

31.5 dBi Active GPS Magnet Mount Antenna  
RHCP 1575 MHz, RG174 SMA Male IP66



**FMANGPS1011**

**Features**

- SMA Male
- Right Hand Circular Polarized
- 28 dB LNA w/ low 1.5 dB Noise Figure
- Neodymium Rare-Earth Magnet
- IP66 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 FMANGPS1011 is Right Hand Circular Polarized with an integrated Neodymium Rare Earth Magnet for a secure mount. The FMANGPS1011 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 FMANGPS1011. This high quality SMA male antenna meets GPS L1 requirements by operating in the 1574 MHz to 1577 MHz frequency range.

The FMANGPS1011 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	
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					GHz
Center Frequency	1.575					GHz

### Mechanical Specifications

#### Size

Length	1.9 in [48.26 mm]
Width	1.5 in [38.1 mm]
Height	0.6 in [15.24 mm]
Weight	1 lbs [453.59 g]

### Environmental Specifications

#### Temperature

Ingress Protection	IP66
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**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:

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### FMANGPS1011

#### 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 IP66 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.

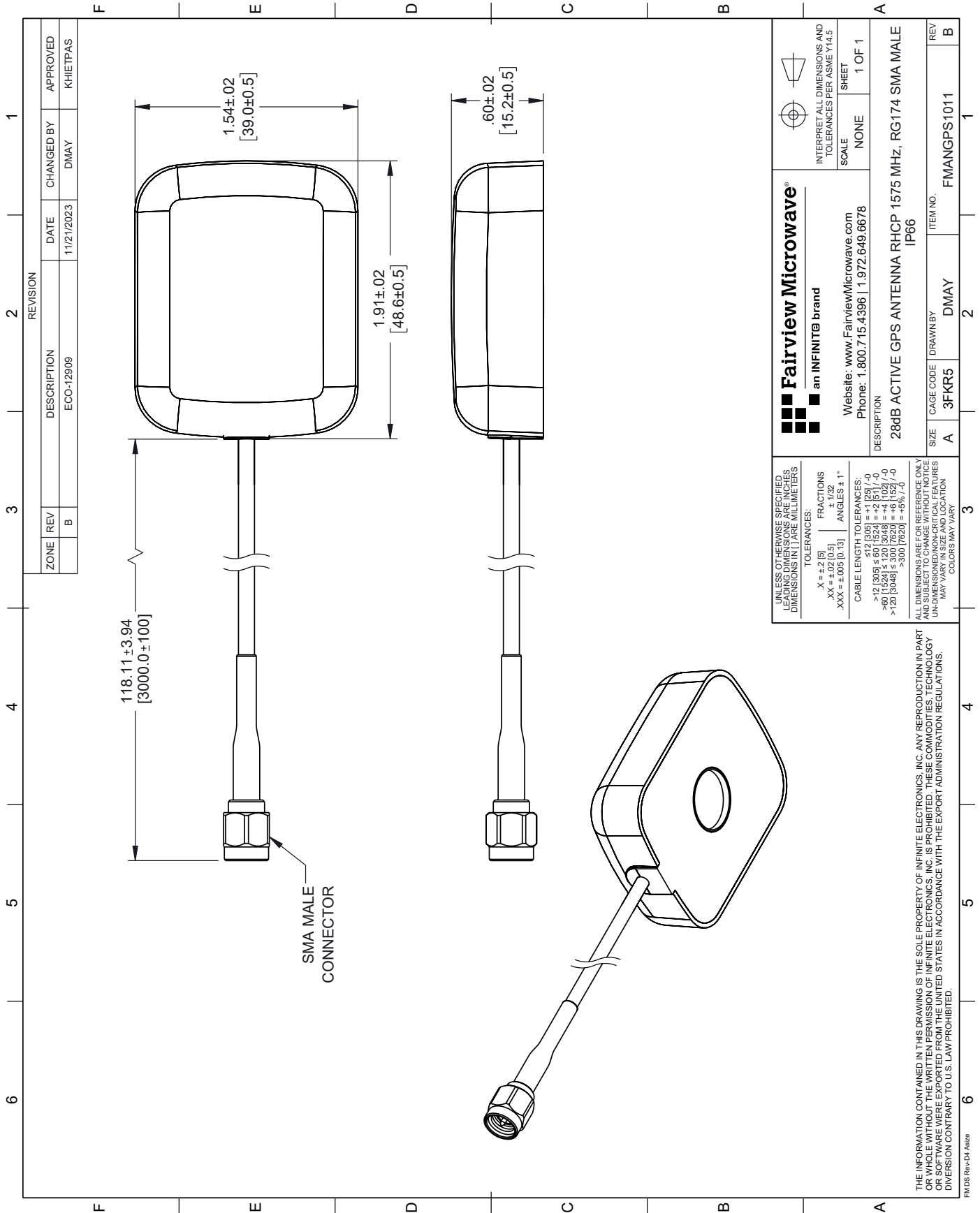
For additional information on this product, please click the following link: [31.5 dBi Active GPS Magnet Mount Antenna RHCP 1575 MHz, RG174 SMA Male IP66 FMANGPS1011](#)

URL: <https://www.fairviewmicrowave.com/gps-active-antenna-1.574-to-1.577-ghz-31.5-dbi-gain-sma-male-connector-rh-cp-fmangps1011-p.aspx>

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

# FMANGPS1011 CAD Drawing

31.5 dBi Active GPS Magnet Mount Antenna RHCP 1575 MHz, RG174 SMA Male IP66



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV	DESCRIPTION		
	B	ECO-129/09	DMAJ	KHIETPAS

 <b>Fairview Microwave®</b> an INFINITI® brand Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a> Phone: 1.800.715.4396   1.972.649.6678		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE NONE SHEET 1 OF 1
DESCRIPTION <b>28dB ACTIVE GPS ANTENNA RHCP 1575 MHz, RG174 SMA MALE IP66</b>		
SIZE	CAGE CODE	ITEM NO.
A	3FKR5	DMAJ
		REV B
		FMANGPS1011

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN PAREMILLIMETERS

TOLERANCES:  
 .X = ±.2 [5] FRACTIONS ± 1/32  
 .XX = ±.02 [0.5] ANGLES ± 1°  
 .XXX = ±.005 [0.13]

CABLE LENGTH TOLERANCES:  
 >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

ALL DIMENSIONS ARE FOR REFERENCE ONLY  
 DIMENSIONS OF PARTS ARE TO BE TAKEN FROM THE DRAWING  
 UNDIMENSIONED CRITICAL FEATURES  
 MAY VARY IN SIZE AND LOCATION  
 COLORS MAY VARY

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