

Datasheet

GNSS

GNSS active timing antenna

Features:

This antenna is designed to cover GPS/GLONASS/QZSS/BDS/Galileo frequency band. High performance, certified with IP67.

Applications:

- GPS, GLONASS, QZSS, BDS, Galileo
- Military & security
- Asset tracking
- Navigation devices
- Location based services
- Fleet management
- Network synchronization and timing



GNSS Antenna



Electrical Specifications

Antenna Characteristics By Range Of Receiving Frequency

Frequency (MHz)	1561± 1	1575.42 ± 1	1602 ± 4
Return Loss (dB)	< -10	< -10	< -10
Gain (dBi) @Zenith	3.8 typ.	3.5 typ.	4.8 typ.
Efficiency (%) @Center Frequency	86	88	88
Impedance (Ω)	50	50	50

LNA Characteristics

Frequency (MHz)	1560~1610
Gain (dB) @3.0 V	28 Typ.
Output Impedance (Ω)	50
Output Return Loss (dB)	< -10
Operation Voltage (V)	3~5
Gain (dB)	28 ± 3
Current Consumption (mA)	< 25
Noise Figure (dB)	< 2

Total Characteristics

Frequency (MHz)	1561 ± 1	1575.42 ± 1	1602 ± 4
Gain (dBi) @Zenith	31.8 ± 3	31.5 ± 3	32.8 ± 3
Return Loss (dB)	< -10		
Output Impedance (Ω)	50		
ESD (kV)	15		

Mechanical Specifications

Mechanical

Dimension (mm)	ø66.5 × 84.0
Material	PC+ABS
Connector Type	N-type (Jack)
Weight (g)	119.2

