

FX4200 Wi-Fi Antenna Specifications**1. Antenna Part Number:**

- Manufacturer: Inseego Corp.
- Wi-Fi Ant #0 Part Number: RQ-FX4210-WIFI0-V4
- Wi-Fi Ant #1 Part Number: RQ-FX4210-WIFI1-V4

2. Antenna Construction:

- Material: Printed Circuit FR4 Design consists of Copper and Adhesive
- Type: Planar Dipole Antenna

3. Antenna Passive Gain Table:

Wi-Fi Ant #0	Frequency Range	Gain
DTS	2412MHz to 2462MHz	2.5 dBi
UNI-1	5170MHz to 5250MHz	4.8 dBi
UNI-2A	5250MHz to 5330MHz	4.8 dBi
UNI-2C	5490MHz to 5730MHz	5.5 dBi
UNI-3	5735MHz to 5835MHz	5.1 dBi
Wi-Fi Ant #1	Frequency Range	Gain
DTS	2412MHz to 2462MHz	3.5 dBi
UNI-1	5170MHz to 5250MHz	5.8 dBi
UNI-2A	5250MHz to 5330MHz	5.5 dBi
UNI-2C	5490MHz to 5730MHz	5.4 dBi
UNI-3	5735MHz to 5835MHz	4.4 dBi

4. Antenna Passive Gain (dBi) Charts:

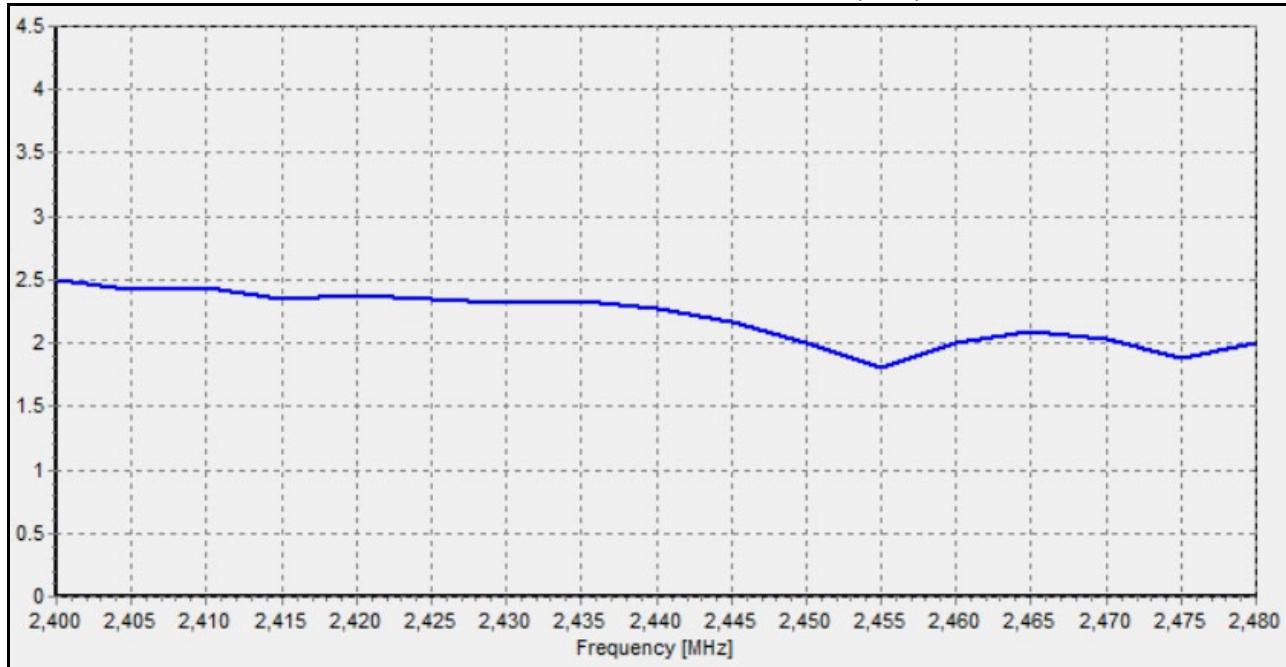
- Antenna Engineer: Younghwan Park
- Passive Measurement Date: 07-24-2025
- Measurement Test Site: Inseego Engineering Lab

