

Datasheet

GPS
GPS Active Antenna



GPS Antenna

Features:

This antenna is designed to cover GPS frequency band. High performance, certified with IP67.

Applications:

- GPS 1575.42MHz
- Military & security
- Asset tracking
- Navigation devices
- Location based services
- Fleet management
- Network synchronization and timing



Electrical Specifications

Antenna Characteristics By Range Of Receiving Frequency	
Frequency (MHz)	1575.42 ± 1
Return Loss (dB)	< -10
Gain (dBi)	1.0 Typ.
Efficiency (%) @Center Frequency	44
Impedance (Ω)	50

LNA Characteristics	
Frequency (MHz)	1575.42
Gain (dB) @3.0 V	28 Typ.
Output Impedance (Ω)	50
Output Return Loss (dB)	< -9.5
Operation Voltage (V)	3~5
Gain (dB)	28 ± 3
Current Consumption (mA)	8 ± 2.5
Noise Figure (dB)	1.5 Typ.

Total Characteristics	
Frequency (MHz)	1575.42 ± 1
Gain (dBi) @Zenith	30 ± 3
Return Loss (dB)	< -9.5
Output Impedance (Ω)	50
ESD (kV)	-

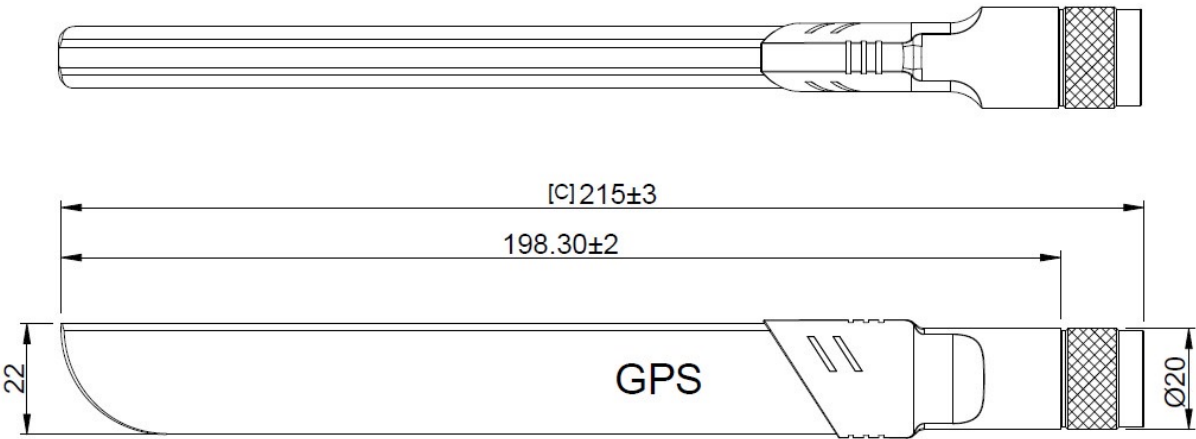
Mechanical Specifications

Mechanical	
Dimension (mm)	215.0
Connector Type	N-type (Plug)
Material	PC
Weight (g)	68.3

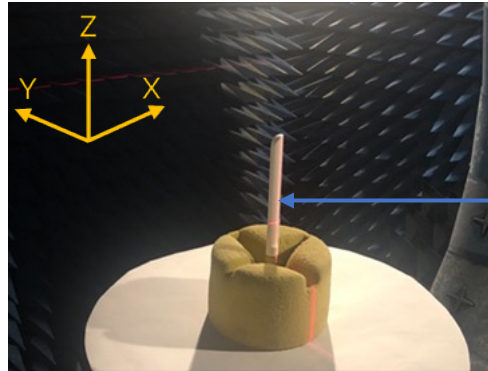
Environmental	
Temperature Range (°C)	-40 to 85
IP Rating	IP67
RoHS Compliant	

