

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

The FMANGPS1005 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 FMANGPS1005 antenna has an integrated LNA with 2 dB noise figure and typical LNA gain of 40 dB.

The FMANGPS1005 GPS/GNSS antenna from Fairview Microwave, 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
Gain	47.5 to 47.5 dBi
Polarization	RHCP
Connector Type	TNC Female

### Electrical Specifications

Description	Min	Typ	Max	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

### Specifications by Frequency

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

### Mechanical Specifications

<b>Size</b>	
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]



### 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

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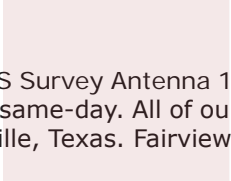
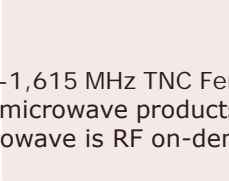
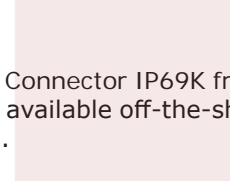
Environmental Specifications

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

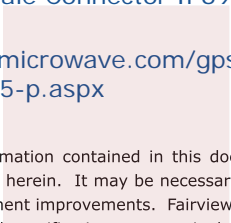
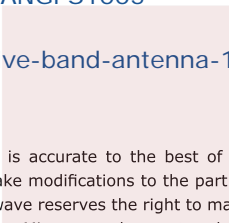
Notes:

Multi Band 47dBi GPS/GNSS Survey Antenna 1,164-1,615 MHz TNC Female Connector IP69K from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Multi Band 47dBi GPS/GNSS Survey Antenna 1,164-1,615 MHz TNC Female Connector IP69K FMANGPS1005](#)

URL: <https://www.fairviewmicrowave.com/gps-active-band-antenna-1.164-1.615-ghz-47.5-dbi-gain-tnc-female-connector-rhcp-fmangps1005-p.aspx>

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