

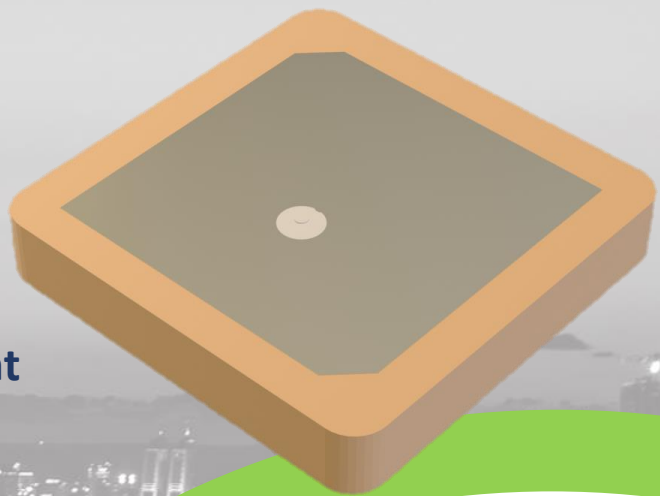
**RF
NEXUS**

Product Datasheet

NEX12-INT-CR-001

Key Features

- **L1 GPS & GNSS**
- **1565/1585 MHz**
- **Through Hole Mount**
- **Ceramic**
- **Dimensions**
25 × 25 x 4 mm



1- Introduction

The NEX12-INT-CR-001 is a ceramic GPS/GNSS passive patch antenna, designed to deliver exceptional performance on the GPS L1 and Galileo E1 bands, operating at 1575.42 MHz. Its low-profile design, with a thickness of only 4mm, allows it to seamlessly integrate into compact devices, while its compatibility with standard Through Hole Mount processes. This antenna is an ideal solution for manufacturers seeking low-cost, scalable assembly for mass-market applications.

The NEX12-INT-CR-001 is specifically crafted for use in a wide range of navigation and positioning systems, including those found in vehicle tracking, fleet management, and telematics applications. Its reliability and robust performance make it a top choice across various industries, including transportation, defense, marine, and agriculture, where precise positioning and navigation are critical. Whether in advanced navigation systems or large-scale fleet tracking, this antenna delivers consistent, high-quality performance, making it a versatile and dependable option for numerous applications.

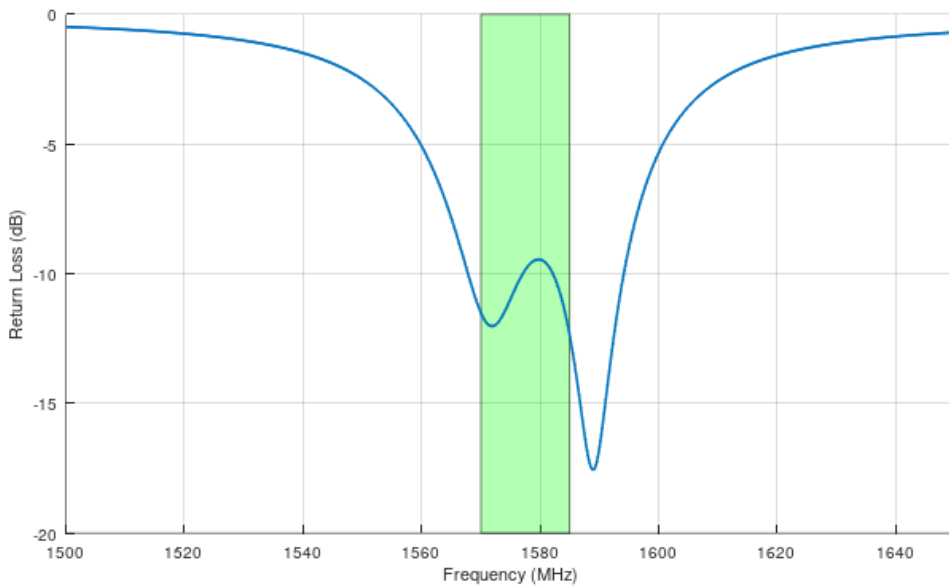
2- Specifications

Mechanical	
Height	25x25mm
Thickness	4 mm
Adhesive	3M
Weight*	1g
Temperature Range	-40°C to 85°C
Electrical	
Frequency (MHz)	1565/1585
Return Loss on Ground (dB)	-7
VSWR on Ground	2.6:1
Efficiency on Ground	60%
RHCP Peak Gain on Ground (dBi)	0
Impedance	50Ω
Polarization	RHCP
Pattern	Omni Directional

