



2/3/5 dBi Poly Flex Vehicular Antenna 698-960/1710-2700 MHz NMO Mount Connector

Antennas Technical Data Sheet

PE51MP1010

Features

- Design Incorporates Expanded Frequency Range and Reduced Height
- Compact Coupled Design Optimizes LTE Signal Performance while Maintaining Low-Profile Tapered Form Factor
- Dust and O-Ring Seals for Reliable High Pressure Car Wash & Waterproof Performance (IP66)
- Flexible Elastomeric Polymer Housing Resist High Speed Impact and Damage from low hanging obstructions

Applications

- Service Vehicles
- Public Safety
- Public Transportation
- Mining & Construction

Description

This compact multi-band mobile omnidirectional antenna is ideally suited for multipoint mobile applications including service vehicles, public transportation, public safety, mining and construction vehicles, as well numerous other commercial and industrial applications where mobility and wide coverage is desired. This antenna features a flexible Poly Spring base. Unlike the traditional metal spring base, the Poly Spring will not corrode and does not generate electrical noise when flexed during use. It has a standard TAD/NMO Motorola-type mobile base.

Configuration

Design	Vehicular
Band Type	Multi
Radiation Pattern	Omni Directional
Polarization	Linear, Vertical
Ground Plane	Required
Connector Type	NMO Mount
Housing Material and Plating	Brass, Black Chrome

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	698		2,700	MHz
Input VSWR		1.5:1	2:1	
Impedance		50		Ohms
Horizontal (Azimuth) Beam Width		Omnidirectional		
Vertical (Elevation) Beam Width		70		Degrees
Input Power			100	Watts

Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	698-960	1,710-2,150	2,150-2,700			MHz
Gain	2	3	5			dBi

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2/3/5 dBi Poly Flex Vehicular Antenna 698-960/1710-2700 MHz NMO Mount Connector PE51MP1010](#)

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Mechanical Specifications

Radome Material	Elastomeric Polymer
Housing Material	Brass
Housing Plating/Color	Black Chrome
Mounting Application	NMO Mount
Base Diameter	1.6 in [40.64 mm]
Height	3.63 in [92.2 mm]

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Installation Instructions

PE51MP1010 (698-960/1710-2700 MHz) LTE POLY PRO LOW PROFILE MULTI-BAND NMO MOUNT ANTENNA

*Congratulations on your selection of another quality antenna product from Pasternack.
Pasternack is committed to continually provide the greatest antenna VALUE for your wireless applications.*

1. Parts (Figure 1): Verify all parts are included with the antenna as shown in Fig. 1.

- A. Antenna
- B. O-ring

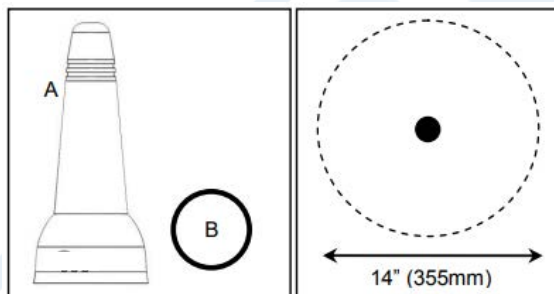


Fig. 1

Fig. 2

2. Pre-Installation (Fig. 2)

- A. The PE51MP1010 antenna is designed for installation to a high quality, low loss NMO mount (sold separately, see Fig.3).
- B. For best performance, the metallic ground-plane installation surface should be approximately 14" (355mm) diameter or greater.
- C. Verify that the surface immediately surrounding the NMO mount is flat, properly cleaned and clear of obstructions.

3. Installation

- A. Press O-ring around the base of the NMO antenna mount as shown in Figure 3.
- B. Thread antenna onto NMO mount. Tighten with firm hand torque until O-ring is completely seated against mounting surface.
- C. **CAR WASH REMOVAL (Fig. 4):** Using one hand, hold the antenna at the base adapter with a firm grip. Using the opposite hand, detach the Poly Spring from the vase by unthreading with a Counter Clockwise (CCW) rotation. **Note:** Leave the NMO Base adapter attached to the NMO mount to protect the mount from water and debris.

