

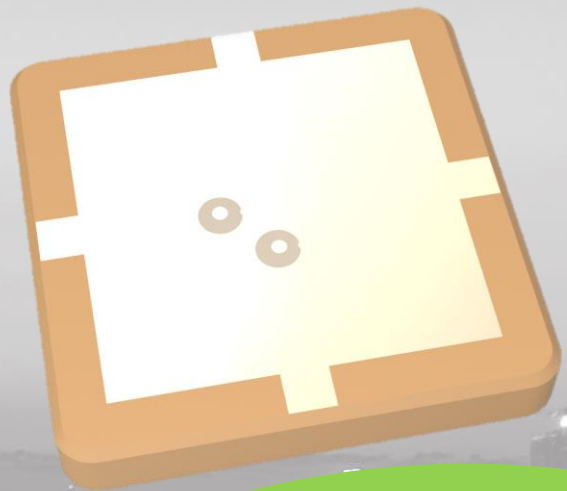
**RF
NEXUS**

Product Datasheet

NEX12-INT-CR-002

Key Features

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



1- Introduction

The NEX12-INT-CR-002 is a high-performance, single-band passive GNSS patch antenna, specifically designed for GPS/GNSS frequencies. It features an innovative dual-feed patch design that significantly improves axial ratio, enhancing multipath rejection and ensuring clearer signal reception and transmission, even in challenging environments with reflective surfaces. This makes it ideal for high-performance GNSS applications..

The NEX12-INT-CR-002 is engineered for seamless integration into modern systems, utilizing a Through Hole Mount process.. The NEX12-INT-CR-002 is well-suited for applications that require precise and reliable GNSS functionality, offering dependable performance in a compact form factor.

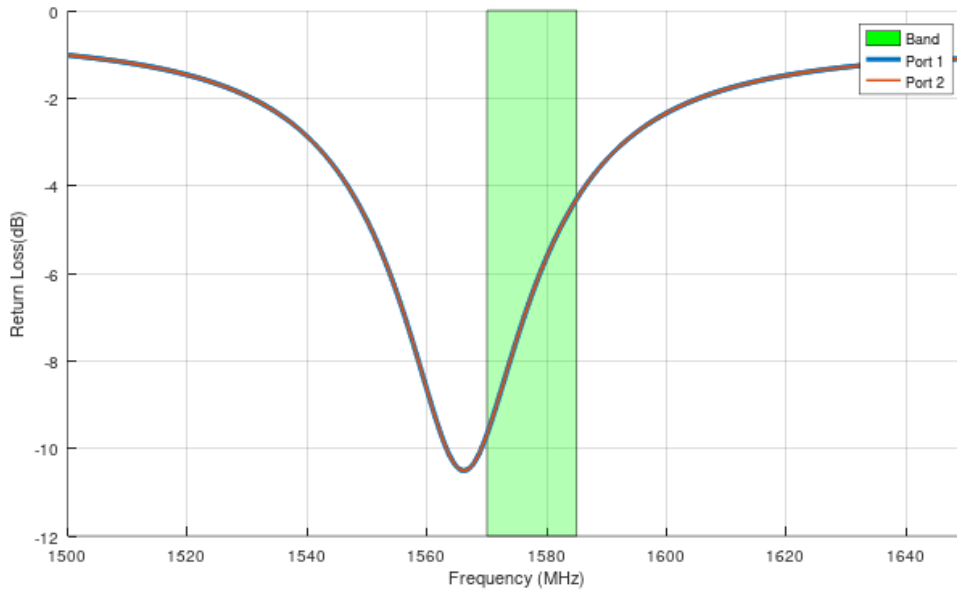
2- Specifications

Mechanical	
Height	25x25mm
Thickness	4 mm
Adhesive	3M
Weight*	7g
Temperature Range	-40°C to 85°C
Electrical	
Frequency (MHz)	1565/1585
Return Loss (dB)	-4
VSWR	4.4:1
Efficiency	60%
RHCP Peak Gain (dBi)	3
Impedance	50Ω
Polarization	RHCP
Pattern	Omni Directional