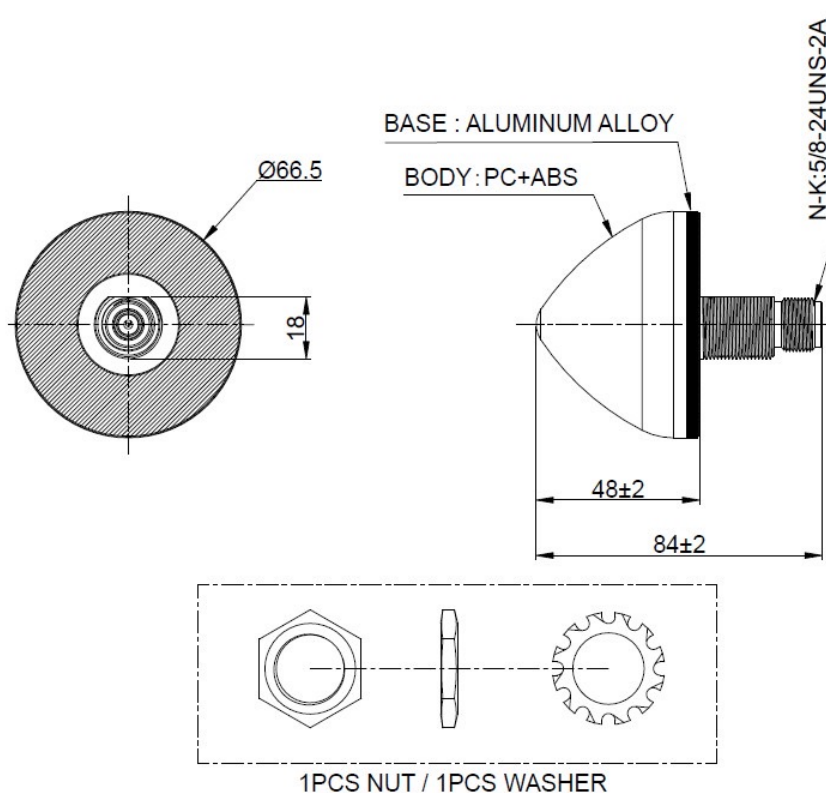
Environmental

Temperature Range (°C)	-40 to 85
IP Rating	IP67

RoHS Compliant

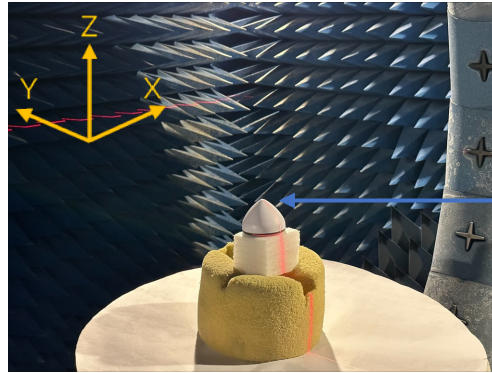
Mechanical Drawing

Unit : mm



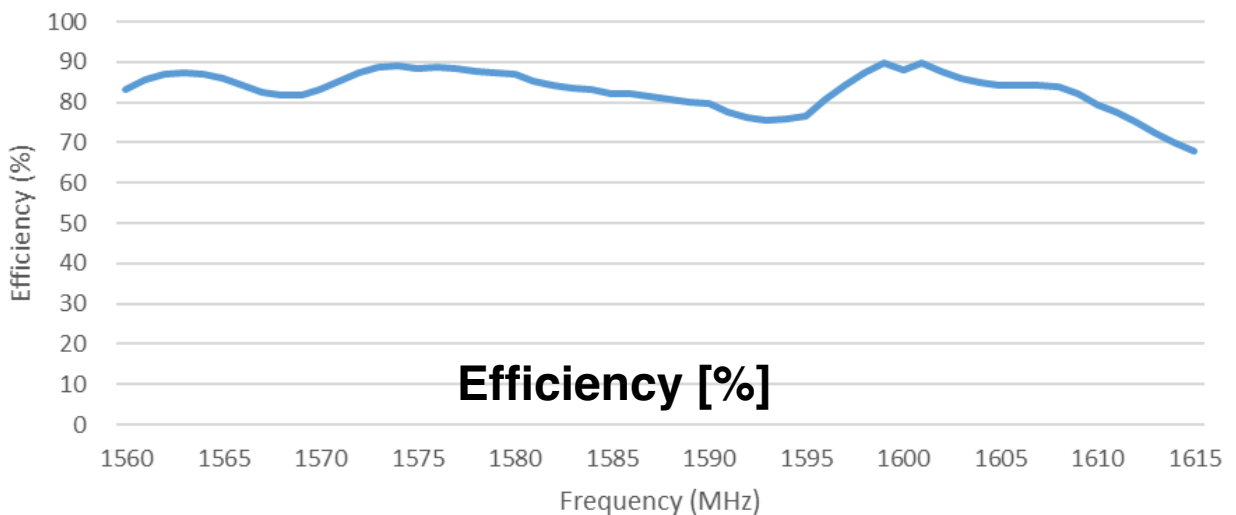
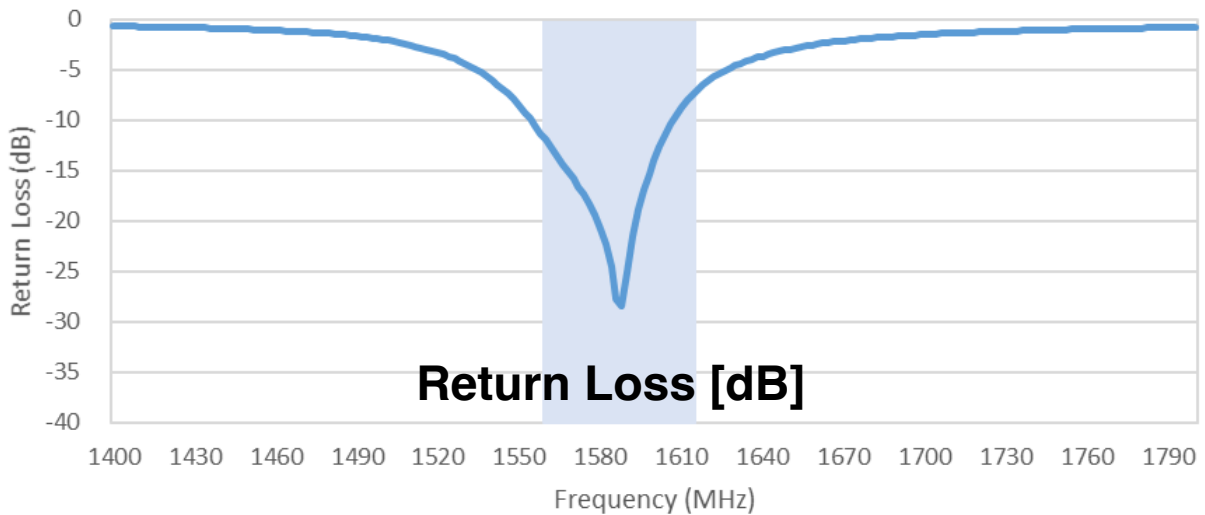
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Charts In Free Space