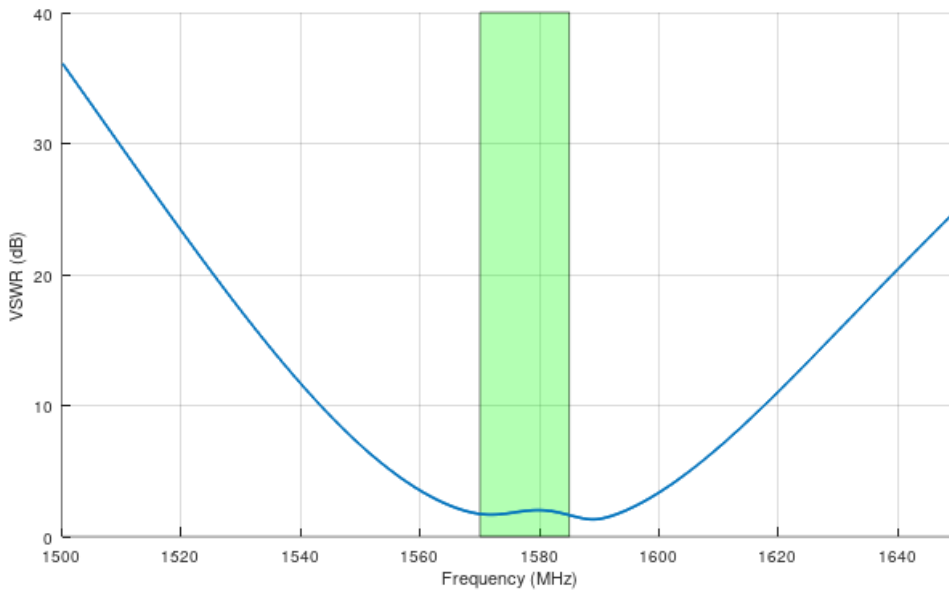
*Data are given for antenna on 70x70 mm metal ground plane.

3- Antenna Parameters

3.1- Return Loss

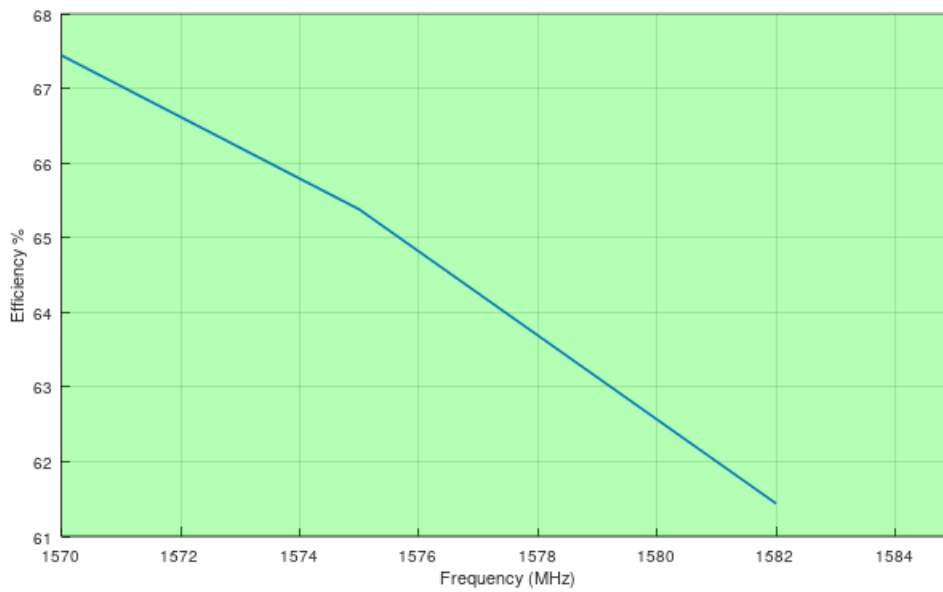


3.2- VSWR



*Data are given for antenna on 70x70 mm metal ground plane.