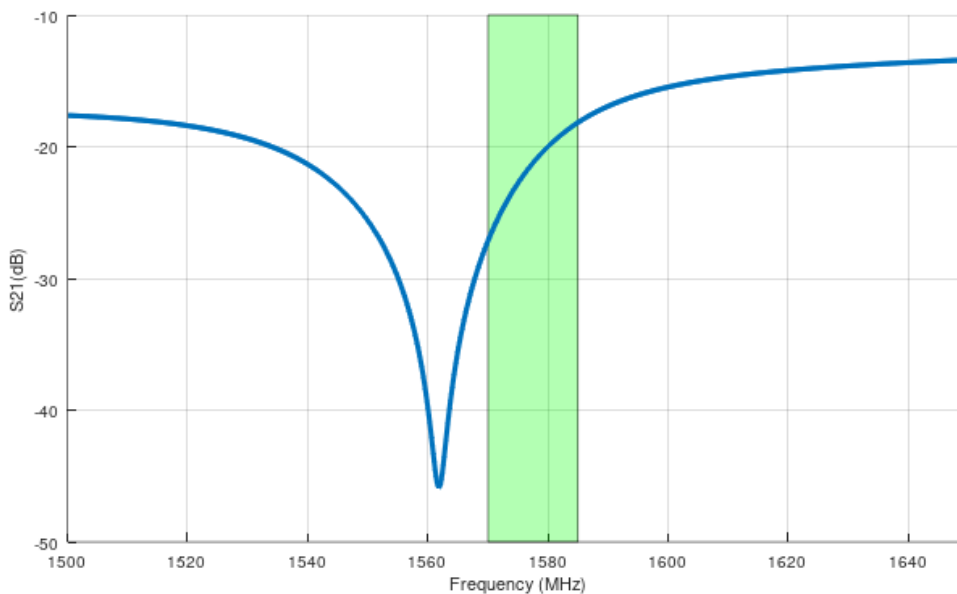
*Data are given for antenna on 70x70 mm metal ground plane.

