

Datasheet

GNSS

GNSS active timing antenna

Features:

This antenna is designed with high gain, Low Noise Amplifier (LNA) offers precision timing reference, with an industrial grade compact size weather-proof housing, 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)	1561~1602
Return Loss (dB)	< -10
Gain (dBic) @Zenith @Center Frequency	3 Typ.
Efficiency (%)	63
Axial Ration (dB) @Center Frequency	3 Typ.
Polarization	RHCP
Impedance (Ω)	50

LNA Characteristics

Frequency (MHz)	1561~1602
Gain (dB) @5.0 V	38 ± 4
Output Impedance (Ω)	50
Output Return Loss (dB)	< -10
Operation Voltage (V)	3~5
Current Consumption (mA)	13 ± 2.5
Noise Figure (dB) @5.0 V	< 3

Total Characteristics

Frequency (MHz)	1561~1602
Gain (dBic) @Zenith	41 ± 4
Return Loss (dB)	< -10
Output Impedance (Ω)	50
ESD	8 kV contact ; 15 kV air

Mechanical Specifications

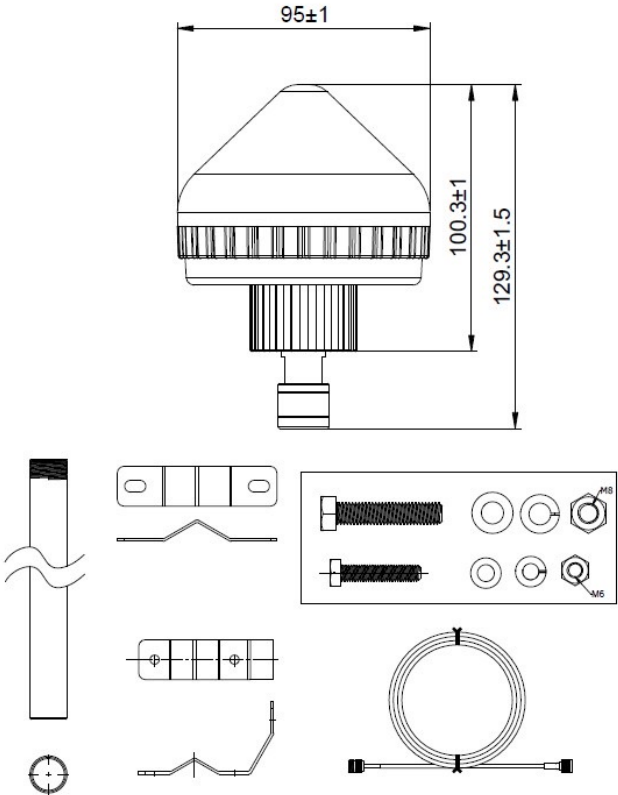
Mechanical	
Dimension (mm)	Ø95.0 × 129.3
Material	ASA
Connector Type	N-type (Plug)
Mounting Type	Bracket Mount
Antenna Weight (g)	700.0
Accessories Weight (g)	225.0

