PASTERNACK
an INFINITE brand



Dual Band 47dBi GPS/GNSS Survey Antenna 1,205-1,615 MHz TNC Female Connector IP67

Antennas Technical Data Sheet PEANGPS1003

Features

- Dual Band
- IP67 Rated
- 1.205-1.278GHz and 1.559-1.615GHz
- Stable Phase Center
- Millimeter Level Accuracy
- TNC Female

Applications

- GPS L1/L2
- GLONASS L1/L2
- Galileo E1
- QZSS L1/L2
- SBAS L1
- Unmanned Vehicles/Vessels
- GIS Surveying
- Autonomous Vehicles

Description

The PEANGPS1003 is an active GPS/GNSS dual band L1/L2 antenna with 47.5 dBi overall gain. This high precision antenna is IP67 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 1.205-1.278GHz and 1.559-1.615GHz bands meeting GPS L1/L2, GALILEO E1 and GLONASS L1/L2 requirements. The PEANGPS1003 antenna has an integrated LNA with 2 dB noise figure and typical LNA gain of 40 dB.

The PEANGPS1003 GPS 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
Band Type	Dual
Polarization	RHCP
Connector Type	TNC Female

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	1,205		1,615	MHz
Output VSWR			2:1	
Impedance		50		Ohms
Gain		47.5		dBi
Noise Figure		2		dB
Operating DC Voltage	3.3		12	Volts
Current			45	mA
Axial Ratio		3		dB

Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	1.205 to 1.278	1.559 to 1.615				GHz

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications: Dual Band 47dBi GPS/GNSS Survey Antenna 1,205-1,615 MHz TNC Female Connector IP67 PEANGPS1003

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Gain	47.5	47.5	dBi

Mechanical Specifications

Mounting Application	BSW5/8” - 11 screw, 12-14mm

Size

Overall Length	5.98 in [151.89 mm]
Width	5.98 in [151.89 mm]
Height	2.44 in [61.98 mm]
Weight	1.25 lbs [566.99 g]

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
Storage Range	-55 to +85 deg C
Humidity	95%
ESD Protection	67

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

Dual Band 47dBi GPS/GNSS Survey Antenna 1,205-1,615 MHz TNC Female Connector IP67 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/47.5-dbi-band-gps-active-antenna-1205-1615-mhz-tnc-female-connector-peangps1003-p.aspx

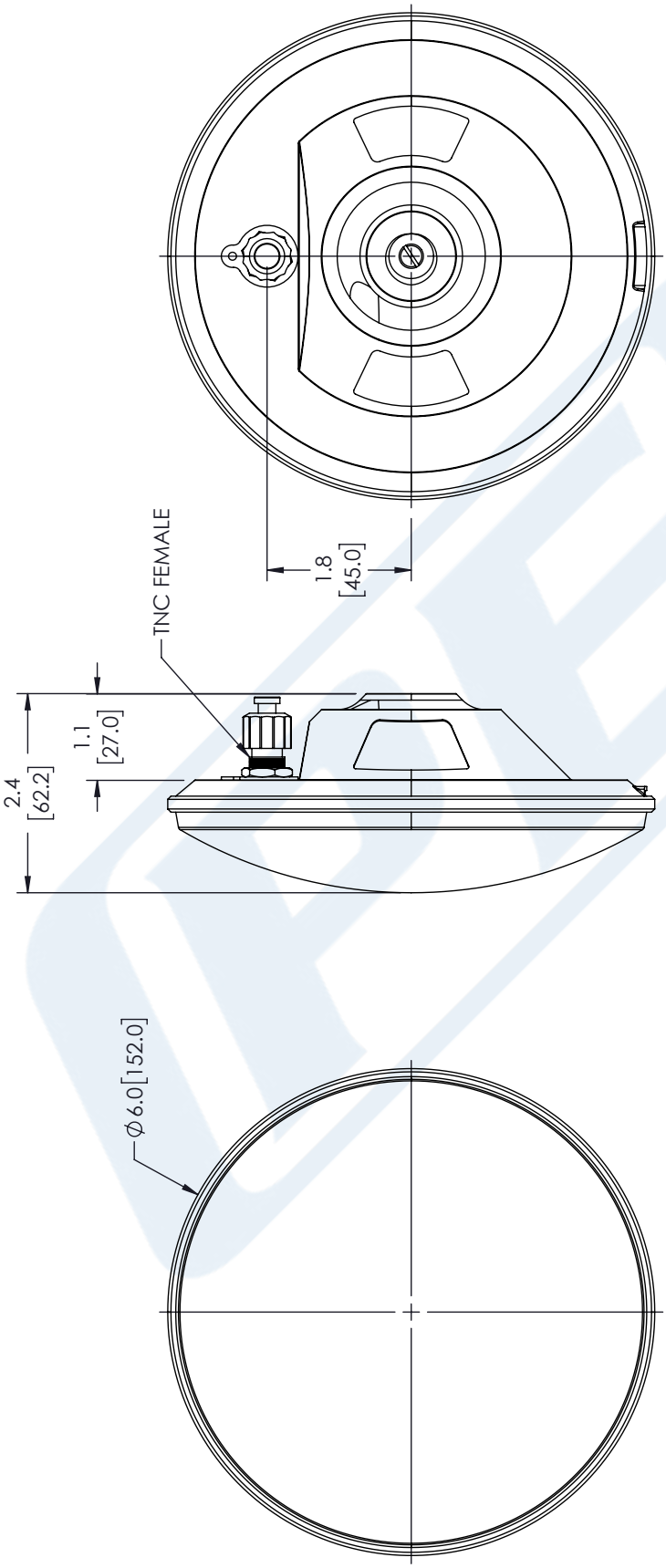
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PEANGPS1003 CAD Drawing

Dual Band 47dBi GPS/GNSS Survey Antenna 1,205-1,615 MHz TNC Female Connector IP67



REVISIONS

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

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

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SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	HBAKKE	PEANGPS1003

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

TOLERANCES:

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

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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