

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



LCANGPS1005

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 LCANGPS1005 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 LCANGPS1005 antenna has an integrated LNA with 2 dB noise figure and typical LNA gain of 40 dB.

The LCANGPS1005 GPS/GNSS antenna from L-com, 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 |

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 Survey GPS/GNSS Antenna 1,164-1,615 MHz TNC Female Connector IP69K LCANGPS1005](#)

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| | | |
|-------------|----|----|
| Current | 45 | mA |
| Axial Ratio | 3 | dB |

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 | |
| Length | 5.9 in [149.86 mm] |
| Width | 2.08 in [52.83 mm] |
| Height | 2.08 in [52.83 mm] |
| Weight | 1.32 lbs [598.74 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:

Multi Band 47dBi Survey GPS/GNSS Antenna 1,164-1,615 MHz TNC Female Connector IP69K from L-com has same day shipment for domestic and International orders. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and

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active components.

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

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L-com CAD Drawing