Mechanical Drawing

Unit : mm

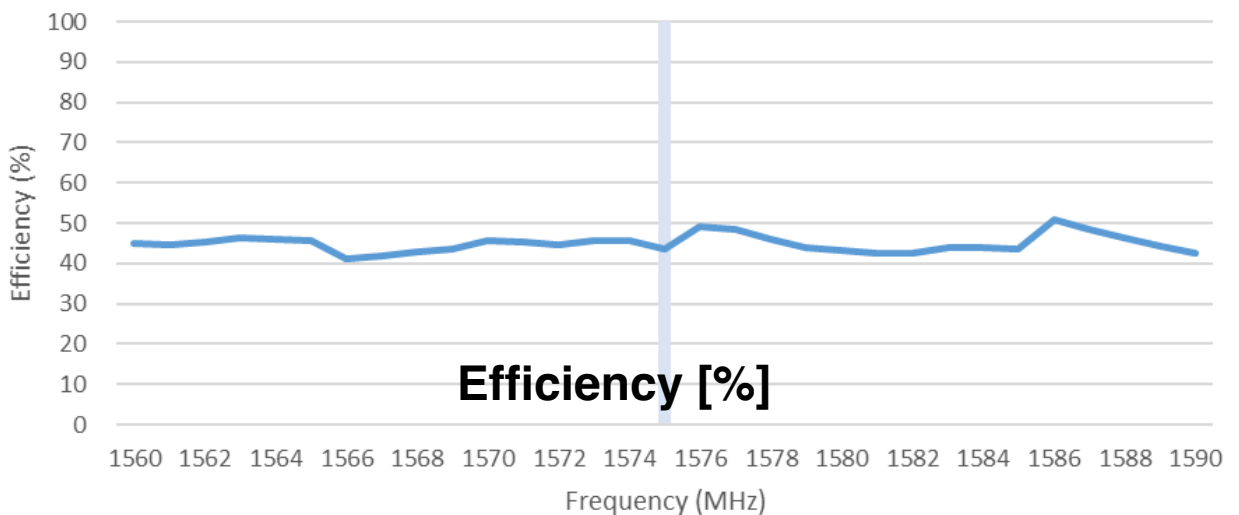
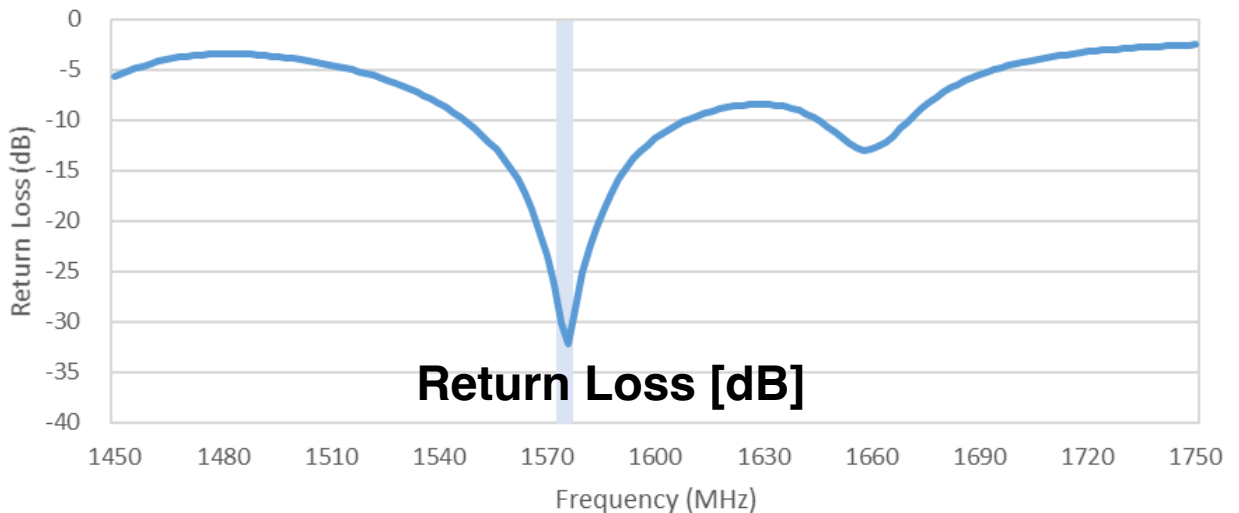


