



2.4 GHz/900 MHz 3 dBi Omni Antenna - NMO Connector

Antennas Technical Data Sheet

PE510M1022

Features

- Can be used with 2.4 GHz and 900 MHz systems
- TAD/NMO Mounting System
- Weather-Proof

Applications

- 802.11b, 802.11g, 802.11n and Bluetooth® compatible (2.4 GHz Band)
- 2.4 GHz and 900 MHz Wireless Video Systems
- Multipoint and Mobile Applications
- ISM, GSM, RFID, 900 MHz Cellular compatible (900 MHz Band)

Description

This very compact mobile-mount dual band omni antenna is designed to operate in 2.4 GHz or 900 MHz bands and provides broad coverage and 3 dBi gain. The Dual-Band design of this antenna eliminates the need to purchase different antennas for each frequency. In the 2.4 GHz ISM band, it is ideally suited for ISM, IEEE 802.11b, 802.11g and 802.11n wireless LANs, Bluetooth® and other WLAN applications where omni-directional coverage and low visibility are desired. In the 900 MHz band, this antenna is ideally suited for ISM, GSM and RFID applications as well as 900MHz wireless LAN and Cellular systems.

This RF antenna is only 2.7" long and features an aesthetic black finish. It is designed with a standard TAD/NMO Motorola-type connection that allows for ease of installation to similar TAD/NMO mounting systems. Because of its near-invisible design this antenna is ideal for use on vehicles where vandal-resistance and aesthetics are important.

Configuration

Design	Mobile
Band Type	Dual
Radiation Pattern	Omni Directional
Polarization	Vertical
Connector Type	NMO Mount
Number of Ports	1

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	900		2,500	MHz
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	0.9 to 0.96	2.4 to 2.5				GHz
Horizontal Beam Width	360	360				Degrees
Vertical Beam Width	60					Degrees
Maximum Input Power		50				

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2.4 GHz/900 MHz 3 dBi Omni Antenna - NMO Connector PE510M1022](#)



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Mechanical Specifications

Radome Material	ABS
Size	
Overall Length	3 in [76.2 mm]
Width	1.4 in [35.56 mm]
Height	1.4 in [35.56 mm]
Weight	0.2 lbs [90.72 g]

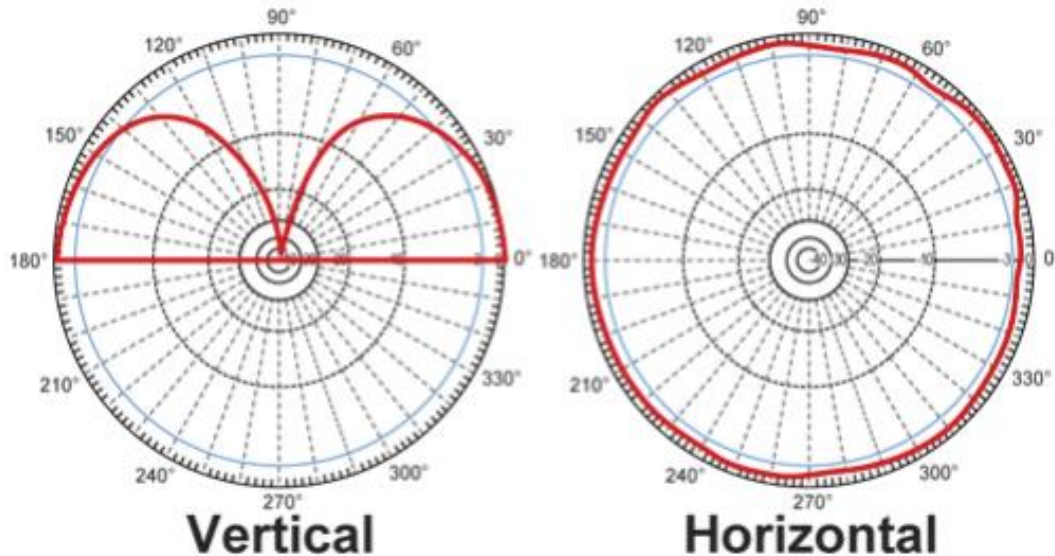
Environmental Specifications

Temperature	
Operating Range	-40 to +85 deg C
Wind Loading	150 MPH [241.4 KPH]

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

Plotted and Other Data

Notes:



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Antennas Technical Data Sheet

PE51OM1022

2.4 GHz/900 MHz 3 dBi Omni Antenna - NMO 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: [2.4 GHz/900 MHz 3 dBi Omni Antenna - NMO Connector PE51OM1022](#)

