



GPS Active Antenna, 1597 MHz to 1607 MHz,
 10dBic, Linear Polarization Small SMA mount

Antennas Technical Data Sheet

PEANGPS1009

Features

- Low Profile
- Embedded Low Noise Amplifier
- MIL-STD-810G
- Linearly Polarized
- 10 dBic Gain
- SMA Male
- IP67 Rated
- Operating Frequency Range 1559 MHz to 1610 MHz
- Operating Voltage 3.3 Vdc

Applications

- Military, Law Enforcement, or Private Security
- Hand-held/Portable Devices
- Asset and Fleet Tracking
- Scientific Instrumentation
- Oil, Gas, and Mining Industries
- M2M Applications
- GPS L1, GALLILEO E1, AND GLONASS

Description

Pasternack's Active GNSS Antenna PEANGPS1009 is Linearly polarized and conforms to MIL-STD-810G. The PEANGPS1009 is an active GPS L1 band antenna with 10 dBic Gain. These Mil Spec active GNSS antenna units are ideally suited for use in rugged terrain where low profile, low drag, bullet style antennas are needed.

Our GNSS antenna specialists are ready and available to answer any questions you may have on the PEANGPS1009. This high quality multi-standard SMA male antenna meets GPS L1, GALLILEO E1 and GLONASS G1 requirements by operating in the 1559MHz to 1610MHz frequency range.

The PEANGPS1009 GNSS antenna series from Pasternack are designed for portable, hand-held, or mobile devices which receive GNSS signals from satellite constellations to triangulate geolocations for navigation, tracking, surveying, mobile network timing, or munitions targeting. Order your Active GNSS PEANGPS1009 Antenna from Pasternack today. There is no MOQ (minimum order quantity) and the product ships same day from our warehouse.

Configuration

| | |
|----------------|------------------|
| Design | GPS/GNSS Active |
| Band Type | Single |
| Polarization | Linear, Vertical |
| Connector Type | SMA Male |

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|----------------------|---------|---------|---------|-------|
| Frequency Range | 1,597 | | 1,607 | MHz |
| Output VSWR | | | 2.5:1 | |
| Impedance | | 50 | | Ohms |
| Gain | 10 | | | dBic |
| Noise Figure | | 0.55 | | dB |
| Operating DC Voltage | 2 | | 3.5 | Volts |
| Current | | 3.8 | | mA |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [GPS Active Antenna, 1597 MHz to 1607 MHz, 10dBic, Linear Polarization Small SMA mount PEANGPS1009](#)



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Mechanical Specifications

| | |
|-----------------|--------------------|
| Radome Material | Polyetherimide |
| Size | |
| Overall Length | 1.35 in [34.29 mm] |
| Width | 0.5 in [12.7 mm] |
| Height | 0.5 in [12.7 mm] |
| Weight | 0.01 lbs [4.54 g] |

Environmental Specifications

| | |
|--------------------|---|
| Temperature | |
| Operating Range | -40 to +71 deg C |
| Storage Range | -40 to +85 deg C |
| Environment | MIL-STD-810G |
| Humidity | MIL-STD-810G, Meth 507.5, Proc. II, 95% Relative Humidity |
| Shock | MIL-STD-810G |
| Vibration | MIL-STD-810G |
| Altitude | MIL-STD-810G |
| Corrosion | MIL-STD-810G, Meth 509.5, 4 x 24 h |

Environmental Specification Notes:

- Operating Temp MIL-STD-810G, Meth. 501.5 & 502.5, Proc.II. Storage Temp MIL-STD-810G, Meth. 501.5 & 502.5, Proc. I.

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

Plotted and Other Data

Notes:

