

2 Cellular, 2 Wi-Fi, 1 GPS Combination Antenna
2 SMA, 2 RP SMA, 1 TNC Connector White



FMANOM1121

Features

- 2 x Cellular 4G/5G SMA Male
- 2 x Wi-Fi 2.4 GHz / 5 GHz RPSMA Male
- 1 x GPS L1 / G1 TNC Male
- MIMO Capable
- 17 ft Cable Leads
- Indoor/Outdoor IP69K Rated
- UV Stabilized White ABS

Applications

- Public Safety
- Emergency Services
- Mobile Base Stations
- Autonomous Vehicles
- Fleet Management
- Smart Cities
- Smart Utilities
- Industrial IoT

Description

The Fairview Microwave FMANOM1121 is a 5-in-1 combination antenna designed for public safety, emergency services, mobile base stations, autonomous vehicles, fleet management, smart cities, smart utilities, or industrial IoT applications. This vertically polarized omnidirectional antenna has TNC male, SMA male and RPSMA male connectors with 17 feet cable leads. Our high-quality mobile antenna with 5 ports has a typical input VSWR of 2:1.

The IoT combination antenna from Fairview Microwave has an overall length of 7 inches, width of 7 inches, and weight of 4 lbs. This FMANOM1121 mobile antenna is IP69K-rated and has a black-colored radome made of UV-stabilized ABS. The 2 cellular, 2 Wi-Fi, 1 GPS combination antenna has an impedance of 50 Ohms and a maximum input power of 10 Watts.

Our vertically polarized mobile antenna can operate at temperatures ranging from -40 to 70 degrees C. This MIMO-capable IoT antenna features two 4G/5G, two 2.4/5 GHz, and one L1/G1 GPS band elements in one radome. Emergency services, first responders, and fleets can rely on our 5-in-1 combination antenna to maintain a secure link between vehicles and dispatch centers.

Configuration

Design	Mobile
Radiation Pattern	Omni Directional
Polarization	Vertical
Connector Type	SMA Male
Interface 2	SMA Male Reverse Polarity
Interface 3	TNC Male
Number of Ports	5

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Input VSWR		2:1		
Impedance		50		Ohms
Gain		26		dBi
Input Power			10	Watts

2 Cellular, 2 Wi-Fi, 1 GPS Combination Antenna
2 SMA, 2 RP SMA, 1 TNC Connector White



FMANOM1121

Cellular Specifications					
Frequency Range	617 - 960	1690 - 2700	3300 - 4200	4900 - 6000	MHz
Peak Gain	4	6	7	8	dBi
Port Count	2				
Cable Type	RG58				
Cable Length	17 [5] ft [m]				
Connector Type	SMA Male				
Wi-Fi Specifications					
Frequency Range	2400 - 2500		4900 - 6000		MHz
Peak Gain	5		6		dBi
Port Count	2				
Cable Type	RG58				
Cable Length	17 [5] ft [m]				
Connector Type	RPSMA Male				
GPS Specifications					
Frequency Range	1562 - 1612				MHz
VSWR	<2.0:1 ± 4 MHz				
LNA Gain	26				dB
Out of band rejection	>40 dB (@ > +/- 100 MHz)				
Typical Noise Figure	≤ 2.7				dB
Notch Filter rejection @787MHz	24				dB
Operating Voltage	3 - 5				VDC
Typical Current	15				mA
Cable Type / Length	RG174 / 17 ft [5 m]				
Connector Type	TNC Male				

Mechanical Specifications

Radome Material	UV Stabilized ABS
Size	
Length	7 in [177.8 mm]
Width	7 in [177.8 mm]
Height	3.15 in [80.01 mm]
Weight	4 lbs [1.81 kg]

Environmental Specifications

Temperature	
Operating Range	-40 to +70 deg C
Ingress Protection	IP69K

2 Cellular, 2 Wi-Fi, 1 GPS Combination Antenna
2 SMA, 2 RP SMA, 1 TNC Connector White



FMANOM1121

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

Plotted and Other Data

Notes:

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.

2 Cellular, 2 Wi-Fi, 1 GPS Combination Antenna 2 SMA, 2 RP SMA, 1 TNC Connector White 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.