6370 Nancy Ridge Drive, Suite 101
San Diego CA 9212, United States

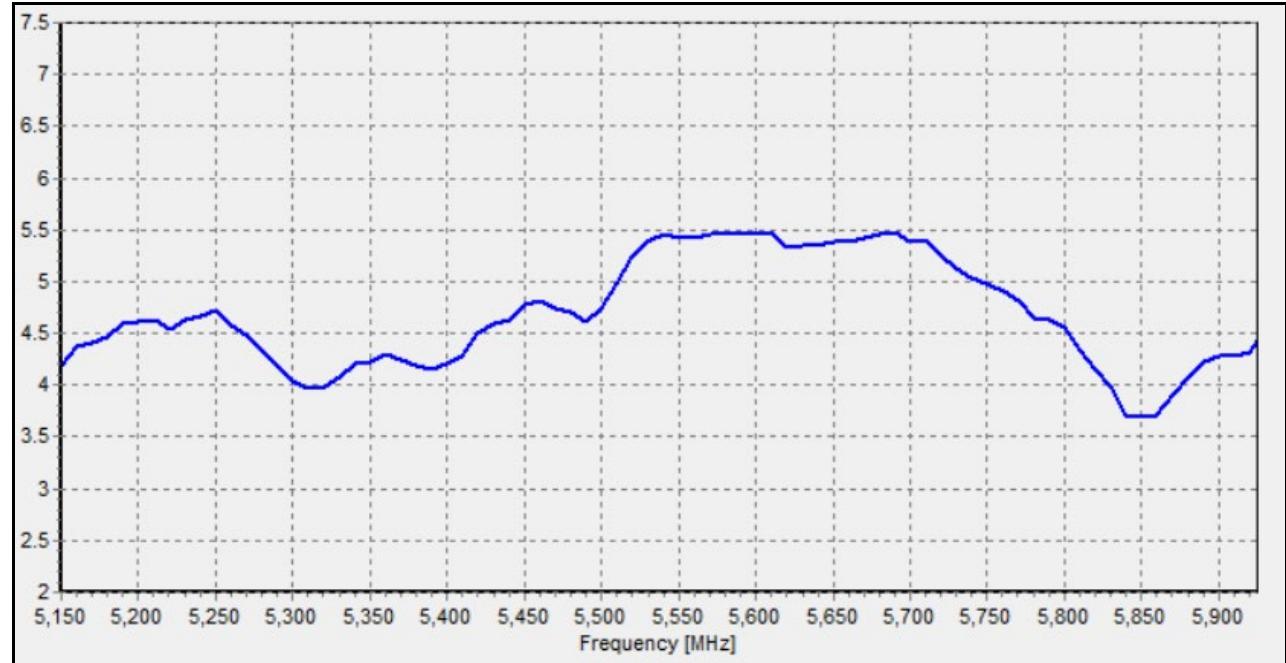
Inseego Corp.

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Toll Free: 888.888.9231 • Main 858.812.3400
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Maximum Gain Wi-Fi-Ant 0 –2.4GHz (DTS)



