



3 dBd Ground Independent Poly Spring Vehicular Antenna 440-480 MHz NMO Mount Connector

Antennas Technical Data Sheet

PE51MP1008

Features

- Wide band performance; no tuning required
- NMO Mount, Black Chrome Finish
- One-piece 17-7 Stainless steel open coil whip
- Flexible Black Polymer Alloy Spring
- O-ring seal for waterproof construction
- Durable Xenoy™ base with TPV over mold dust seal and grip ring

Applications

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

Description

This ground plane independent UHF 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
Application Band	UHF
Band Type	Single
Radiation Pattern	Omni Directional
Polarization	Linear, Vertical
Ground Plane	Independent
Connector Type	NMO Mount

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	440		480	MHz
Input VSWR			2:1	
Impedance		50		Ohms
Gain		3		dBd
Horizontal (Azimuth) Beam Width		Omnidirectional		
Vertical (Elevation) Beam Width		35		Degrees
Input Power			150	Watts

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [3 dBd Ground Independent Poly Spring Vehicular Antenna 440-480 MHz NMO Mount Connector PE51MP1008](#)



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Mechanical Specifications

Base Material	Xenoy™ w/TPV over mold grip
Whip Material	17-7 SS
Whip Finish	Black Chrome
Mounting Application	¾ inch thru-hole NMO Mount
Spring Material	Black Molded Polymer Alloy

Size

Overall Length	31.25 in [793.75 mm]
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Installation Instructions

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3 dBd GROUND PLANE INDEPENDENT ANTENNA
(440-480 MHz)

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.

**Designed and Optimized for Wide Band Fixed Length
"No Ground Plane" Installations**

Note: CAREFULLY READ ALL INSTRUCTIONS BEFORE INSTALLING

1. Parts (Figure 1):

Verify all parts are included with the Antenna as shown in Figure 1.

- A. Antenna Whip
- B. Spring Assembly
(SS or e/m-Flex™ Polymer Type)
- C. NMO Base Adapter
- D. O-Ring

2. Tools:

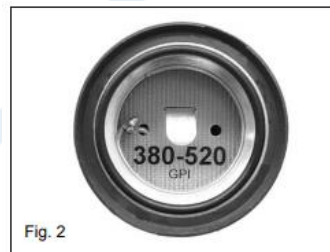
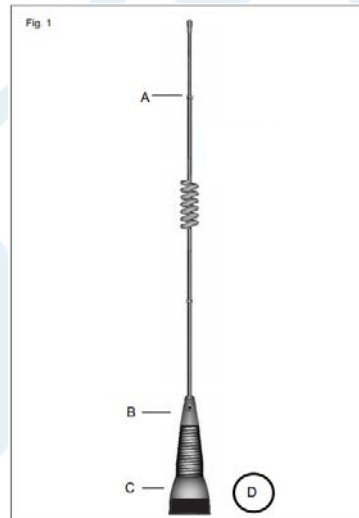
- A. None required for installation to standard NMO Type Mount.

3. Pre-Installation (Figure 2):

- A. **Optimal Performance:** The Antenna is designed for installation to an NMO mount using a small metal L-Bracket or non-metallic surfaces.
- B. Ensure O-ring is properly seated within O-ring groove as shown in Figure 2.
- C. **IMPORTANT: NO TUNNING OR CUTTING REQUIRED.**

4. Tuning and Installation (Figure 3):

- A. Verify contact spring is completely extended. If necessary, adjust by pulling the contact outward.
- B. Thread Antenna onto the NMO mount. Tighten by hand until O-Ring is completely seated.
- C. **No Tuning or Cutting Required**
- D. Verify VSWR.



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Environmental Specifications

Temperature

Operating Range

-40 to +85 deg C

Humidity

95%

Corrosion

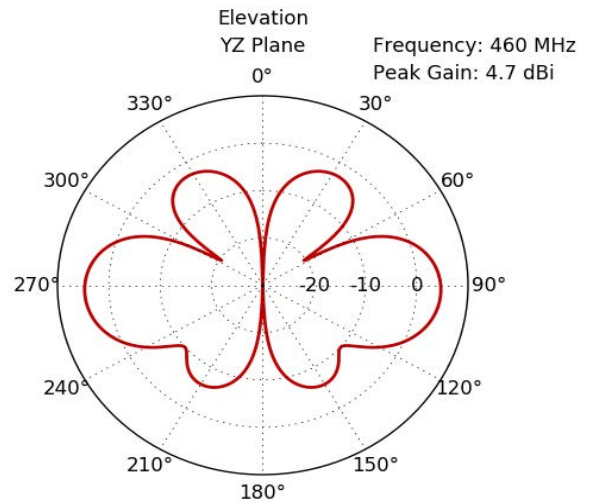
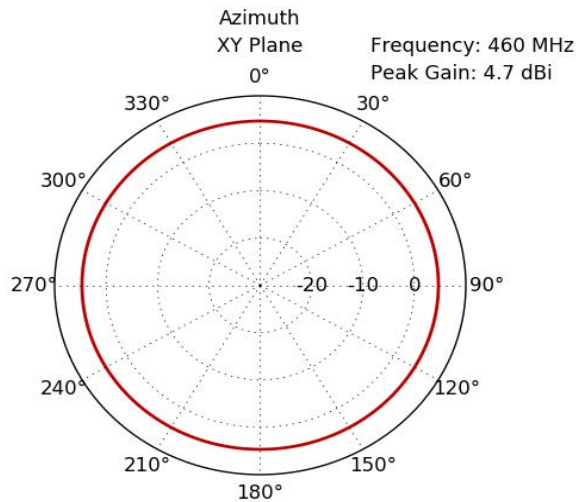
Salt Fog

