

## Datasheet

## GNSS Patch antenna

Embedded

Features:

The patch antenna supports GPS+Glonass, has much higher efficiency and small form factor, pin-connector and easy mounting, suitable for mounting inside device.

Applications:

- Navigation device
- Telematics box
- Fleet management
- Portable Handsets
- Tracking and Positioning



18 X 18 X 4 mm

## GNSS Antenna



## Electrical Specifications

## Antenna Characteristics By Range Of Receiving Frequency

Frequency (MHz)	1575.42 ± 1	1602 ± 5
Return Loss (dB)	< -10	< -10
Gain (dBi) @Zenith at 50mm x 50mm ground	-0.5 typ.	1.0 typ.
Bandwidth (MHz)	5	5
Efficiency (%) @Center Frequency	80	82
Impedance (Ω)	50	50

**Mechanical Specifications**

**Environmental**

Temperature Range (°C)

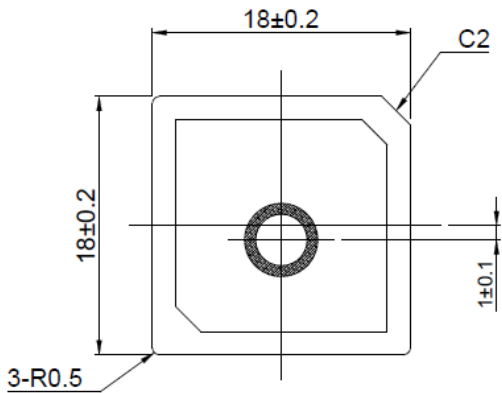
-40 to 105

RoHS Compliant

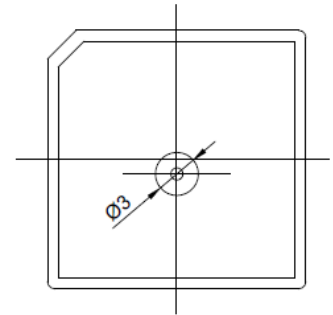
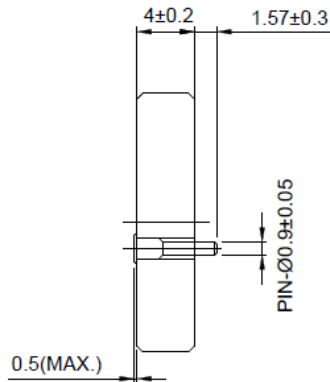
Part Number	Length (mm)	Width (mm)	Height (mm)	Weight (g)
ST0543-00-N04-U	18.0	18.0	4.0	5.9

**Mechanical Drawing**

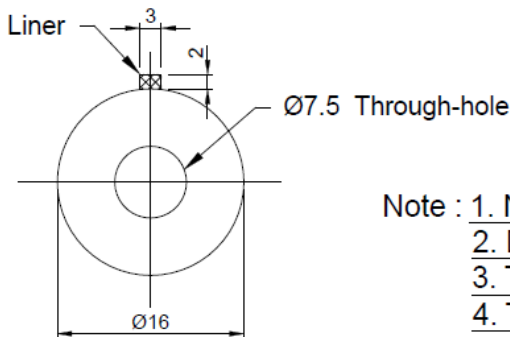
Unit : mm



Top Side



Bottom Side

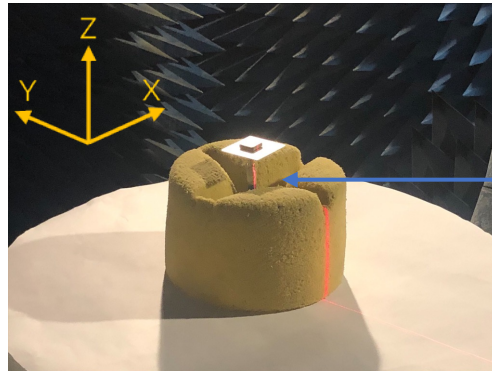


Tape dimension  
(Attached to bottom side)

- Note :
1. NITTO : NO.5015
  2. Double-coated adhesive tape for industrial use
  3. Thickness : 0.12mm
  4. The unmarked tolerance is ±0.2