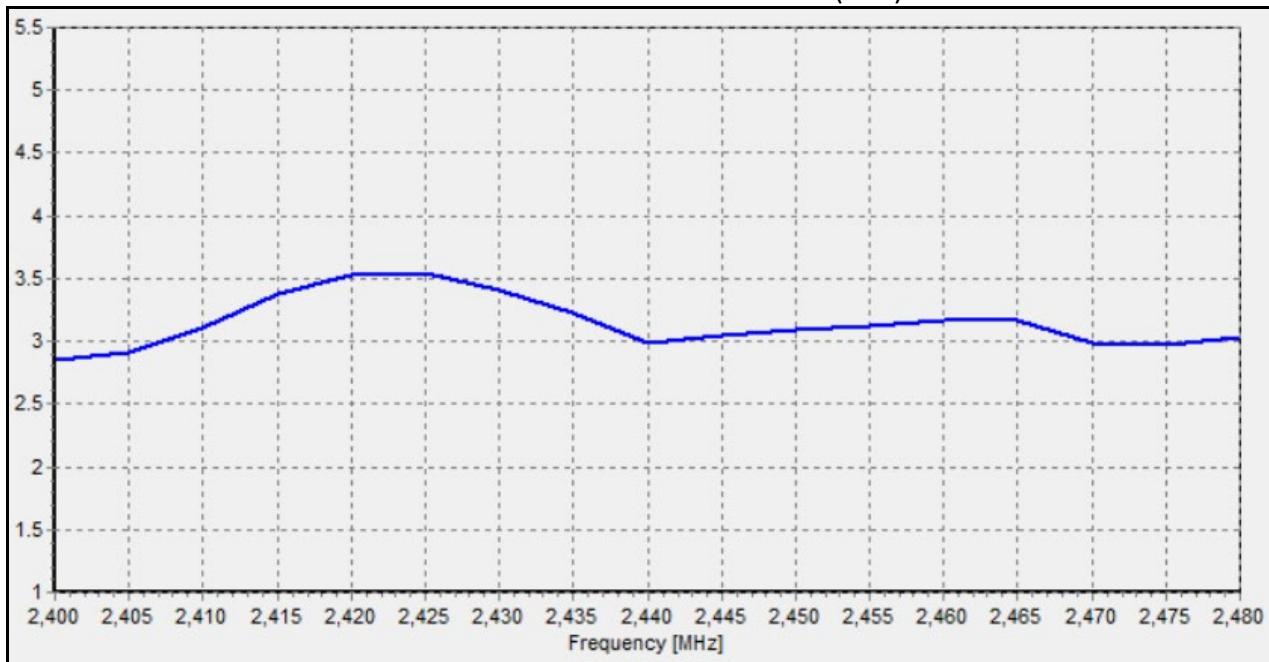
Maximum Gain Wi-Fi-Ant 0 –5GHz (UNI-1, UNII-2, UNII-3)



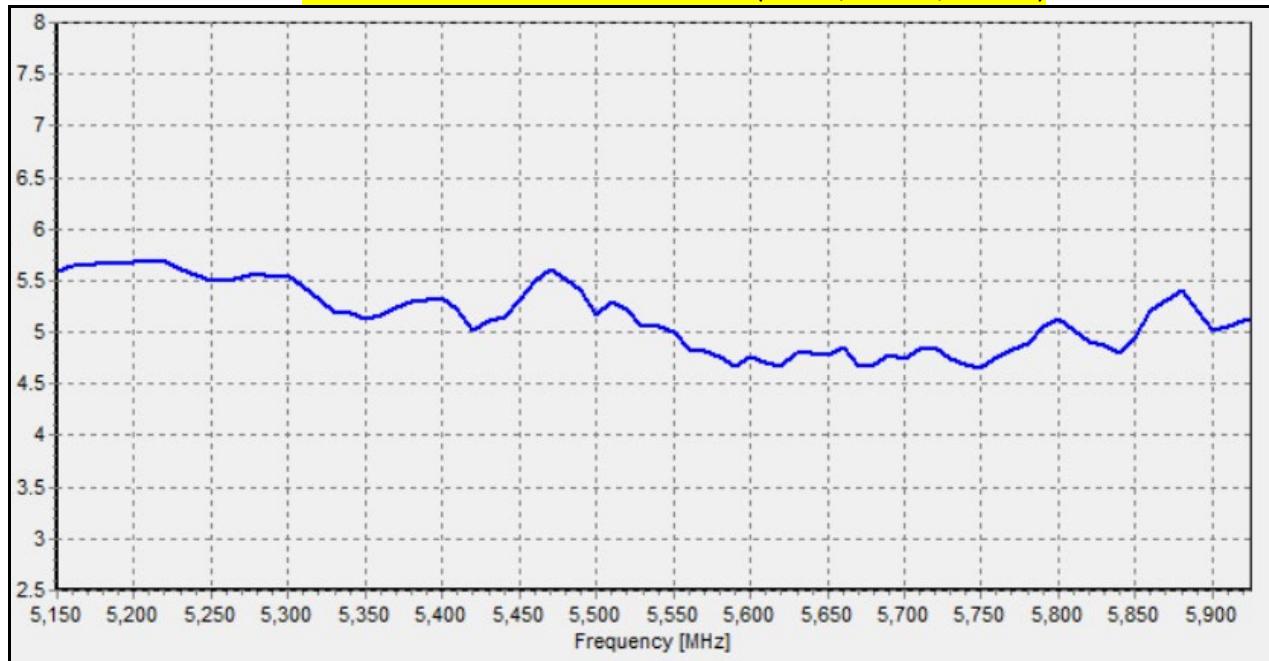
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Maximum Gain Wi-Fi-Ant 1 –2.4GHz (DTS)



