Fairview Microwave
an INFINITE brand

FMANGPS1009 DATA SHEET

GPS Active Antenna, 1597 MHz to 1607 MHz, 10dBic, Linear Polarization Small SMA mount

Fairview Microwave's Active GNSS Antenna FMANGPS1009 is Linearly polarized and conforms to MIL-STD-810G. The FMANGPS1009 is an active GPS L1 band antenna with 10 dBic Gain. These Mil Spec active GNSS antenna units are ideally suited for use in rugged terrain where low profile, low drag, bullet style antennas are needed.

Our GNSS antenna specialists are ready and available to answer any questions you may have on the FMANGPS1009. This high quality multi-standard SMA male antenna meets GPS L1, GALLILEO E1 and GLONASS G1 requirements by operating in the 1559MHz to 1610MHz frequency range.

The FMANGPS1009 GNSS antenna series from Fairview Microwave are designed for portable, hand-held, or mobile devices which receive GNSS signals from satellite constellations to triangulate geolocations for navigation, tracking, surveying, mobile network timing, or munitions targeting. Order your Active GNSS FMANGPS1009 Antenna from Fairview Microwave today. There is no MOQ (minimum order quantity) and the product ships same day from our warehouse.

Configuration

Design	GPS/GNSS Active
Polarization	Linear, Vertical
Connector Type	SMA Male

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	1,597		1,607	MHz
Output VSWR			2.5:1	
Impedance		50		Ohms
Gain	10			dBic
Noise Figure		0.55		dB
Operating DC Voltage	2		3.5	Volts
Current		3.8		mA

Mechanical Specifications

Radome Material	Polyetherimide
Size	
Length	1.35 in [34.29 mm]
Width	0.5 in [12.7 mm]
Height	0.5 in [12.7 mm]
Weight	0.178 lbs [80.74 g]

Environmental Specifications

Temperature	
Operating Range	-40 to +71 deg C
Storage Range	-40 to +85 deg C
Environment	MIL-STD-810G
Humidity	MIL-STD-810G, Meth 507.5, Proc. II, 95% Relative Humidity
Shock	MIL-STD-810G
Vibration	MIL-STD-810G

Features:

- Low Profile
- Embedded Low Noise Amplifier
- MIL-STD-810G
- Linearly Polarized
- 10 dBic Gain
- SMA Male
- IP67 Rated
- Operating Frequency Range 1559 MHz to 1610 MHz
- Operating Voltage 3.3 Vdc

Applications:

- Military, Law Enforcement, or Private Security
- Hand-held/Portable Devices
- Asset and Fleet Tracking
- Scientific Instrumentation
- Oil, Gas, and Mining Industries
- M2M Applications
- GPS L1, GALLILEO E1, AND GLONASS

Fairview Microwave
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sales@fairviewmicrowave.com

Corrosion	MIL-STD-810G, Meth 509.5, 4 x 24 h
Altitude	MIL-STD-810G

Environmental Specification Notes:
Operating Temp MIL-STD-810G, Meth. 501.5 & 502.5, Proc.II. Storage Temp MIL-STD-810G, Meth. 501.5 & 502.5, Proc. I.

