

**31 dBi Active GPS/BeiDou/GLONASS Timing Antenna
 RHCP 1563/1575/1602, RG174 TNC Female IPX6**

Fairview Microwave's FMANGPS1016 active GPS timing antenna filters and amplifies GNSS L1, GLONASS G1, and BeiDou B1 global positioning signals received from satellite constellations. The antenna operates within 1559 MHz to 1563 MHz, 1574 MHz to 1606 MHz with high out-of-band rejection with an integrated 28 dB LNA.

The Fairview Microwave FMANGPS1016 recovers timing and positioning data for timing reference and phase synchronization. High 31 dBi gain and low 1.5 dB noise figure allows for longer commercial grade cable, making installation versatile and economical.

The GPS timing antenna FMANGPS1016 from Fairview Microwave is externally grounded with a DC feed through the RF cable. This Timing Antenna with TNC Female connector is compatible with several existing mounting brackets. The active antenna is fully ruggedized and IPX6 Rated. Active GPS Antennas from Fairview Microwave are high-quality components backed by expert technical support and sales personnel.

Configuration

Design	GPS Active
Gain	31
Polarization	RHCP
Cable Type	RG174
Connector Type	TNC Female
Number of Ports	1

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	1,559		1,607	MHz
Input VSWR			2:1	
Output VSWR			2:1	
Impedance		50		Ohms
Gain		31		dBi
Gain Variation		±5		dBi
Out Of Band Rejection	20			dB
Operating DC Voltage	3		5.5	Volts
Current	8		22	mA

Specifications by Frequency

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	1.559-1.563	1.574-1.577	1.597-1.607			GHz

Mechanical Specifications

Size	
Length	4.27 in [108.46 mm]
Width	3.15 in [80.01 mm]
Height	3.15 in [80.01 mm]
Weight	1.02 lbs [462.66 g]


Features:

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

Applications:

- GPS L1/BDS B1/GLONASS G1
- High Accuracy Global Positioning
- Precision Agriculture, Mining and Construction
- Military and Security
- Law Enforcement and Public Safety

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Environmental Specifications

Ingress Protection

IPX6

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

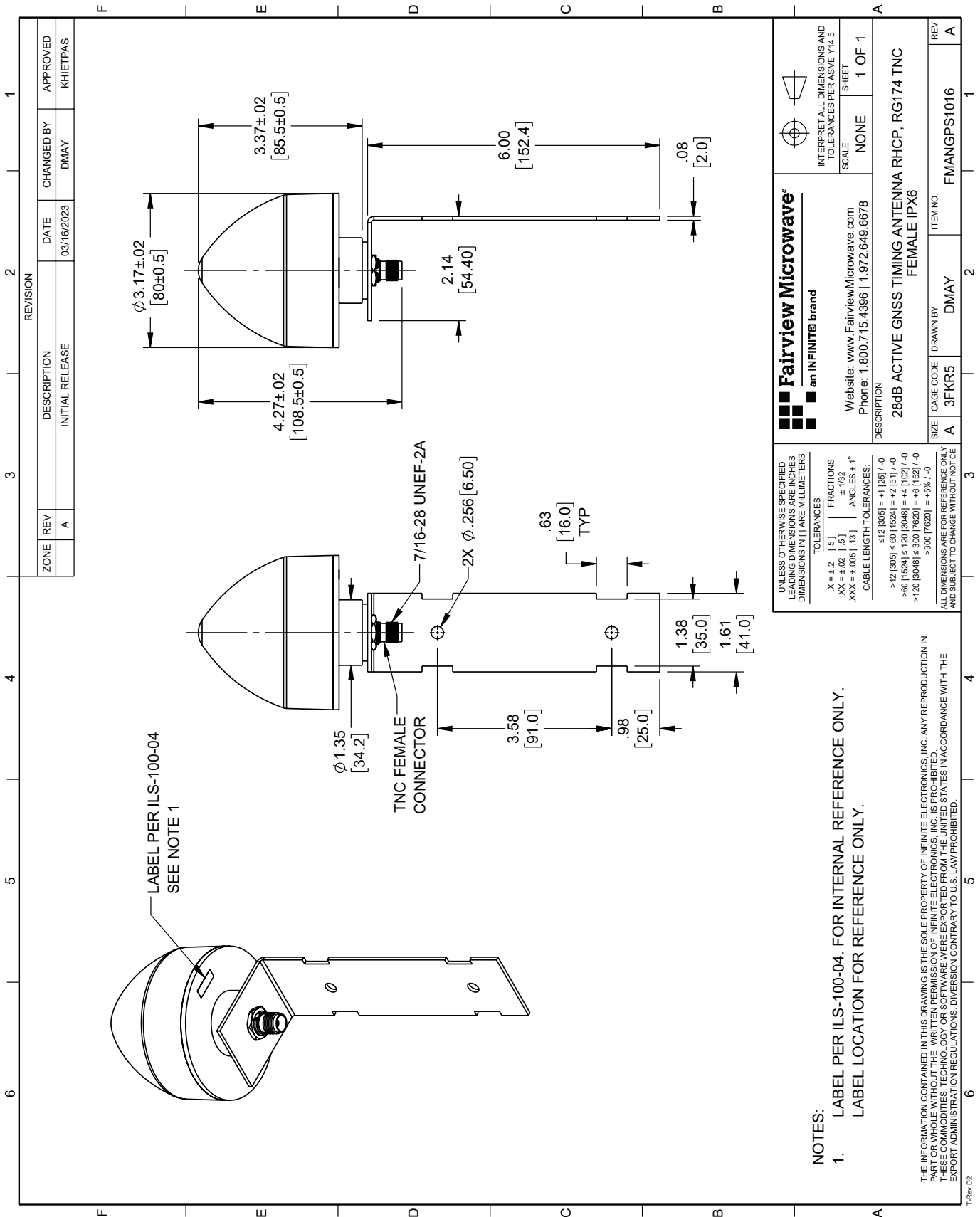
Notes:

31 dBi Active GPS/BeiDou/GLONASS Timing Antenna RHCP 1563/1575/1602, RG174 TNC Female 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/BeiDou/GLONASS Timing Antenna RHCP 1563/1575/1602, RG174 TNC Female IPX6 FMANGPS1016](#)

URL: <https://www.fairviewmicrowave.com/gps-active-antenna-1.559-to-1.607-ghz-31-dbi-gain-tnc-female-connector-rhcp-fmangps1016-p.aspx>

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ZONE		REVISION		APPROVED	
A		DESCRIPTION	DATE	CHANGED BY	KHIETPAS
		INITIAL RELEASE	03/16/2023	DMAY	

 Website: www.FairviewMicrowave.com 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 28dB ACTIVE GNSS TIMING ANTENNA RHCP, RG174 TNC FEMALE IPX6			
SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	3FKR5	DMAY	FMANGPS1016

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

TOLERANCES:

.X ± .2	[5]	FRACTIONS
.XX ± .02	[.5]	± .132
.XXX ± .005	[.13]	ANGLES ± 1°

CABLE LENGTH TOLERANCES:

≤ 12 [305]	± .125 [-0
> 12 [305] ≤ 60 [1524]	± .25 [-0
> 60 [1524] ≤ 120 [3048]	± .5 [-0
> 120 [3048] ≤ 300 [7620]	± 1.0 [-0
> 300 [7620]	± 2.0 [-0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE

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NOTES:
1. LABEL PER ILS-100-04. FOR INTERNAL REFERENCE ONLY.
LABEL LOCATION FOR REFERENCE ONLY.