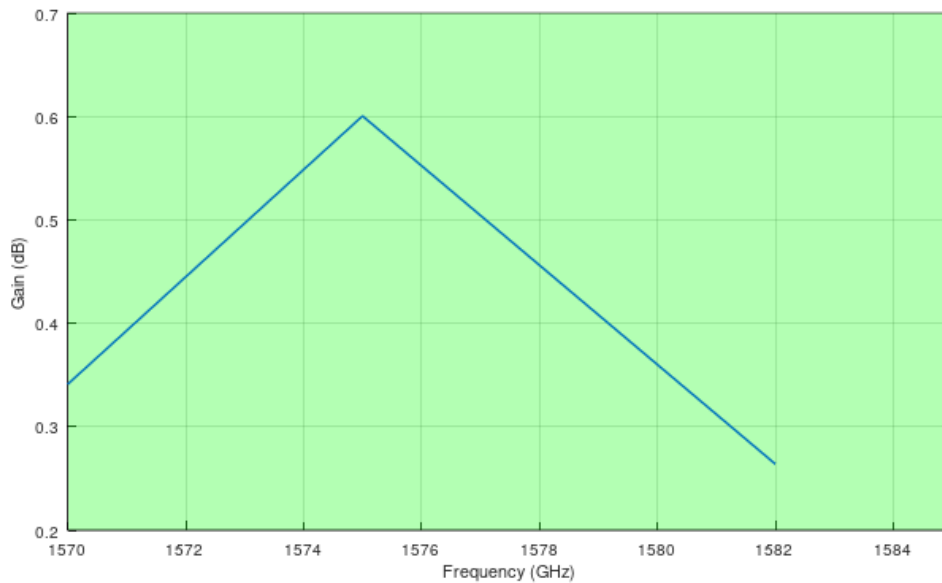
3.3- Efficiency



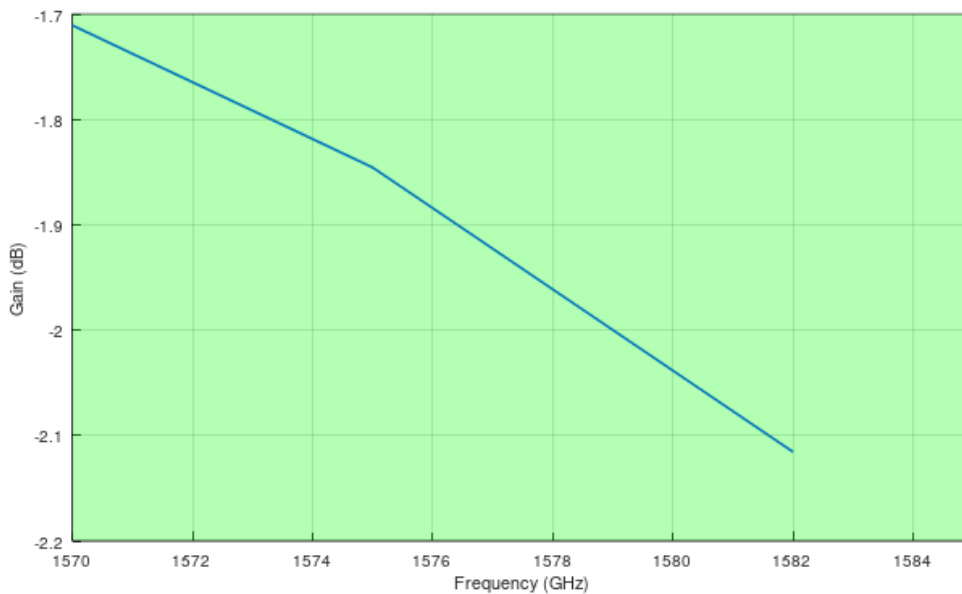
*Data are given for antenna on 70x70 mm metal ground plane.