Charts In Free Space

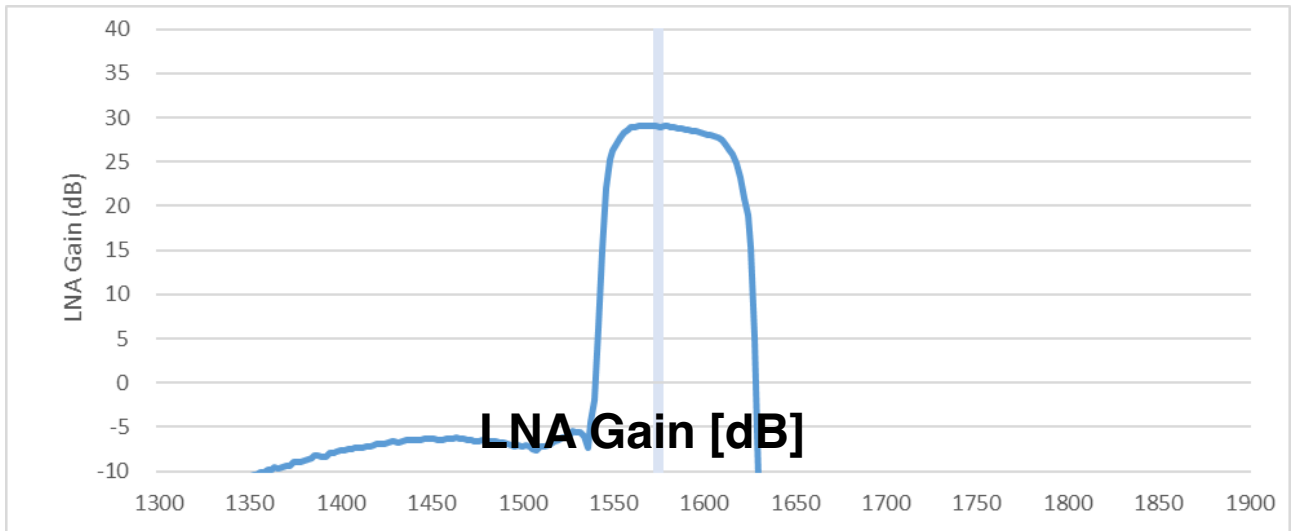


ST0526-41-301-B

Test setup, measurement performed in 3D anechoic chamber.



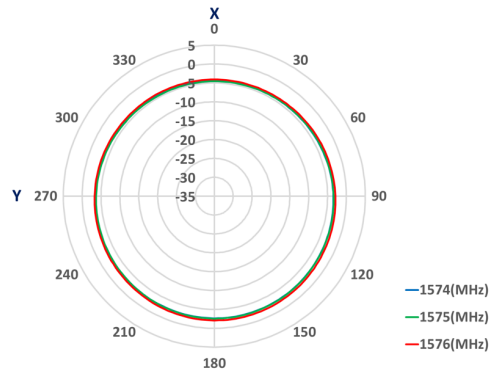
Blue background represents frequency response.



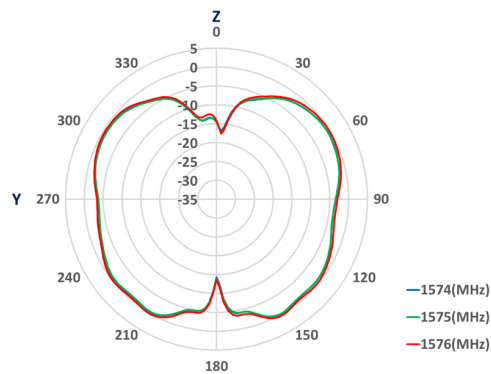
Blue background represents frequency response.

Radiation Pattern - Free Space

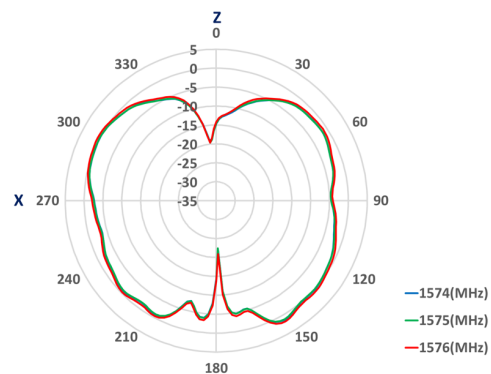
XY - Plane



YZ - Plane



XZ - Plane



Revisions				
Rev.	Description	Date	ECN	Approval
A	Initial Release	2023-09-18	ST0526-41-301-B-RA00	ATC

NOTICE - These drawings, specifications, or other data (1) are, and remain the property of Amphenol corp. (2) must be returned upon request; and (3) are confidential and not to be disclosed to any person other than those to whom they are given by Amphenol Corp. the furnishing of these drawings, specifications, or other data by Amphenol Corp., or to any other person to anyone for any purpose is not to be regarded by implication or otherwise in any manner licensing, granting rights to permitting such holder or any other person to manufacture, use or sell any product, process or design, patented or otherwise, that may in any way be related to or disclosed by said drawings, specifications, or other data.