

31 dBi Active GPS/GLONASS Magnet Mount Antenna  
RHCP 1575/1602 MHz, RG174 SMA Male IPX6



**FMANGPS1010**

**Features**

- SMA Male
- Right Hand Circular Polarized
- 28 dB LNA w/ low 1.5 dB Noise Figure
- Neodymium Rare-Earth Magnet
- IPX6 Rated

**Applications**

- GPS L1/GLONASS G1
- High Accuracy Global Positioning
- Precision Agriculture, Mining and Construction
- Law Enforcement and Public Safety
- Vehicle Fleet Management

**Description**

Fairview Microwave's Active GNSS Antenna FMANGPS1010 is Right Hand Circular Polarized with an integrated Neodymium Rare Earth Magnet for a secure mount. The FMANGPS1010 is an active GPS L1 and GLONASS G1 band antenna with 31 dBi Gain. These Magnet Mount active GNSS antenna units are ideally suited for use on vehicles where low profile, low drag, non-penetrating style antennas are needed.

Our GNSS antenna specialists are ready and available to answer any questions you may have on the FMANGPS1010. This high quality SMA male antenna meets GPS L1 and GLONASS G1 requirements by operating in the 1574 MHz to 1607 MHz frequency range.

The FMANGPS1010 GNSS antenna series from Fairview Microwave are designed for mobile, vehicle, or fleet services to receive GNSS signals from satellite constellations to triangulate geolocations for navigation, tracking, and surveying.

**Configuration**

Design	GPS Active
Band Type	Single
Polarization	RHCP
Cable Type	RG174
Connector Type	SMA Male
Number of Ports	1

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	1,574		1,607	MHz
Input VSWR			1.5:1	
Output VSWR			2:1	
Impedance		50		Ohms
Gain		31		dBi
Gain Variation		±5		
Noise Figure			1.5	
Out Of Band Rejection	30			dB
Operating DC Voltage	3		5	
Current	5.5	8.5	11.5	mA

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### Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	1.574 to 1.577	1.597 to 1.607				GHz
Center Frequency	1.575	1.602				GHz

### Mechanical Specifications

#### Size

Length	1.5 in [38.1 mm]
Width	1.3 in [33.02 mm]
Height	0.5 in [12.7 mm]
Weight	1 lbs [453.59 g]

### Environmental Specifications

#### Temperature

Ingress Protection	IPX6
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**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:

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#### 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.

Dedicated to serving the needs of the Wireless Internet Service Provider (WISP) market, KP Performance Antennas offers purpose built products that reliably perform in the field. KP Performance Antennas product line consists of Yagi, Grid, Omni, Dish and other style antennas that operate in the 900 MHz, 2.4 GHz, 3 GHz, and 5 GHz frequencies.

31 dBi Active GPS/GLONASS Magnet Mount Antenna RHCP 1575/1602 MHz, RG174 SMA Male IPX6 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: [31 dBi Active GPS/GLONASS Magnet Mount Antenna RHCP 1575/1602 MHz, RG174 SMA Male IPX6 FMANGPS1010](https://www.fairviewmicrowave.com/gps-active-antenna-1.574-to-1.607-ghz-31-dbi-gain-sma-male-connector-rh-cp-fmangps1010-p.aspx)

URL: <https://www.fairviewmicrowave.com/gps-active-antenna-1.574-to-1.607-ghz-31-dbi-gain-sma-male-connector-rh-cp-fmangps1010-p.aspx>

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# FMANGPS1010 CAD Drawing

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