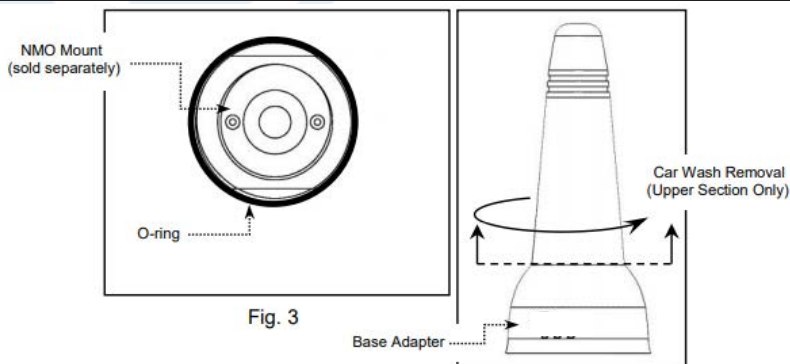


Fig. 3

Fig. 4

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Environmental Specifications

Temperature

Operating Range

Humidity

Vibration

Corrosion

-40 to +85 deg C

95%

AAR & MIL-STD810E

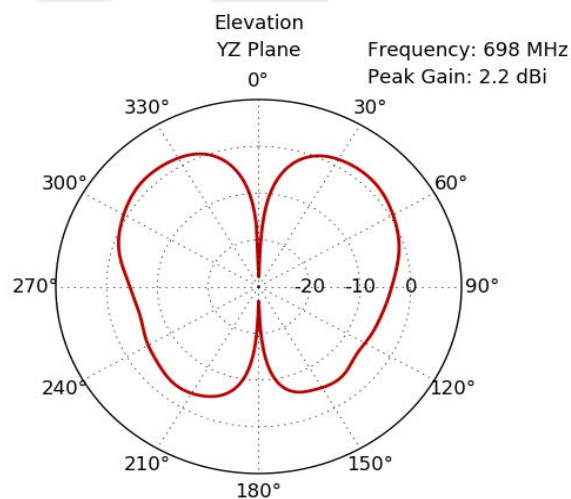
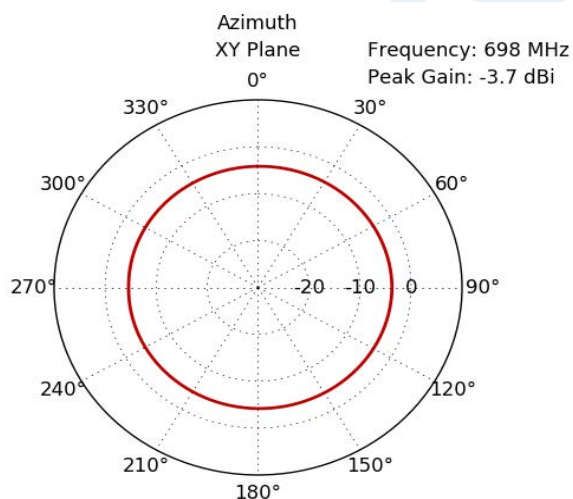
Salt Fog

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

Plotted and Other Data

Notes:

