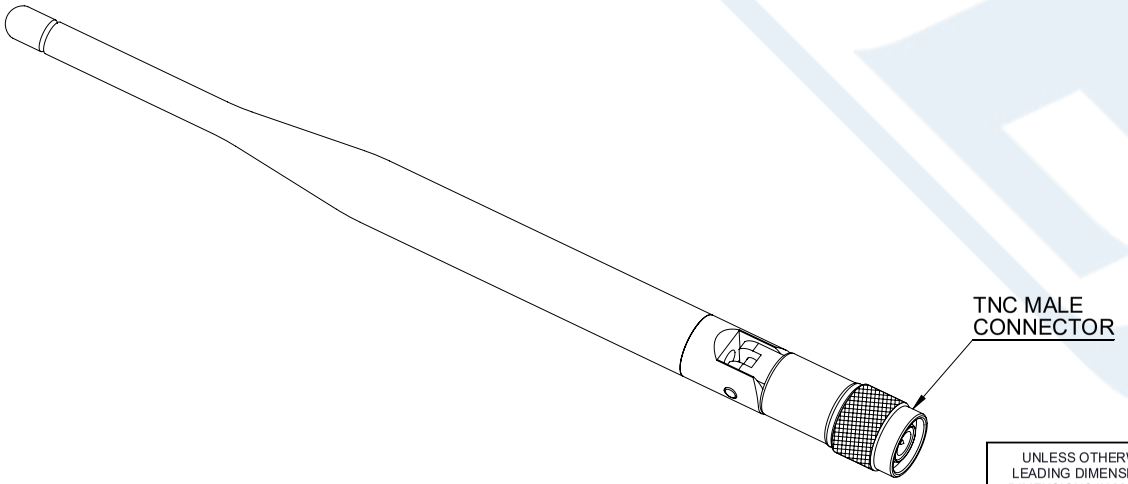
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PE51RD1003 CAD Drawing

2.4/4.9/5.8 GHz 3 dBi Multi-band Rubber Duck Antenna - TNC-Male Connector

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





REGULATORY COMPLIANCE:

EU RoHS DIRECTIVE (MOST RECENT RELEASED VERSION)

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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] = +.5 [13] / -0
12 [305] < L ≤ 60 [1524] = +1 [25] / -0
60 [1524] < L ≤ 120 [3048] = +2 [51] / -0
120 [3048] < L ≤ 300 [7620] = +3 [76] / -0
300 [7620] < L = +2.5%L / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	K.DANG	PE51RD1003	A