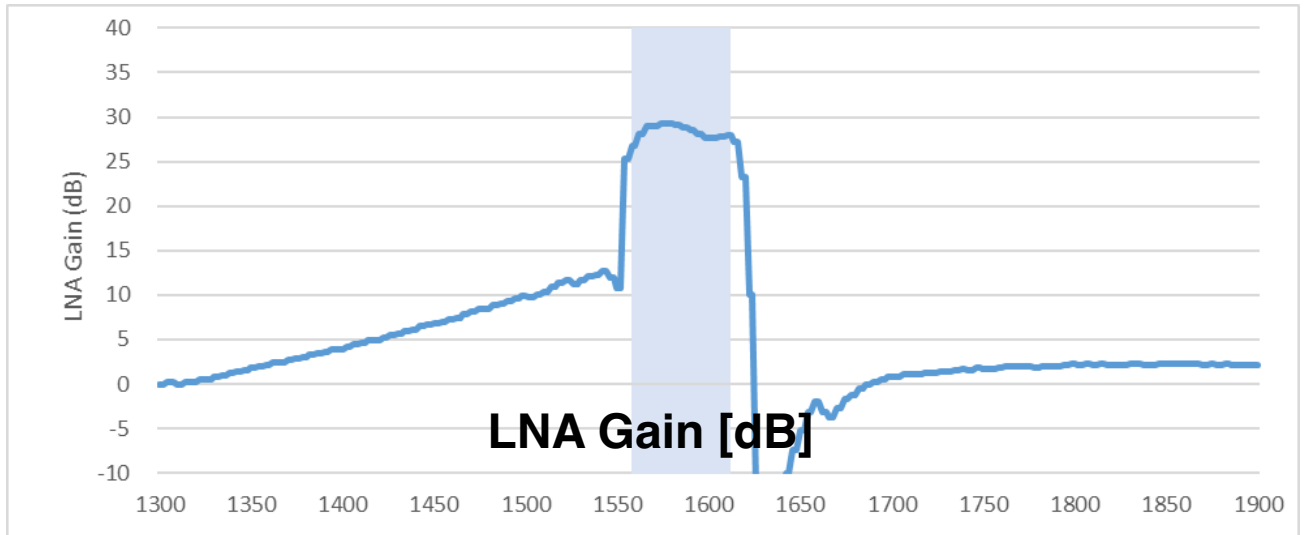


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Test setup, measurement performed in 3D anechoic chamber.



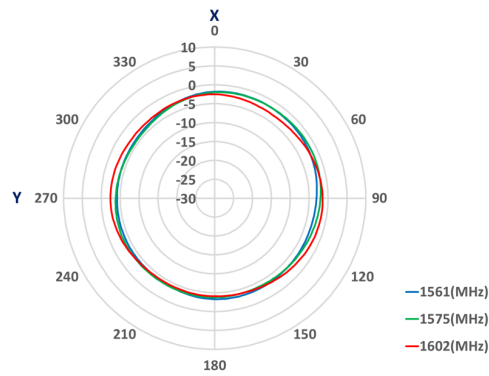
Blue background represents frequency response.



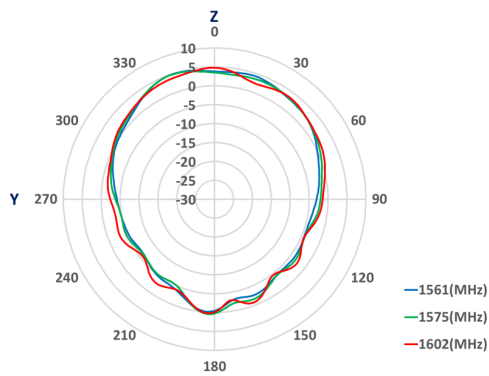
Blue background represents frequency response.

Radiation Pattern - Free Space

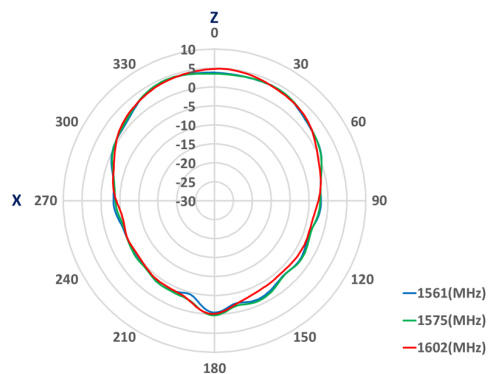
XY - Plane



YZ - Plane



XZ - Plane



Revisions				
Rev.	Description	Date	ECN	Approval
A	Initial Release	2023-03-20	ST0504-22-201-B-RA00	ATC

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