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

Plotted and Other Data

Notes:

Typical Radiation Pattern



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3 dBd Ground Independent Poly Spring Vehicular Antenna 440-480 MHz NMO Mount 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: [3 dBd Ground Independent Poly Spring Vehicular Antenna 440-480 MHz NMO Mount Connector PE51MP1008](https://www.pasternack.com/single-antenna-440-480-mhz-3-dbd-gain-nmo-mount-pe51mp1008-p.aspx)

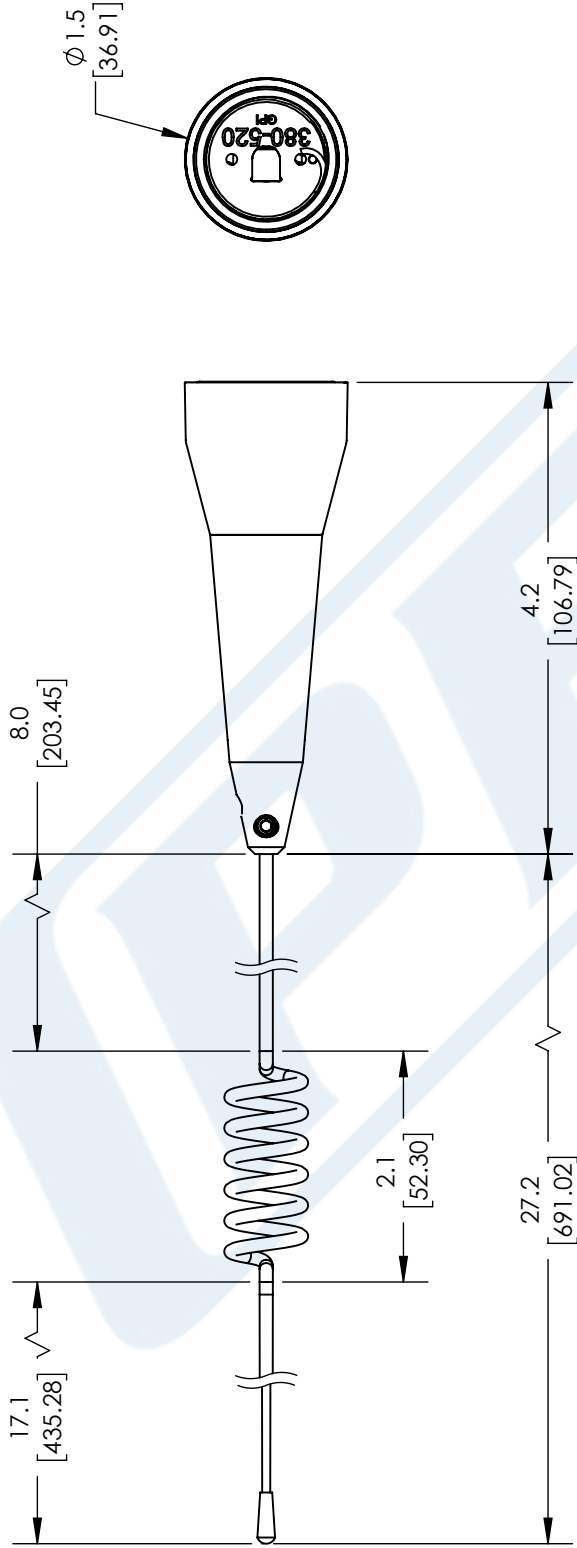
URL: <https://www.pasternack.com/single-antenna-440-480-mhz-3-dbd-gain-nmo-mount-pe51mp1008-p.aspx>

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PE51MP1008 CAD Drawing

3 dBd Ground Independent Poly Spring Vehicular Antenna
440-480 MHz NMO Mount Connector

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	07/18/2019	MMILLER



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS	
TOLERANCES:	FRACTIONS
X \pm 2 [5.08]	+1/32
XX \pm 0.1 [2.54]	
XXX \pm 0.005 [0.127]	ANGLES \pm 1°
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.	
THIRD-ANGLE PROJECTION	

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SIZE: A CAGE: 53919 DRAWN BY: BPUCHASKI PART NUMBER: PE51MP1008

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SHEET: 1	OF: 1
SCALE: N/A	REV: A

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