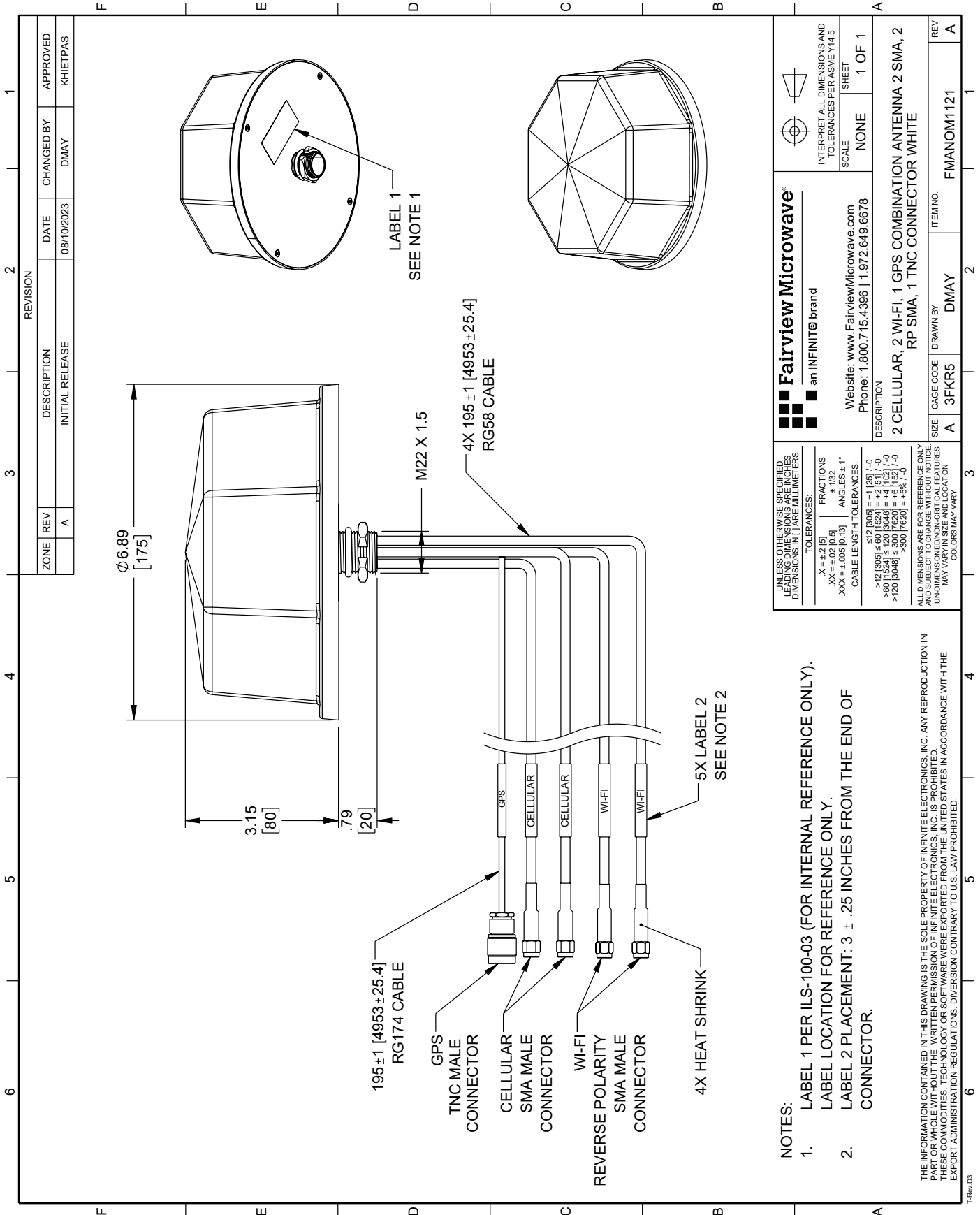
For additional information on this product, please click the following link: [2 Cellular, 2 Wi-Fi, 1 GPS Combination Antenna 2 SMA, 2 RP SMA, 1 TNC Connector White FMANOM1121](#)

URL: <https://www.fairviewmicrowave.com/product/antennas/26-dbi-band-mobile-antenna-tnc-connector-fmanom1121.html>

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.

FMANOM1121 CAD Drawing

2 Cellular, 2 Wi-Fi, 1 GPS Combination Antenna 2 SMA, 2 RP SMA, 1 TNC Connector White



ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	08/10/2023	DMAY	KHIETPAS

Fairview Microwave an INFINIT® brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678		
DESCRIPTION: 2 CELLULAR, 2 WI-FI, 1 GPS COMBINATION ANTENNA 2 SMA, 2 RP SMA, 1 TNC CONNECTOR WHITE		
SIZE: A	CAGE CODE: 3FKR5	ITEM NO: FMANOM1121
DRAWN BY: DMAY	REV: A	

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

TOLERANCES:
 X = ±.2 [5] FRACTIONS ± 1/32
 .XX = ±.02 [0.5] ANGLES ± 1°
 .XXX = ±.005 [0.13] CABLE LENGTH TOLERANCES:
 <12 [305] ±.1 [25] /-0
 >12 [305] ≤ 60 [1524] = ±.2 [5] /-0
 >60 [1524] ≤ 120 [3048] = ±.4 [102] /-0
 >120 [3048] ≤ 300 [7620] = ±.6 [152] /-0
 >300 [7620] = ±.9% /-0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE UNLESS SPECIFIED OTHERWISE. DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

NOTES:
 1. LABEL 1 PER ILS-100-03 (FOR INTERNAL REFERENCE ONLY). LABEL LOCATION FOR REFERENCE ONLY.
 2. LABEL 2 PLACEMENT: 3 ± .25 INCHES FROM THE END OF CONNECTOR.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

TRev.03