Maximum Gain Wi-Fi-Ant 1 –5GHz (UNI-1, UNII-2, UNII-3)



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5. Antenna Passive Measurement Setup:

Passive Performance Test System Components and Diagram

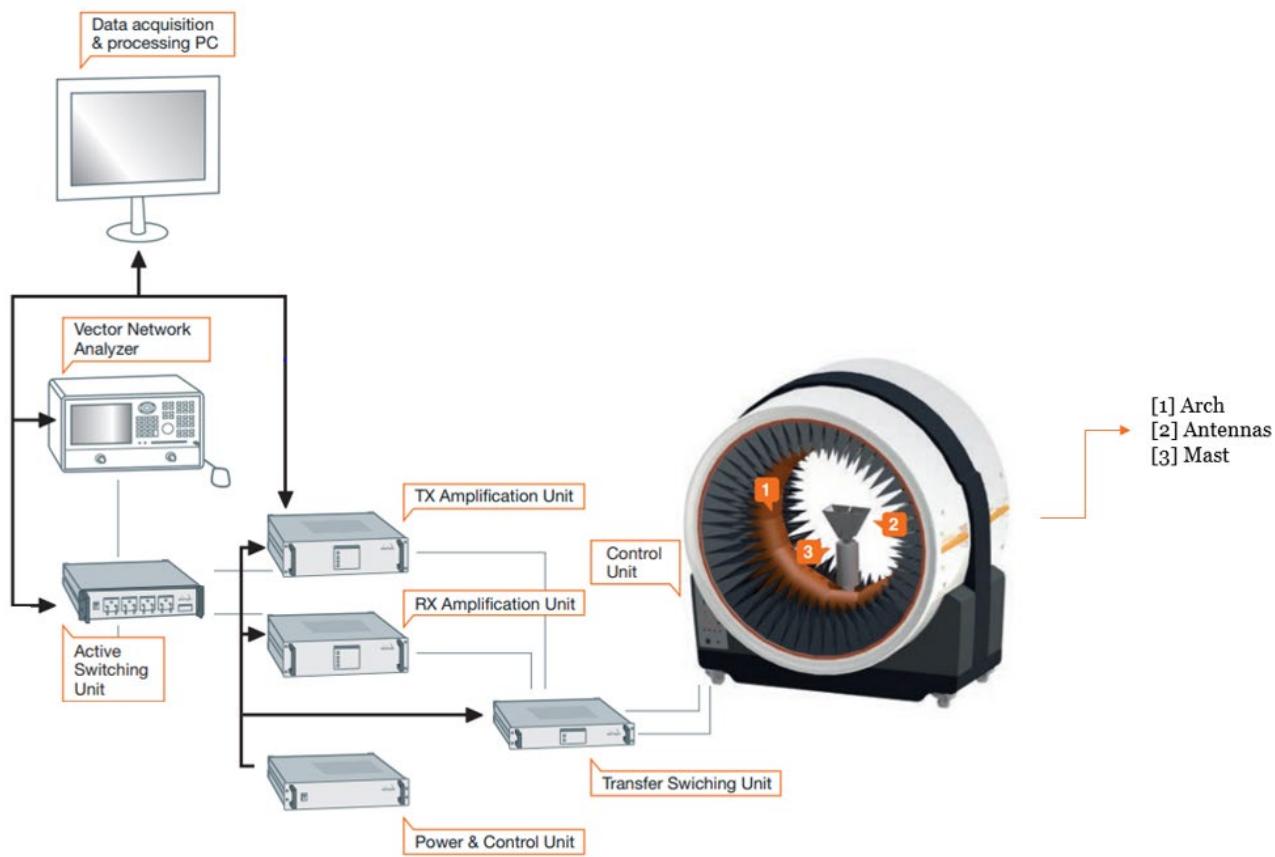
Frequency Bands: 600 MHz to 6 GHz

Max. Size of DUT: 450mm for spherical set-up

Max. Weight of DUT: 10 kgs

The system is capable of the following measurements:

- Gain
- Directivity
- Beamwidth
- Cross polar discrimination
- Sidelobe levels
- 3D radiation pattern
- Radiation pattern in any polarization (linear or circular)
- Antenna efficiency test