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

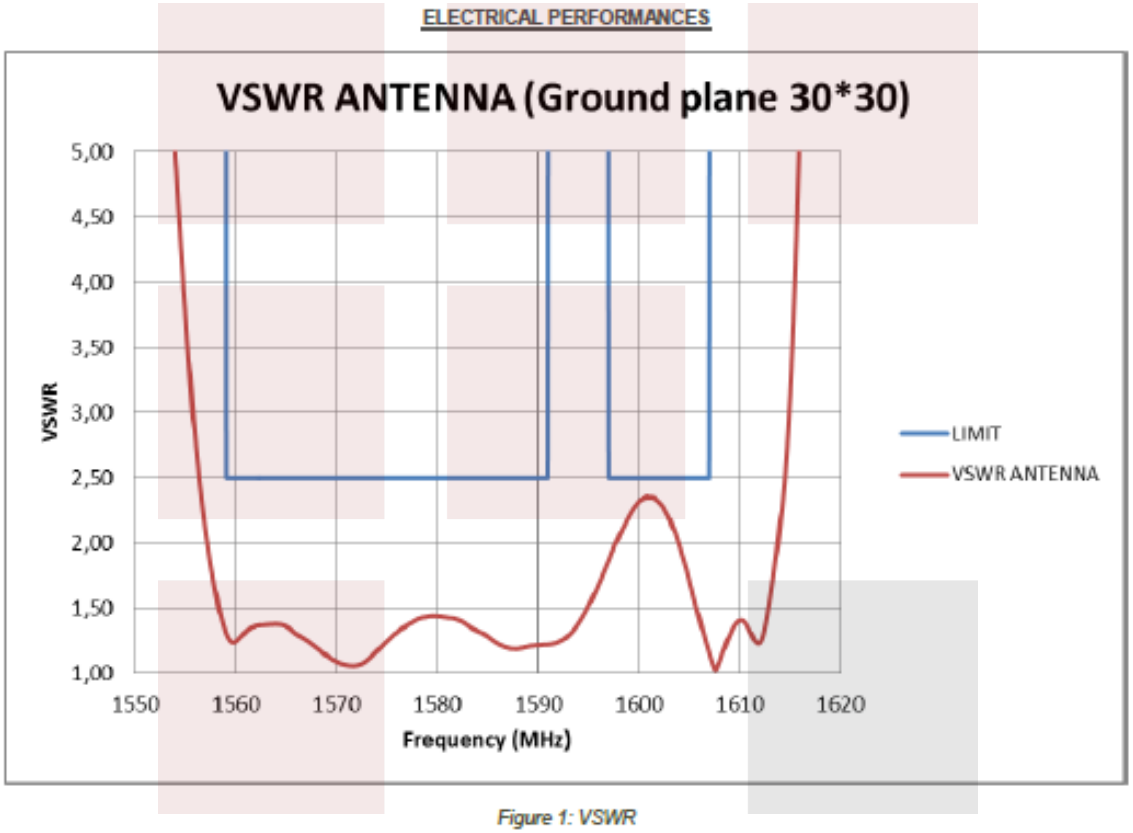


Figure 1: VSWR

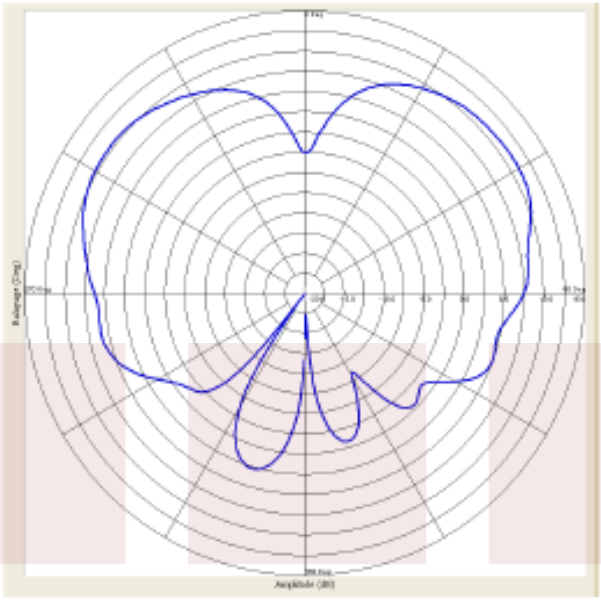


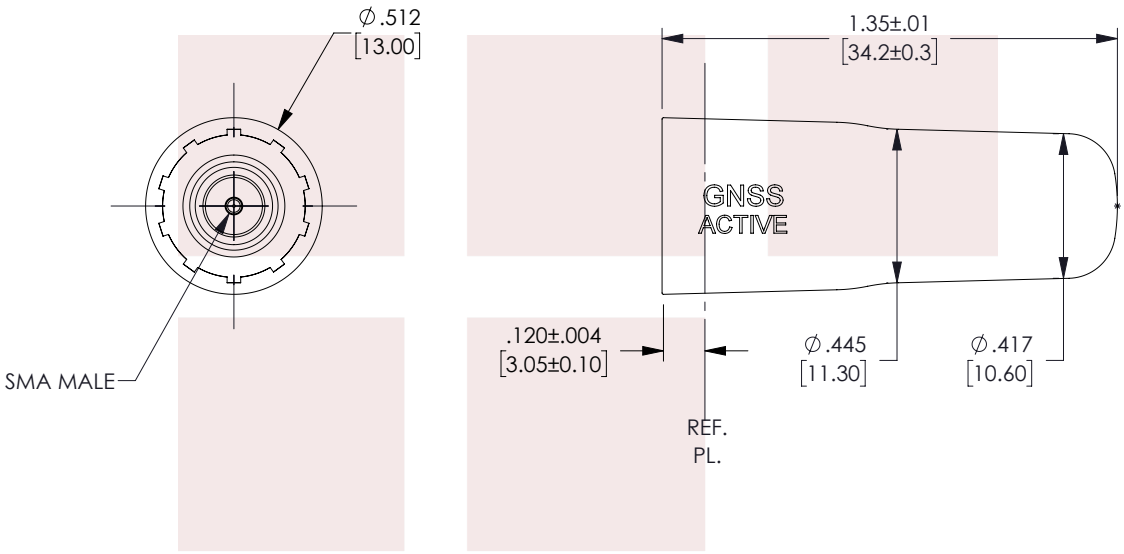
Figure 2: Radiation pattern on ground plane at 1575 MHz (RHCP)

GPS Active Antenna, 1597 MHz to 1607 MHz, 10dBic, Linear Polarization Small SMA mount 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: GPS Active Antenna, 1597 MHz to 1607 MHz, 10dBic, Linear Polarization Small SMA mount FMANGPS1009

URL: https://www.fairviewmicrowave.com/dbic-gps-gnss-active-antenna-1597-1607-mhz-sma-connector-fmangps1009-p.aspx

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	7/21/2022	KHIETPAS



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TITLE

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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:

.X = ±.2 [5.08]
.XX = ±.02 [.51]
.XXX = ±.005 [.13]
FRACTIONS ± 1/32
ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0
12 [305] < L ≤ 60 [1524] = +2 [51] / -0
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
300 [7620] < L = +5%L / -0

THIRD-ANGLE PROJECTION

SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	3FKR5	KGLEBOVA	FMANGPS1009	A

T-Rev.D

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