



Multi Band 47dBi GPS/GNSS Survey Antenna 1,164-1,615 MHz TNC Female Connector IP69K

**Antennas Technical Data Sheet**

**PEANGPS1005**

**Features**

- Multi Band
- 1.164-1.3GHz and 1.525-1.615GHz
- IP69K Rated
- Stable Phase Center
- Millimeter Level Accuracy
- TNC Female

**Applications**

- GPS L1/L2/L5
- GLONASS L1/L2/L3
- Galileo E1/E5a/E5b/E6
- BDS B1/B2/B3
- QZSS L1/L2/L5/L6
- SBAS L1/L5
- IRNSS L5
- L Band Correction Services
- Unmanned Vehicles/Vessels
- GIS Surveying
- Autonomous Vehicles

**Description**

The PEANGPS1005 is an active GPS/GNSS multi band L1/L2/L5 antenna with 47.5 dBi overall gain. This high precision ruggedized antenna is IP69K rated, light weight and designed for Survey. The active Survey GPS/GNSS antenna is ideally suited for use in harsh operating environments where stability and reliability of GPS/GNSS signal is required.

This antenna operates in the 1.164-1.3GHz and 1.525-1.615GHz bands meeting GPS L1/L2/L5, GALILEO E1/E6/E5a/E5b and GLONASS L1/L2/L3 requirements. The PEANGPS1005 antenna has an integrated LNA with 2 dB noise figure and typical LNA gain of 40 dB.

The PEANGPS1005 GPS/GNSS antenna from Pasternack, with an axial ratio of 3 dB, can track visible satellites under extreme conditions, providing positioning solutions with accuracy for UAV navigation, autonomous tracking, or GIS surveying.

**Configuration**

Design	GPS/GNSS Active
Band Type	Multi
Polarization	RHCP
Connector Type	TNC Female

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	1,164		1,615	MHz
Output VSWR			2:1	
Impedance		50		Ohms
Gain		47.5		dBi
Gain Variation		±4		dBi
Noise Figure		2		dB
Operating DC Voltage	3.3		18	Volts
Current			45	mA
Axial Ratio		3		dB

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Multi Band 47dBi GPS/GNSS Survey Antenna 1,164-1,615 MHz TNC Female Connector IP69K PEANGPS1005](#)



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### Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	1.164 to 1.3	1.525 to 1.615				GHz
Gain	47.5	47.5				dBi

### Mechanical Specifications

Mounting Application Coarse threaded 5/8"-11, thread hole depth 10-11mm

#### Size

Overall Length 5.9 in [149.86 mm]  
 Width 5.9 in [149.86 mm]  
 Height 2.08 in [52.83 mm]  
 Weight 1.85 lbs [839.15 g]

### Environmental Specifications

#### Temperature

Operating Range -45 to +85 deg C  
 Storage Range -55 to +85 deg C

Humidity 95%

Shock 75Gs, 6ms duration, 3 shocks in mutually perpendicular axes

Vibration 9.8gRMS, 24 2000Hz

Corrosion 96h (continuous spray, 5% concentration, 35°C)

Ingress Protection IP67/IP69K

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

### Plotted and Other Data

Notes:

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Multi Band 47dBi GPS/GNSS Survey Antenna 1,164-1,615 MHz TNC Female Connector IP69K 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: [Multi Band 47dBi GPS/GNSS Survey Antenna 1,164-1,615 MHz TNC Female Connector IP69K PEANGPS1005](https://www.pasternack.com/47.5-dbi-band-gps-active-antenna-1164-1615-mhz-tnc-female-connector-peangps1005-p.aspx)