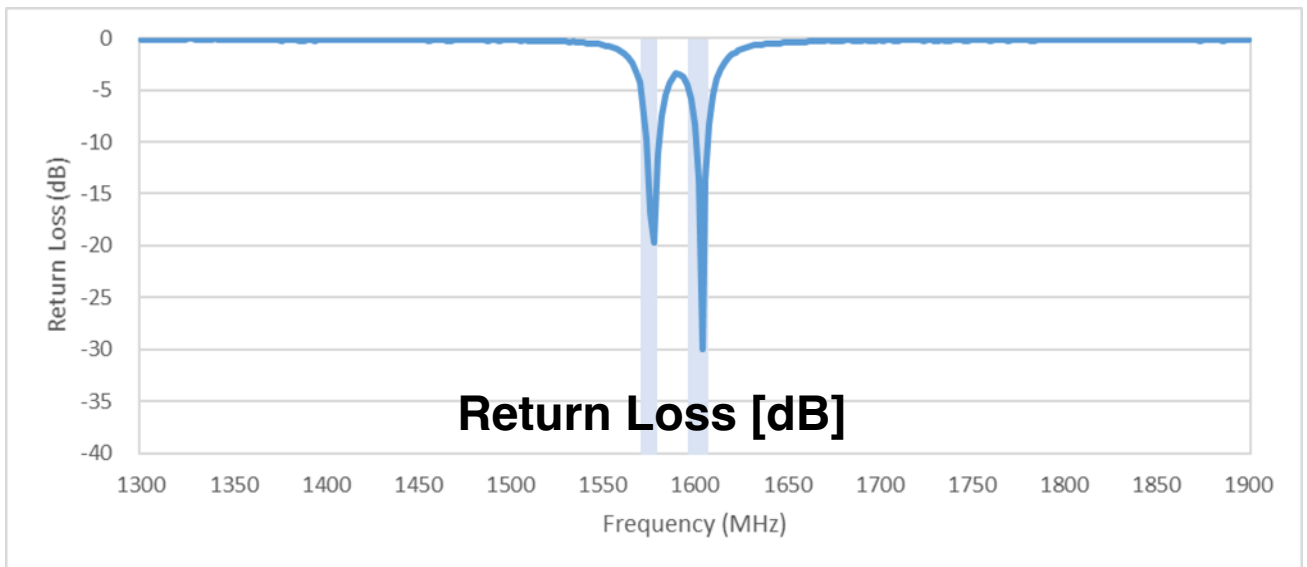
**ST0543-00-N04-U**

## Charts In Free Space



ST0543-00-N04-U

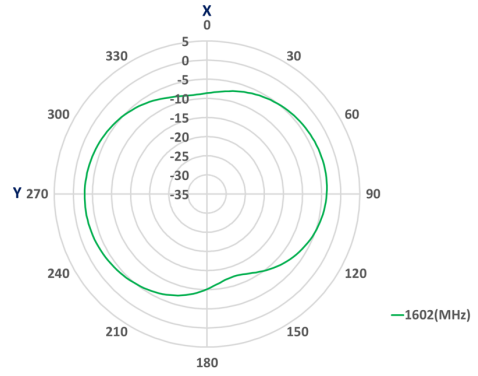
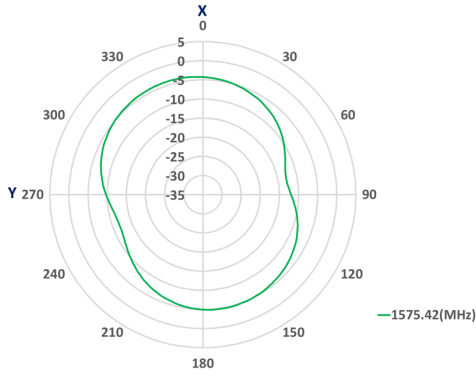
Test setup, measurement performed in 3D anechoic chamber.



