

31.5 dBi Active GPS Magnet Mount Antenna
RHCP 1575 MHz, RG174 SMA Male IPX6



FMANGPS1012

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
- High Accuracy Global Positioning
- Precision Agriculture, Mining and Construction
- Law Enforcement and Public Safety
- Vehicle Fleet Management

Description

Fairview Microwave's Active GNSS Antenna FMANGPS1012 is Right Hand Circular Polarized with an integrated Neodymium Rare Earth Magnet for a secure mount. The FMANGPS1012 is an active GPS L1 band antenna with 31.5 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 FMANGPS1012. This high quality SMA male antenna meets GPS L1 requirements by operating in the 1574 MHz to 1577 MHz frequency range.

The FMANGPS1012 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		1,577	MHz
Input VSWR			1.5:1	
Output VSWR			2:1	
Impedance		50		Ohms
Gain		31.5		dBi
Gain Variation		±5		
Noise Figure			1.5	
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					GHz
Center Frequency	1.575					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.

31.5 dBi Active GPS Magnet Mount Antenna RHCP 1575 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.

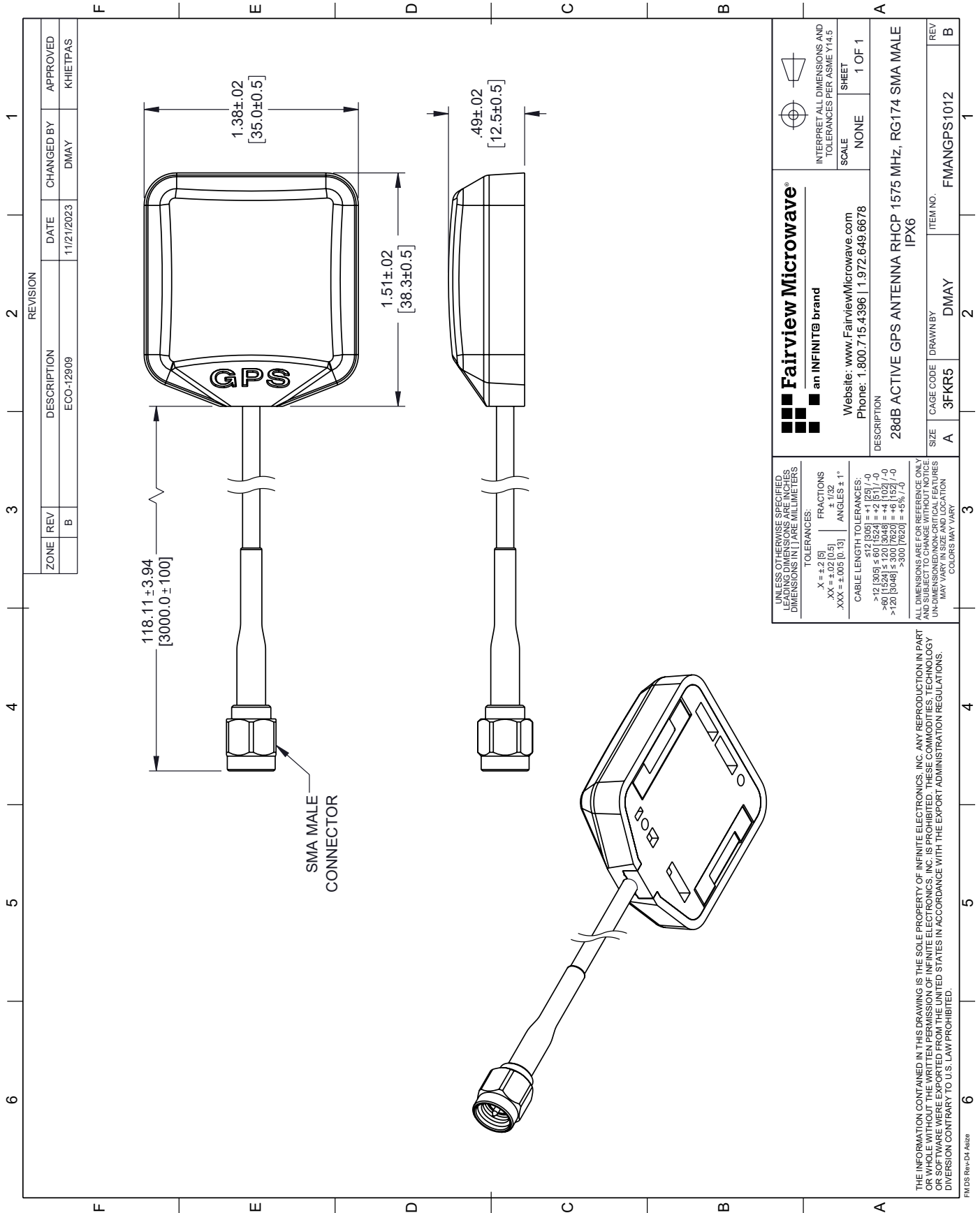
For additional information on this product, please click the following link: [31.5 dBi Active GPS Magnet Mount Antenna RHCP 1575 MHz, RG174 SMA Male IPX6 FMANGPS1012](#)

URL: <https://www.fairviewmicrowave.com/gps-active-antenna-1.574-to-1.577-ghz-31.5-dbi-gain-sma-male-connector-rh-cp-fmangps1012-p.aspx>

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FMANGPS1012 CAD Drawing

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<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN [] ARE MILLIMETERS</p> <p>TOLERANCES:</p> <p>X = ± 0.05 FRACTIONS ± 1/32 .XX = ± 0.02 [0.5] ANGLES ± 1° .XXX = ± 0.01 [0.13]</p> <p>CABLE LENGTH TOLERANCES:</p> <p>>12 [305] ≤ 60 [1524] = +1 [25] / -0 >60 [1524] ≤ 120 [3048] = +4 [102] / -0 >120 [3048] ≤ 300 [7620] = +5 [127] / -0 >300 [7620] = +5 [127] / -0</p> <p>ALL DIMENSIONS ARE FOR REFERENCE ONLY. DIMENSIONS OF PARTS MAY VARY FROM DRAWING DIMENSIONS. UNDIMENSIONED CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.</p>		
<p>DESCRIPTION: 28dB ACTIVE GPS ANTENNA RHCP 1575 MHz, RG174 SMA MALE IPX6</p>		
SIZE: A	CAGE CODE: 3FKR5	ITEM NO.: FMANGPS1012
DRAWN BY: DMAY	REV: B	

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FM DS Rev-D4 AS2P