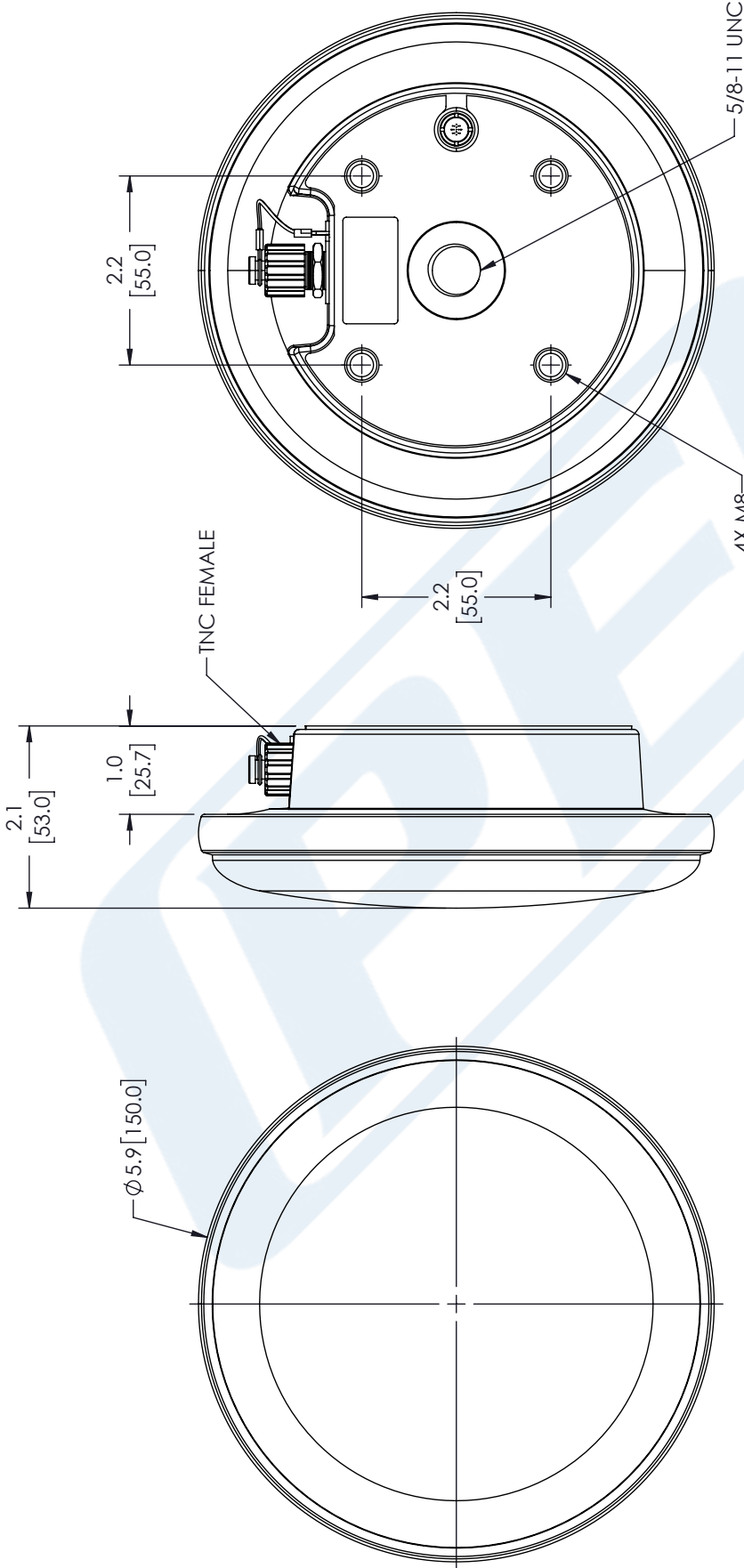
URL: <https://www.pasternack.com/47.5-dbi-band-gps-active-antenna-1164-1615-mhz-tnc-female-connector-peangps1005-p.aspx>

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# PEANGPS1005 CAD Drawing

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	5/9/2022	KHIETPAS



<p><b>PE PASTERNAK</b> an INFINITI brand</p> <p>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</p>	<p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION ALL RIGHTS RESERVED.</p> <p>SHEET 1 OF 1</p>
	<p>SCALE N/A</p>
<p>SIZE A</p>	<p>ITEM NO. PEANGPS1005</p>
<p>CAGE CODE 53919</p>	<p>DRAWN BY HBAKKE</p>
<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>TOLERANCES:</p> <p>.X = ±.2 [5.08]    FRACTIONS ± 1/32 .XX = ±.02 [ .51]    ANGLES ± 1° .XXX = ±.005 [ .13]</p> <p>CABLE LENGTH (L): TOLERANCES: L ≤ 12 [305] = +1 [25] / -0 12 [305] &lt; L ≤ 60 [1524] = +2 [51] / -0 60 [1524] &lt; L ≤ 120 [3048] = +4 [102] / -0 120 [3048] &lt; L ≤ 300 [7620] = +6 [152] / -0 300 [7620] &lt; L = +5% / -0</p> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p>	

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