PASTERNACK
an INFINITE brand

Multi Band 37dBi GPS/GNSS UAV Antenna 1,166-1,610 MHz SMA Male Connector IP67



Antennas Technical Data Sheet PEANGPS1001

Features

- Multi Band
- IP67 Rated
- 1.166-1.278GHz and 1.52-1.61GHz
- Stable Phase Center
- Millimeter Level Accuracy
- SMA Male

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
- Unmanned Vehicles/Vessels
- GIS Surveying
- Autonomous Vehicles

Description

The PEANGPS1001 is an active GPS/GNSS multi band L1/L2/L5 antenna with 37dBi overall gain. This high precision antenna is IP67 rated, light weight and designed for Unmanned Arial Vehicles (UAV). The active UAV 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 1.166-1.278GHz and 1.52-1.61GHz bands meeting GPS L1/L2/L5, GALILEO E1/E5a/E5b/E6 and GLONASS L1/L2/L3 requirements. The PEANGPS1001 antenna has an integrated LNA with 1.5 dB noise figure and typical LNA gain of 33 dB.

The PEANGPS1001 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	Multi
Polarization	RHCP
Connector Type	SMA Male

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	1,166		1,610	MHz
Output VSWR			2:1	
Impedance		50		Ohms
Gain		37.5		dBi
Noise Figure		1.5		dB
Operating DC Voltage	3.3		12	Volts
Current			55	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 37dBi GPS/GNSS UAV Antenna 1,166-1,610 MHz SMA Male Connector IP67 PEANGPS1001

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Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	1.166 to 1.278	1.52 to 1.61				GHz
Gain	39	40				dBi

Mechanical Specifications

Size

Overall Length	3.25 in [82.55 mm]
Width	1.57 in [39.88 mm]
Height	1.57 in [39.88 mm]
Weight	0.15 lbs [68.04 g]

Environmental Specifications

Temperature

Operating Range	-40 to +70 deg C
Storage Range	-40 to +70 deg C
Humidity	95%
ESD Protection	67

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

Multi Band 37dBi GPS/GNSS UAV Antenna 1,166-1,610 MHz SMA Male 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/37.5-dbi-band-gps-active-antenna-1166-1610-mhz-sma-male-connector-peangps1001-p.aspx

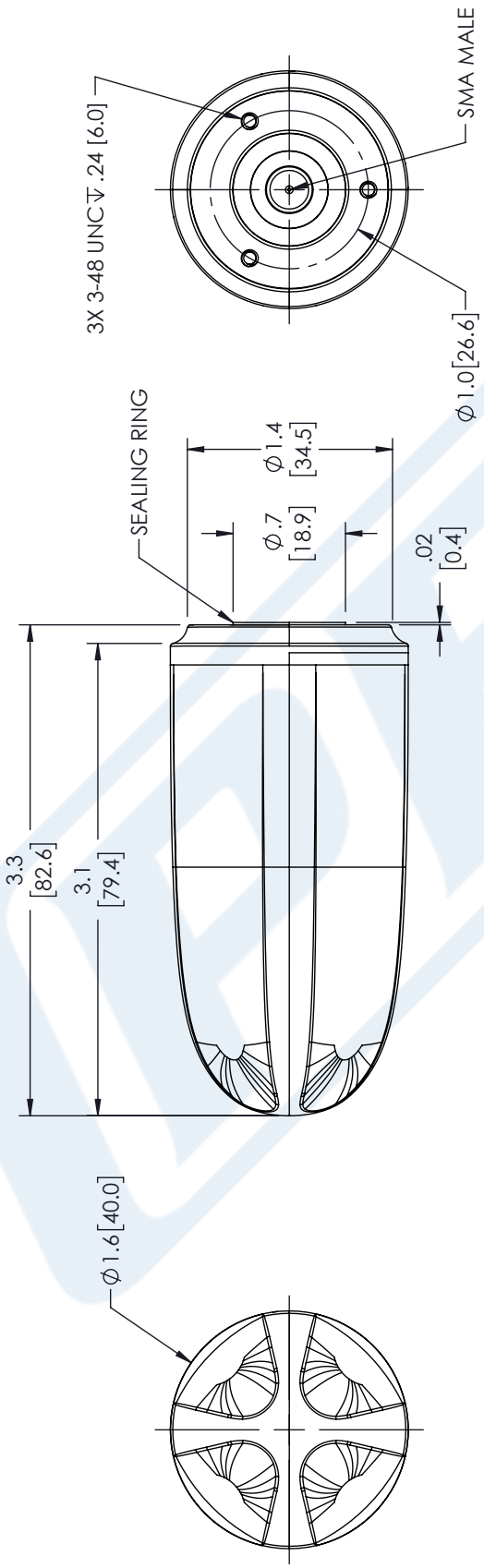
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PEANGPS1001 CAD Drawing

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REVISIONS

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

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.

THIRD-ANGLE PROJECTION

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SHEET	OF	SCALE	REV
1	1	N/A	A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	HBAKKE	PEANGPS1001

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