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ELECTRICAL PERFORMANCES

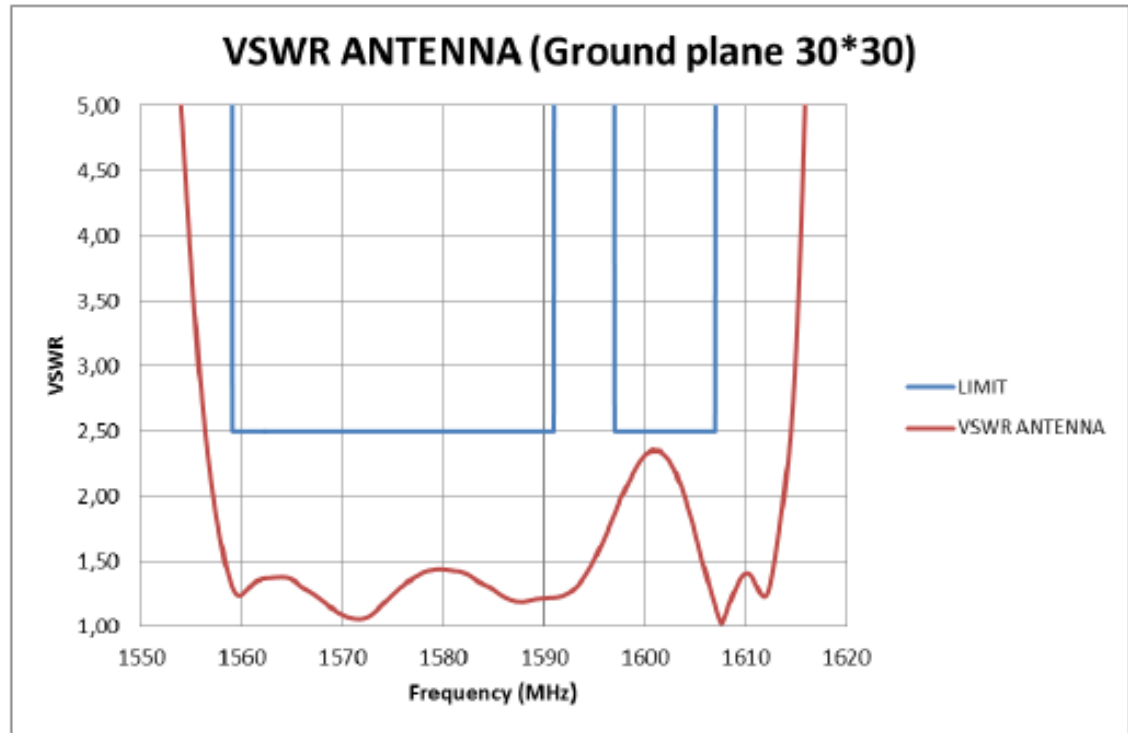


Figure 1: VSWR

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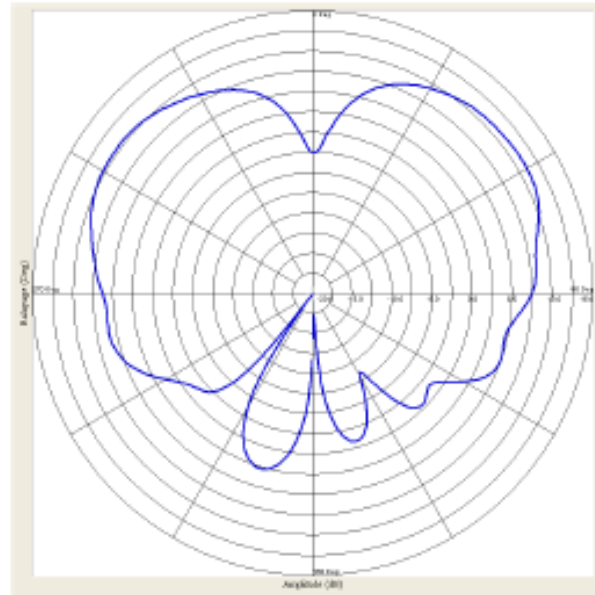


Figure 2: Radiation pattern on ground plane at 1575 MHz (RHCP)

GPS Active Antenna, 1597 MHz to 1607 MHz, 10dBic, Linear Polarization Small SMA mount 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: [GPS Active Antenna, 1597 MHz to 1607 MHz, 10dBic, Linear Polarization Small SMA mount PEANGPS1009](https://www.pasternack.com/10-dbic-gps-gnss-active-antenna-1597-1607-mhz-sma-male-connector-peangps1009-p.aspx)

URL: <https://www.pasternack.com/10-dbic-gps-gnss-active-antenna-1597-1607-mhz-sma-male-connector-peangps1009-p.aspx>

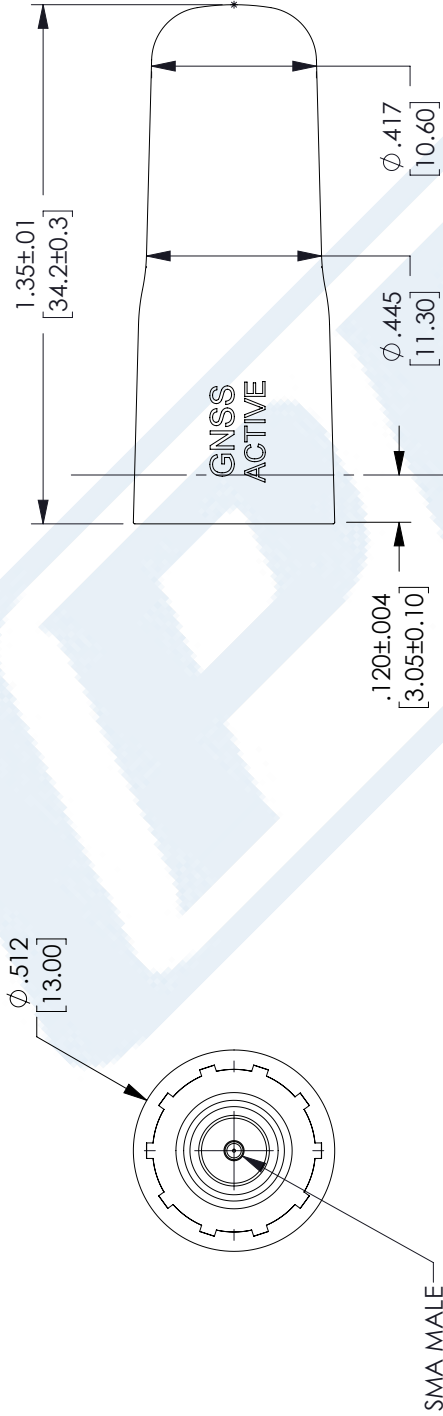
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

PEANGPS1009 CAD Drawing

GPS Active Antenna, 1597 MHz to 1607 MHz, 10dBic,
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REVISIONS

| REV. | DESCRIPTION | DATE | APPROVED |
|------|-----------------|------------|----------|
| A | INITIAL RELEASE | 07/21/2022 | KHIETPAS |



UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:

| | | |
|--------------|--------|-------------|
| .X = ±.2 | [5.08] | FRACTIONS |
| .XX = ±.02 | [.51] | ± 1/32 |
| .XXX = ±.005 | [.13] | ANGLES ± 1° |

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 = | | +5%L / -0 |

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

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Pasternack Enterprises, Inc.
P.O. Box 16759, Irvine, CA 92623.
Phone: 1.949.261.1920 | 1.866.727.8376
Fax: 1.949.261.7451
Website: www.pasternack.com
E-mail: sales@pasternack.com

ITEM NO. PEANGPS1009
CAGE CODE DRAWN BY KGLEBOVA
SIZE A 53919

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1
SCALE N/A

REV A