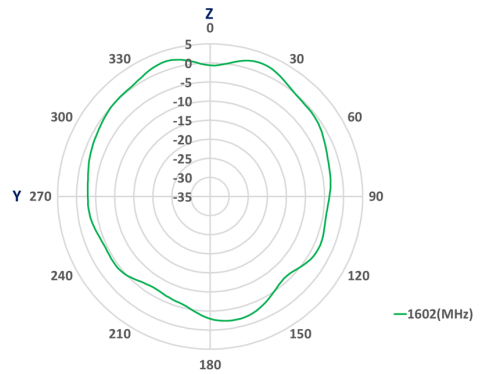
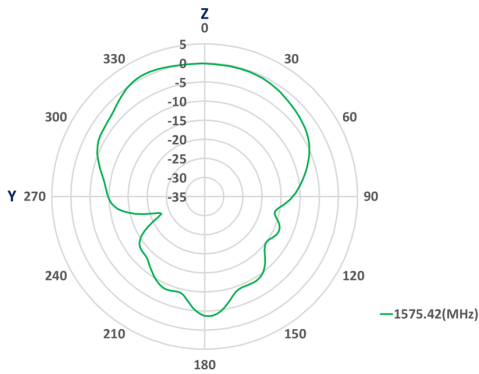
Blue background represents frequency response.

## Radiation Pattern - Free Space

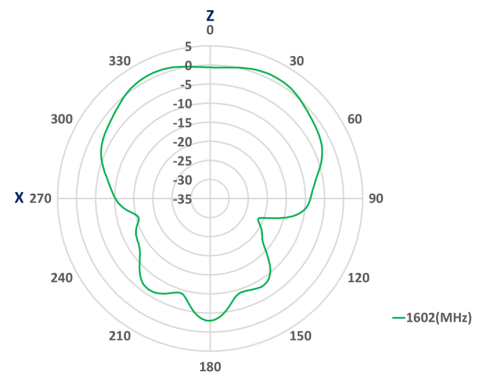
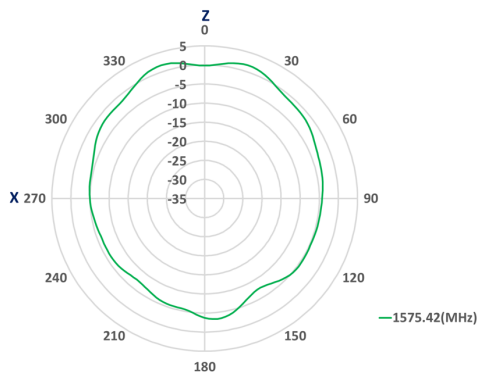
### XY - Plane



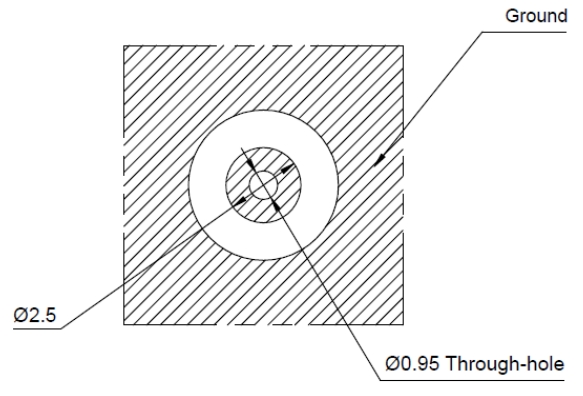
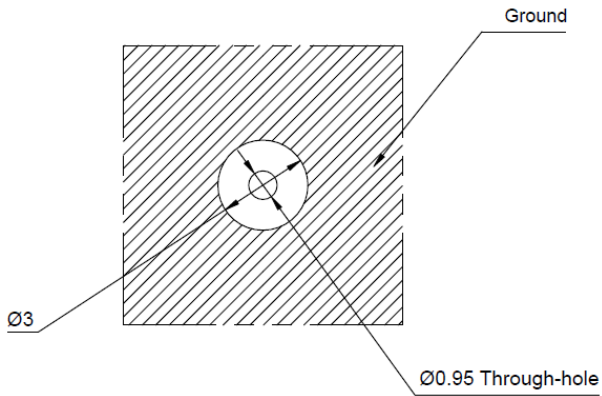
### YZ - Plane



### XZ - Plane



**Layout Dimension**



Tolerance: +/-0.2

Top Side

Bottom Side

**Revisions**

Rev.	Description	Date	ECN	Approval
A	Initial Release	2022-12-23	ST0543-00-N04-U-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.