Environmental	
Temperature Range (°C)	-30 to 70
IP Rating	IP67

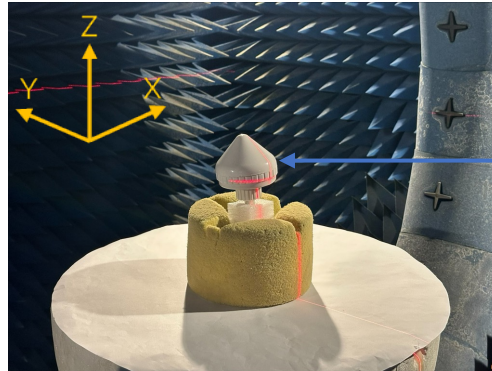
RoHS Compliant

Mechanical Drawing

Unit : mm

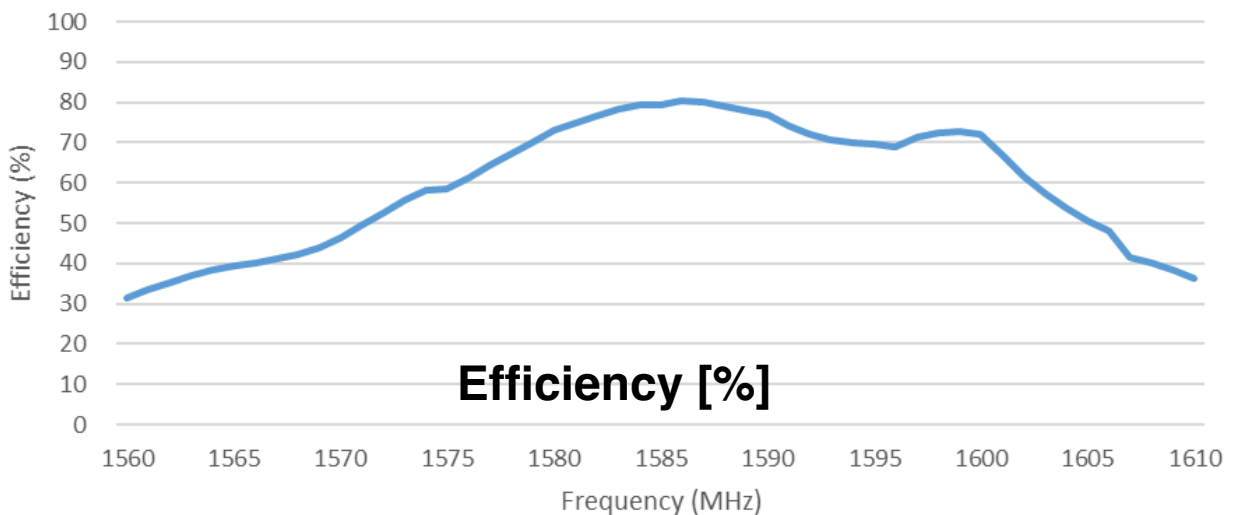
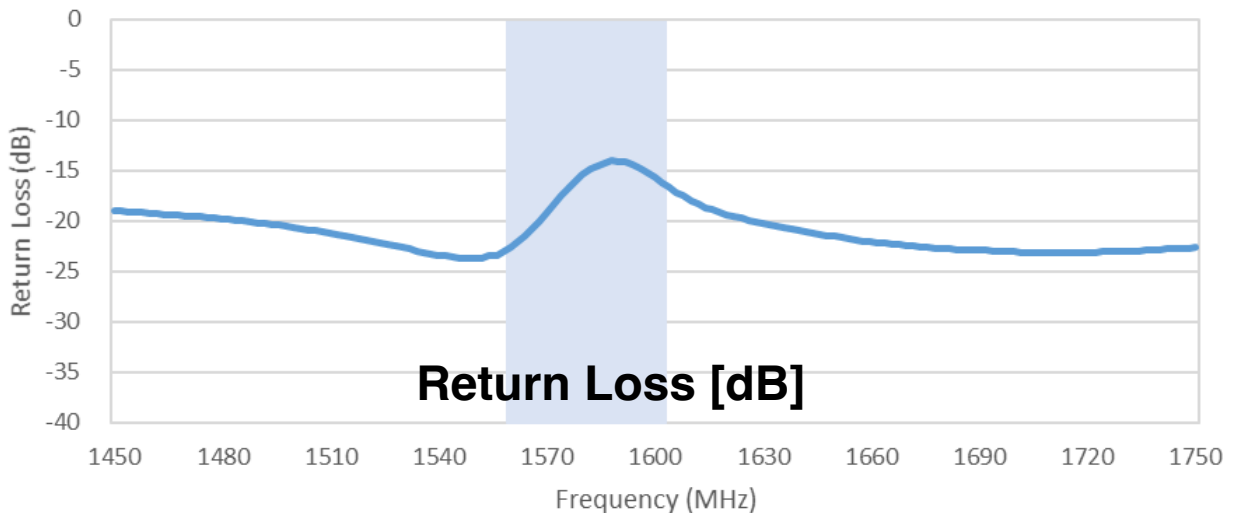


