

Anti-Jam Multi-Constellation Triple-Band GNSS Antenna, 40dB LNA, TNC Female, Extended Filtering, Low-Angle Jamming Suppression

PEANGPS1028-TF



Features

- Anti-jam GNSS antenna
- Triple-band GNSS coverage
- Multi-constellation support
- Built for RF-congested areas
- Mission-critical UAV antenna
- Rugged active antenna
- TNC female connector
- 40 dB LNA Gain

Applications

- Defense UAVs
- Public safety drones
- BVLOS UAS operations
- Critical infrastructure inspection
- Security and surveillance
- Autonomous ground vehicles
- Marine navigation systems

Description

The PEANGPS1028-TF from Pasternack is a triple-band GPS antenna with an integrated low noise amplifier (LNA). Our RHCP polarized GNSS antenna has a maximum input VSWR of 1.8:1. Our GPS quadrifilar helix antenna is designed to operate within a DC voltage range of 2.5 to 16 Volts. This anti-jam multi-constellation antenna provides low-angle jamming suppression.

Pasternack's PEANGPS1028-TF GNSS antenna can operate at frequencies ranging from 1.16 to 1.6 GHz. Our antenna can withstand temperatures ranging from -40 to 85 deg C. This GPS antenna has a TNC female connector. Our RHCP polarized antenna is designed with a through-hole mount type for secure installation.

This RHCP polarized antenna has an overall length of 3.58 inches, a width of 3.58 inches, and a weight of 0.55 lbs. Our PEANGPS1028-TF GNSS antenna has a nominal gain of 40 dB.

For further information on similar products, our expert technical support and knowledgeable sales team can help you get the ideal triple-band GNSS antenna for your requirements.

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		1,606	MHz
Input VSWR		1.5:1	1.8:1	
Gain	41.8	43.7		
Noise Figure		2.5		dB
Operating DC Voltage	2.5		16	Volts
Current		62		mA
Axial Ratio		1		dB

Anti-Jam Multi-Constellation Triple-Band GNSS
Antenna, 40dB LNA, TNC Female, Extended
Filtering, Low-Angle Jamming Suppression



PEANGPS1028-TF

Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Frequency	1.164 to 1.254	1.559 to 1.606				GHz

Electrical Specification Notes:

Rejection

L2/L5

> 85 dB @ < 1100 MHz

> 82 dB @ > 1300 MHz

L1

> 75 dB @ < 1526 MHz

> 47 dB @ < 1536 MHz

> 35 dB @ > 1626 MHz

> 90 dB @ > 1700 MHz

Mechanical Specifications

Size

Length

3.58 in [90.93 mm]

Width

3.58 in [90.93 mm]

Height

6.14 in [155.96 mm]

Weight

0.55 lbs [249.48 g]

Environmental Specifications

Temperature

Operating Range

-40 to +85 deg C

Storage Range

-50 to +95 deg C

Shock

Vertical axis: 50 G, other axes: 30 G

Vibration

MIL-STD-810D Method 514.3-1

Corrosion

ASTM B117

Ingress Protection

IPX7

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

Plotted and Other Data

Notes:

Anti-Jam Multi-Constellation Triple-Band GNSS Antenna, 40dB LNA, TNC Female, Extended Filtering, Low-Angle Jamming Suppression

PEANGPS1028-TF



Typical Radiation Pattern

Appendix

Electrical Downtilt: Angle in the antenna's elevation pattern in which the maximum gain occurs.

Gain: Antenna's average gain.

Front to Back Ratio @ 180°±30°: Average difference between the antenna's maximum gain and the maximum gain in the antenna's back lobe over ±30° angles.

Cross-polarization Ratio (dB): Typical difference between the co-polarization and cross-polarization gain across the sector's 3 dB Beam Width.

Anti-Jam Multi-Constellation Triple-Band GNSS Antenna, 40dB LNA, TNC Female, Extended Filtering, Low-Angle Jamming Suppression 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: [Anti-Jam Multi-Constellation Triple-Band GNSS Antenna, 40dB LNA, TNC Female, Extended Filtering, Low-Angle Jamming Suppression PEANGPS1028-TF](https://www.pasternack.com/40-db-multi-band-quadrifilar-helix-gps-antenna-1164-1606-mhz-tnc-female-connector-peangps1028-tf)

URL: <https://www.pasternack.com/40-db-multi-band-quadrifilar-helix-gps-antenna-1164-1606-mhz-tnc-female-connector-peangps1028-tf.html>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PEANGPS1028-TF CAD Drawing

Anti-Jam Multi-Constellation Triple-Band GNSS Antenna, 40dB LNA, TNC

Female, Extended Filtering, Low-Angle Jamming Suppression