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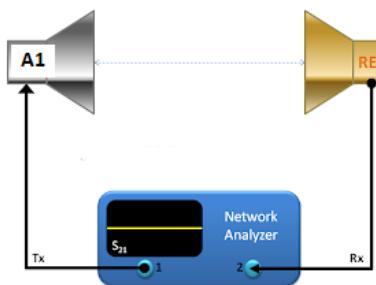
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Gain Measurement Method Explained:

- Calibration:** Use Two Antennas (one has to have a known gain [In this case Ref]) to measure and record the S parameter S21 which is the input/output relationship between the ports on the Network analyzer
 - Normalize the calibration to produce 0 DB reference on the network Analyzer.
 - All cable loss factors are accounted for in the system.

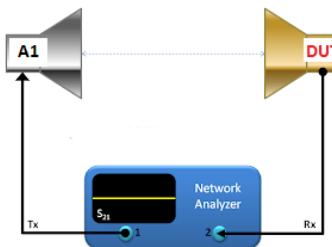
Notes: A1 represents Arch antennas in system

The software instructs the VNA to produce a sweep signal over the frequency range specified. The it will generate the signal is a swept CW between the start and end frequency and pausing at predetermined points long enough to collect measurement.



Calibration diagram

- DUT Measurements:** Replace reference Antenna with DUT Antenna (maintaining the same conditions) distance etc.



DUT Measurement diagram

- Remeasure S21 response which now represents the gain relative to reference antenna. Collect G(Ref).
- Calculate G(Dut)=G(ref)+ G(rel)

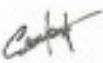
Note: The chamber measurement system is automated. The measurement is taken at multiple locations points by rotating the DUT and the Arch.

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7. Passive Measurement Equipment Calibration:

- 0.6-6GHz Passive System Calibration performed by Inseego with MVG SH600 Dual-Ridge Horn (0.6-6.0Ghz).
 - OTA Engineer: Albert Yazakel
 - Data: 07/23/2025
- MVG StarLab Multi-Probe Compact Passive Antenna Measurement Chamber Calibration Certificate: (5yr Cycle)

				
Calibration Certificate				
Manufacturer's Name :	MVG Industries			
Manufacturer's Address :	13, rue du Zéphir Parc d'Activité de l'Océane 91140 Villejust FRANCE			
Declares that product				
Customer name :	INSEEGO			
Product Name:	SL v1			
Serial Number :	C253			
Calibration date	19/02/2022			
Has been calibrated according MVG procedure and\ Or according ISO 9001 requirements.				
19 February, 2022	MVG Quality Manager			
				
<table border="1"><tr><td>MICROWAVE VISION www.microwavevision.com</td><td>Société Anonyme Capital Social: 691 041€ RCS Evry B 340 342 153 Numéro SIREN : 340 342 153</td><td>47, Blvd St. Michel 75005 Paris, FRANCE Tel. : +33 (0)1 79 58 50 Fax. : +33 (0)1 48 38 39 02</td></tr></table>		MICROWAVE VISION www.microwavevision.com	Société Anonyme Capital Social: 691 041€ RCS Evry B 340 342 153 Numéro SIREN : 340 342 153	47, Blvd St. Michel 75005 Paris, FRANCE Tel. : +33 (0)1 79 58 50 Fax. : +33 (0)1 48 38 39 02
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- E5071C Network Analyzer Calibration Certificate: (5yr Cycle)

Certificate of Calibration	
ISO/IEC 17025:2017 and ANSI/NCSL Z540.1-1994	
Certificate Number 1-13571508236-1	
Model Number	E5071C
Manufacturer	Keysight Technologies Inc
Description	ENA Series Network analyzer
Serial Number	MY46103762
Date of Calibration	17 Dec 2020
Procedure	STE-50114528-C.06.06
Temperature	(23 ± 5) °C
Humidity	(50 ± 30) %RH
Customer	Inseego Corp 9710 Scranton Rd Ste 200 SAN DIEGO CA 92121-1744 United States
Location of Calibration	Keysight Technologies Inc 10090 Foothills Blvd. Roseville CA 95747-7102 UNITED STATES
This certifies that the equipment has been calibrated using applicable Keysight Technologies procedures and in compliance with ISO/IEC 17025:2017 and ANSI/NCSL Z540.1-1994 (R2002). The quality management system is registered to ISO 9001:2015.	