Typical Radiation Pattern



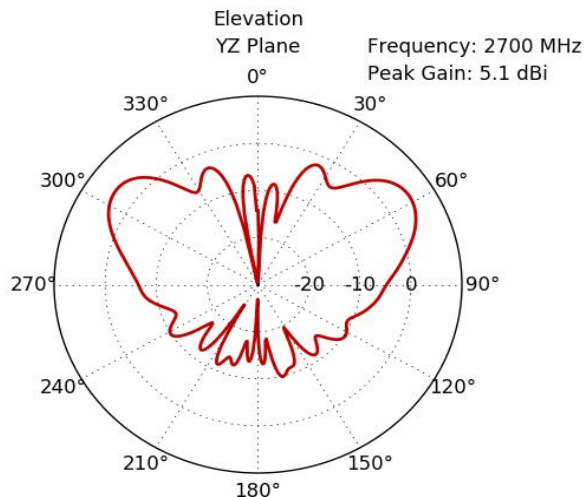
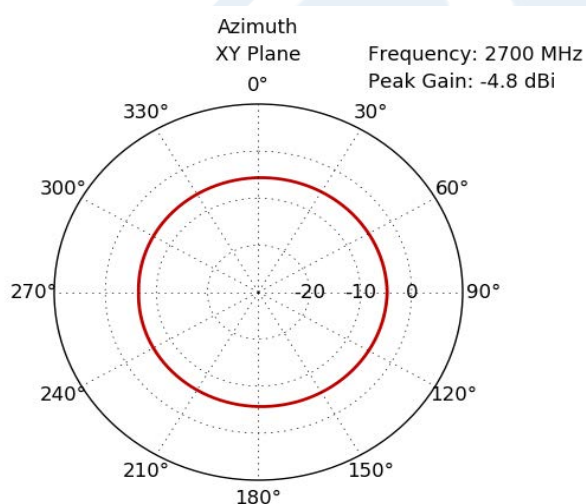
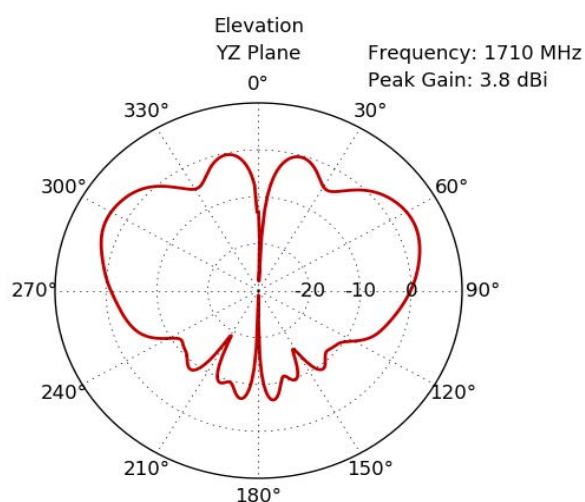
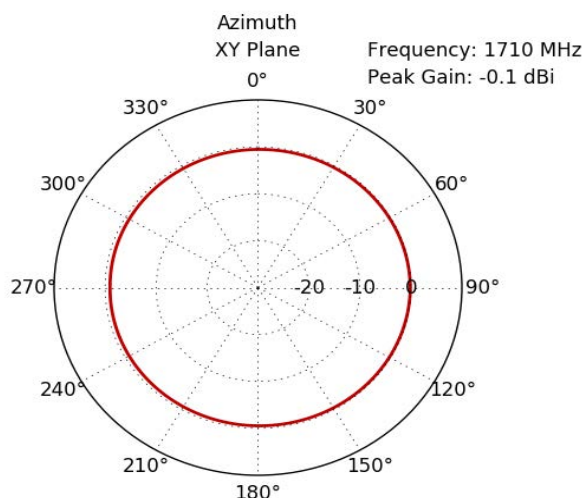
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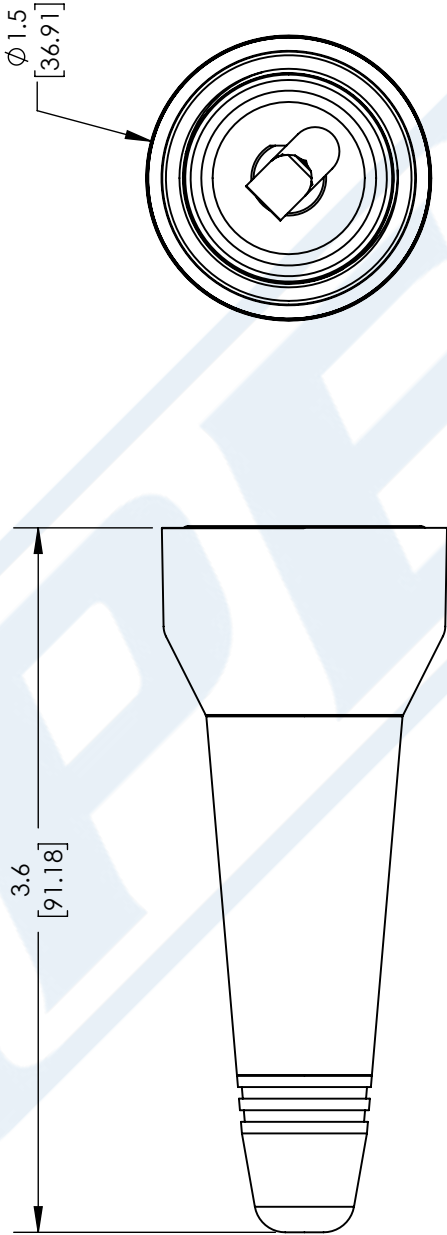
URL: <https://www.pasternack.com/multi-antenna-698-mhz-2.7-ghz-0-gain-nmo-mount-pe51mp1010-p.aspx>

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PE51MP1010 CAD Drawing

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	08/02/2019	MMILLER



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X=± 2 [5.08]	FRACTIONS XX=± 01 [.25]	Pasternack Enterprises, Inc. P.O. Box 16759, Irvine, CA 92623. Phone: 1.949.261.1920 1.866.727.8376 Fax: 1.949.261.7451 www.pasternack.com e-mail: sales@pasternack.com		SHEET 1 OF 1
XXX=± .005 [.13]	ANGLES ± 1°	ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.		SCALE N/A
THIRD-ANGLE PROJECTION		SIZE CAGE DRAWN BY PART NUMBER		REV
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