4- Radiation Patterns

4.1- RHCP Peak Gain

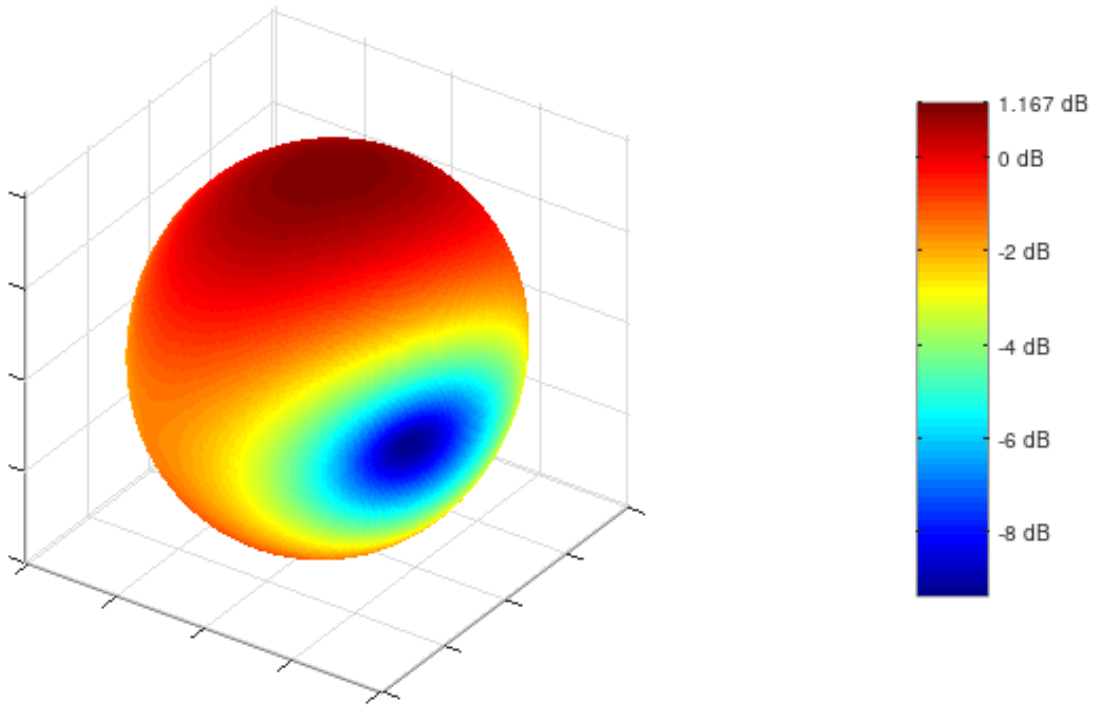


4.2- Average Gain



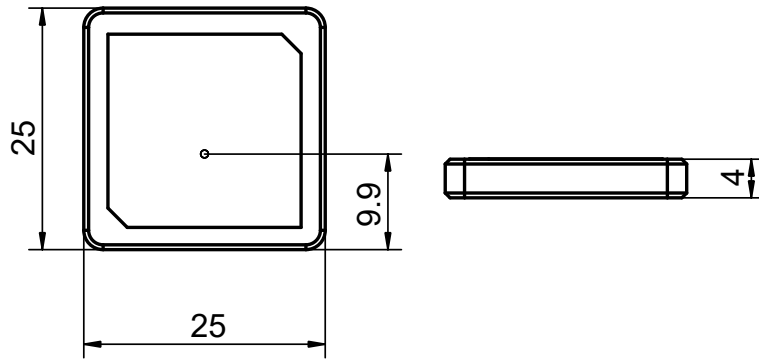
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4.3- 2450 MHz Pattern

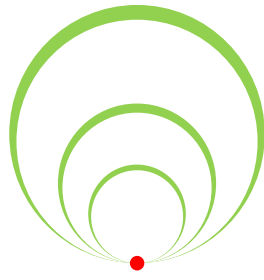


*Data are given for antenna on 70x70 mm metal ground plane.

5- Technical Drawing



Author: Talha Çalış	Legal owner: RF NEXUS Corp.	Scale: M 2:1	Sheet of 1
Appr.:		Toler. #/ - ?	Size: A4
TITLE: L1 Antenna		Part material:	Part number:
		Drawing no.: 1	
		Date: 2024-08-04	Revision: REV A
 Document type: Mechanical assembly drawing		(R) DO NOT DUPLICATE THIS DRAWING TO THIRD PARTIES WITHOUT OWNER'S PERMISSION !	



**RF
NEXUS**



+90 530-716-6670



www.nexus-rf.com



info@nexus-rf.com



**İvedikOSB Mh. 2224. Cad.
No:1 - 117/A
Yenimahalle / Ankara**