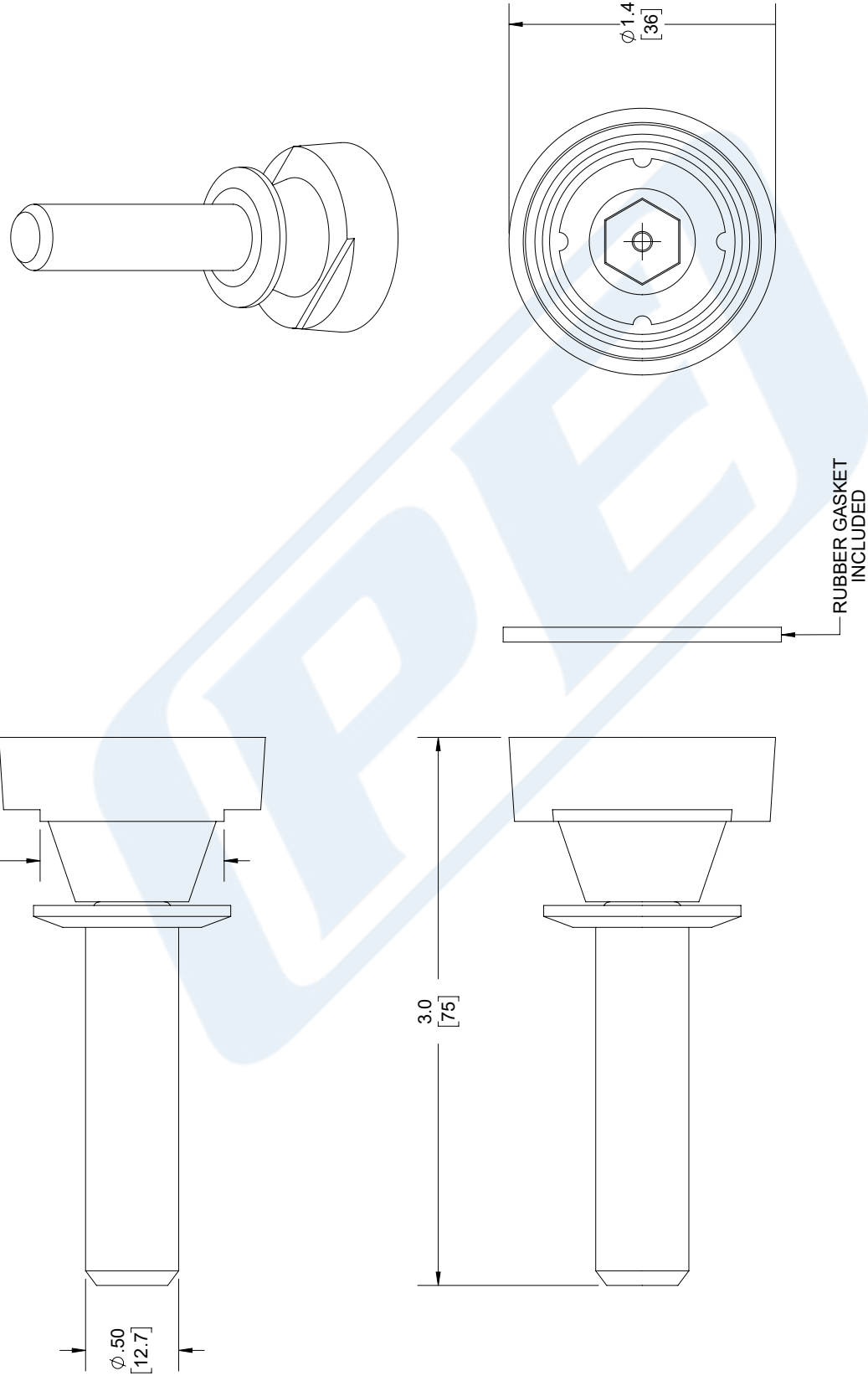
URL: <https://www.pasternack.com/dual-antenna-3-dbi-gain-nmo-mount-pe51om1022-p.aspx>

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PE51OM1022 CAD Drawing

2.4 GHz/900 MHz 3 dBi Omni Antenna - NMO Connector

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	2/14/2020	M.MILLER



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 ≤ ∞	±.9% L / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

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SCALE N/A

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REGULATORY COMPLIANCE:
EU ROHS DIRECTIVE (MOST RECENT RELEASED VERSION)

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