



## 30 dB Magnet Mount GPS/GLNSS Antenna 1,575-1,615 MHz SMA Connector

### Antennas Technical Data Sheet

PE51GPS1004

#### Features

- Low-profile, rugged, compact design
- High-impact Polycarbonate housing
- UV Stabilized
- IP67 Rated
- High Rejection SAW Filter
- Low current consumption

#### Applications

- Service vehicles
- Public safety
- Public transportation
- Mining & Construction

#### Description

This magnet mount GPS/GLNSS antenna is ideally suited for multipoint mobile and fixed applications including service vehicles, public transportation, public safety, mining and construction vehicles, kiosks, as well numerous other commercial and industrial applications where a compact and rugged GPS/GLNSS antenna is required.

#### Configuration

|                |                      |
|----------------|----------------------|
| Design         | GPS/GLNSS            |
| Band Type      | Single               |
| Cable Type     | RG174/U              |
| Cable Length   | 196.8 in [499.87 cm] |
| Connector Type | SMA Plug             |

#### Electrical Specifications

| Description           | Minimum | Typical | Maximum | Units |
|-----------------------|---------|---------|---------|-------|
| Frequency Range       | 1,575   |         | 1,615   | GHz   |
| Output VSWR           |         |         | 2:1     |       |
| Impedance             |         | 50      |         | Ohms  |
| Gain                  |         | 30      |         | dB    |
| Noise Figure          |         | 2       |         | dB    |
| Out Of Band Rejection |         |         | 37      | dB    |
| Operating DC Voltage  | 3       |         | 5       | Volts |
| Current               | 8       |         | 16      | mA    |

#### Passive Element Specifications

| Description                   | Minimum | Typical | Maximum | Units |
|-------------------------------|---------|---------|---------|-------|
| Antenna Gain at Zenith(GLNSS) |         | 4.1     |         | dBic  |
| Antenna Gain at Zenith(GPS)   |         | 3.6     |         | dBic  |
| Antenna VSWR                  |         |         | 2       |       |
| Polarization                  |         | RHCP    |         |       |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [30 dB Magnet Mount GPS/GLNSS Antenna 1,575-1,615 MHz SMA Connector PE51GPS1004](#)



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**Mechanical Specifications**

Mounting Application

Magnet Mount

**Size**

Overall Length

1.9 in [48.26 mm]

Width

1.8 in [45.72 mm]

Height

0.78 in [19.81 mm]

Color

Black

**Environmental Specifications**

**Temperature**

Operating Range

-40 to +90 deg C

Humidity

65 ±20% RH

ESD Protection

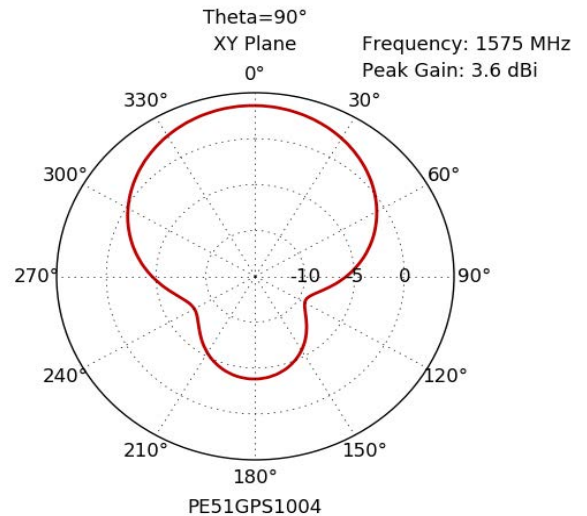
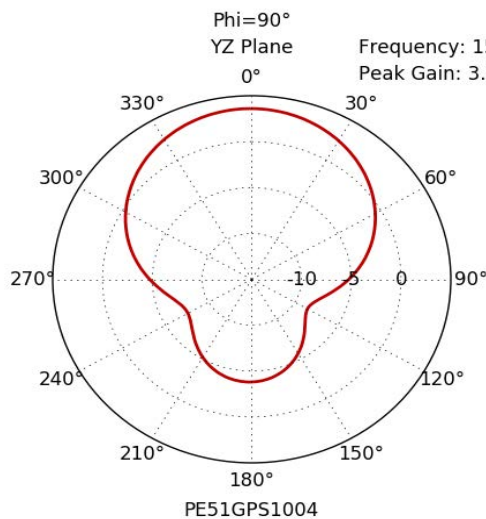
IP67

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

**Plotted and Other Data**

Notes:

**Typical Radiation Pattern**



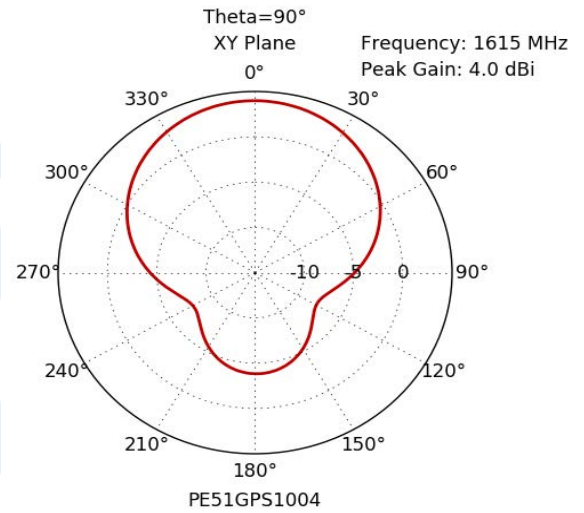
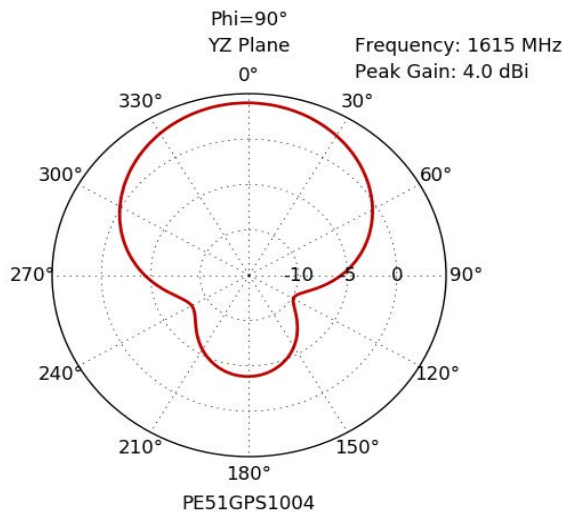
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30 dB Magnet Mount GPS/GLNSS Antenna 1,575-1,615 MHz SMA Connector from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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URL: <https://www.pasternack.com/single-antenna-1.575-1.615-ghz-30-db-gain-sma-pe51gps1004-p.aspx>

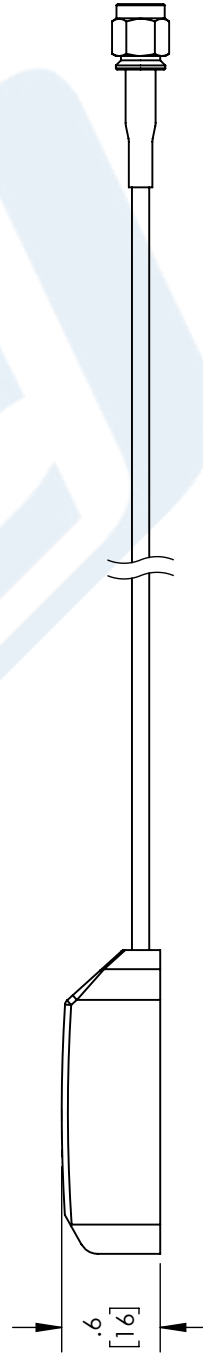
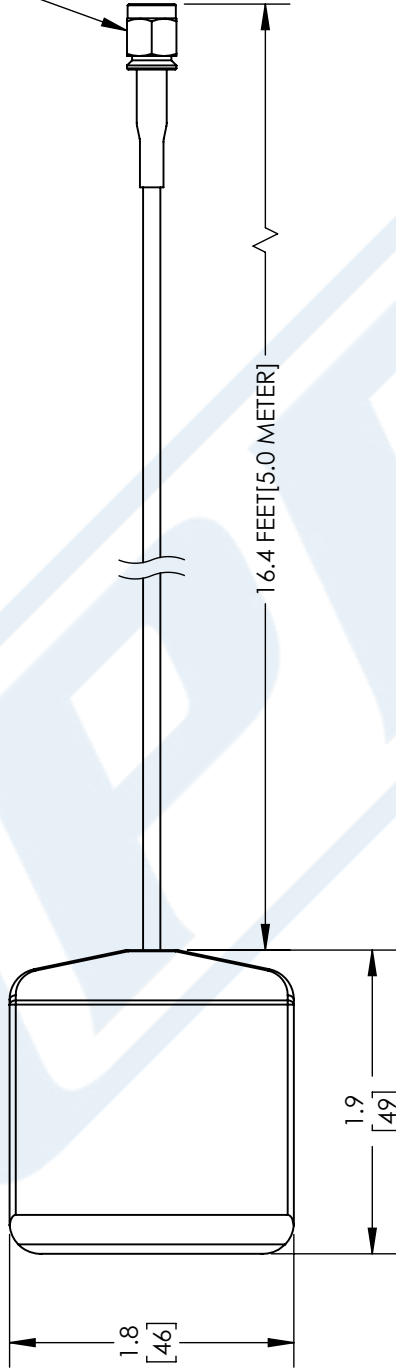
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# PE51GPS1004 CAD Drawing

30 dB Magnet Mount GPS/GLNSS Antenna 1,575-1,615 MHz SMA Connector

| REVISIONS |                 |            |          |
|-----------|-----------------|------------|----------|
| REV.      | DESCRIPTION     | DATE       | APPROVED |
| A         | INITIAL RELEASE | 07/16/2019 | MMILLER  |

SMA MALE  
CONNECTOR



|  |             |
|--|-------------|
| UNLESS OTHERWISE SPECIFIED<br>LEADING DIMENSIONS ARE INCHES<br>DIMENSIONS IN [ ] ARE MILLIMETERS |             |
| TOLERANCES:  | FRACTIONS   |
| X±.2 [5.08]  | +1/32       |
| XX±.01 [.25]   |             |
| XXX±.005 [.13]   | ANGLES ± 1° |
| ALL DIMENSIONS SHOWN<br>ARE FOR REFERENCE ONLY.  |             |
| THIRD-ANGLE PROJECTION   |             |

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SIZE [CAGE] DRAWN BY [PART NUMBER]  
A 53919 BPUCHASKI PE51GPS1004

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|--|------|
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| SHEET 1  | OF 1 |
| SCALE  | N/A  |
| REV  | A    |

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