Charts In Free Space

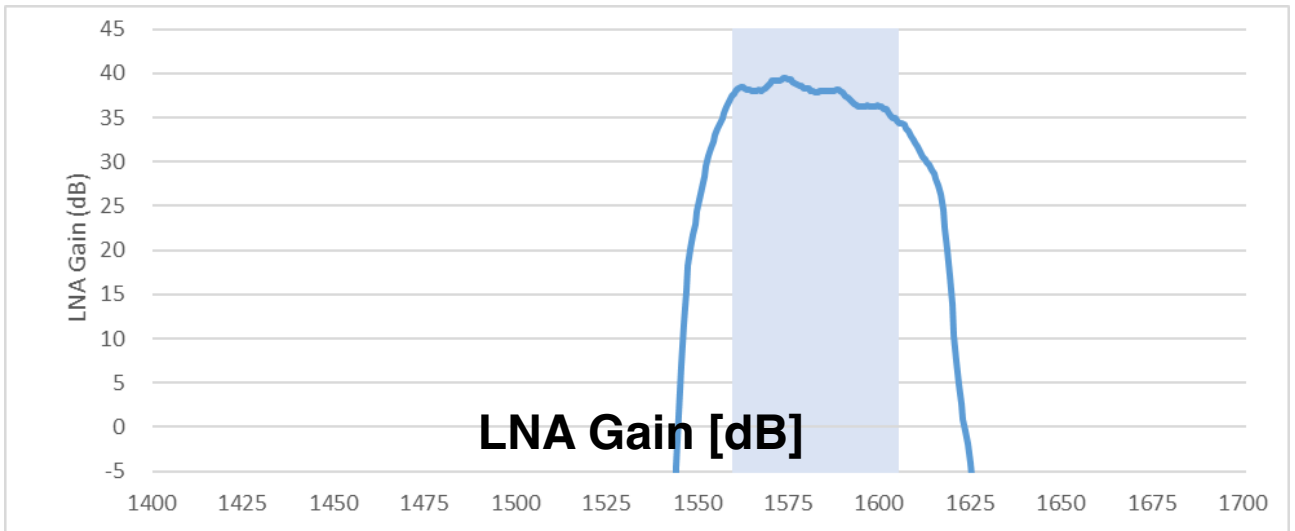


ST0549-32-301-B

Test setup, measurement performed in 3D anechoic chamber.



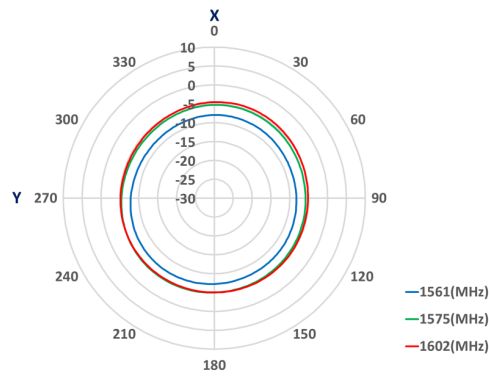
Blue background represents frequency response.



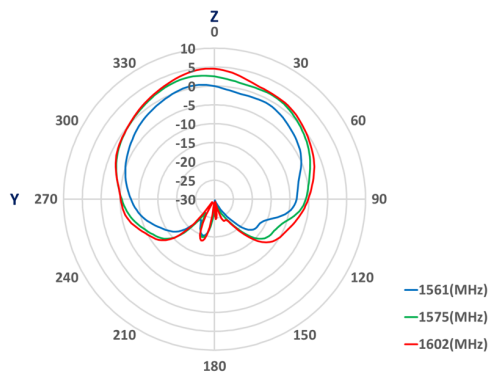
Blue background represents frequency response.

Radiation Pattern - Free Space

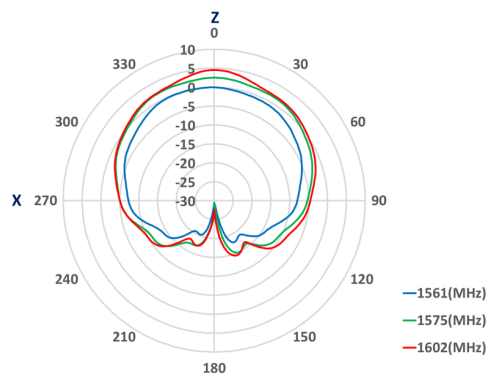
XY - Plane



YZ - Plane



XZ - Plane



Revisions				
Rev.	Description	Date	ECN	Approval
A	Initial Release	2023-11-10	ST0549-32-301-B-RA00	ATC

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