3- Antenna Parameters

3.1- Return Loss

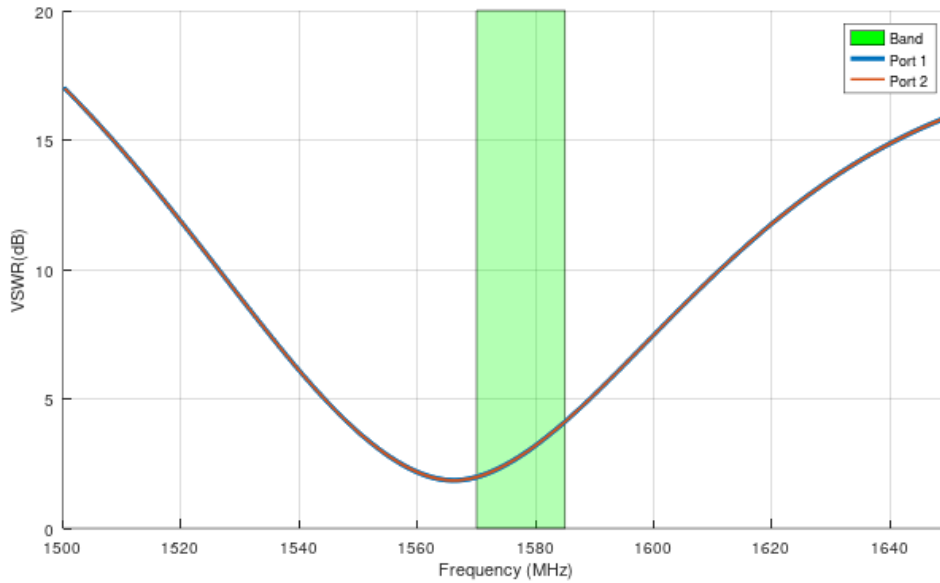


3.2- Coupling

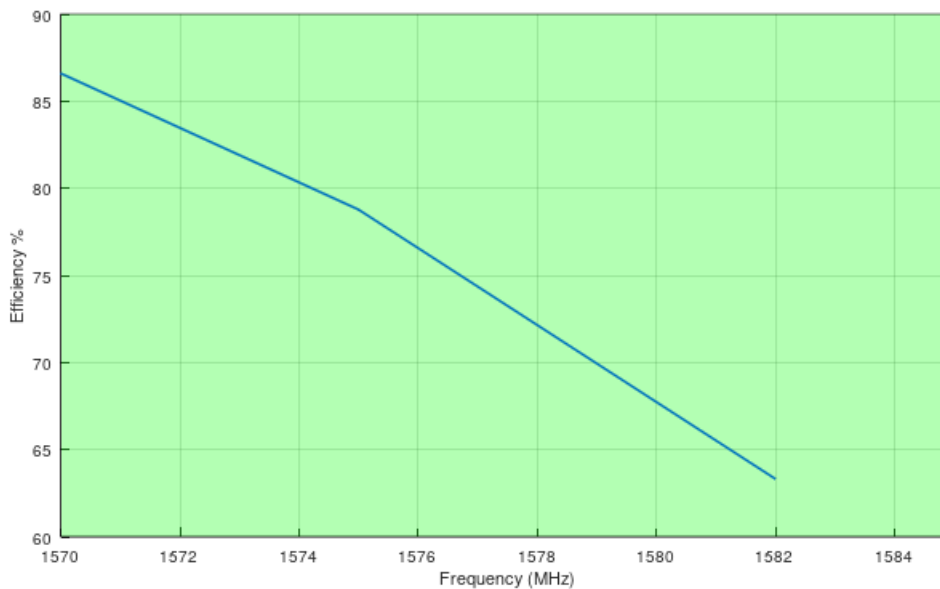


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3.3- VSWR



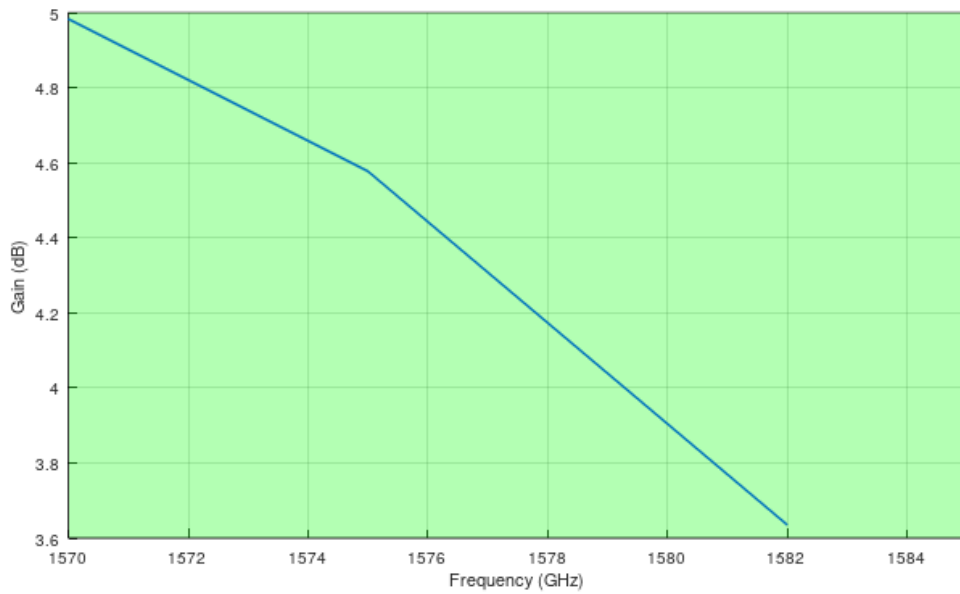
3.4- Efficiency



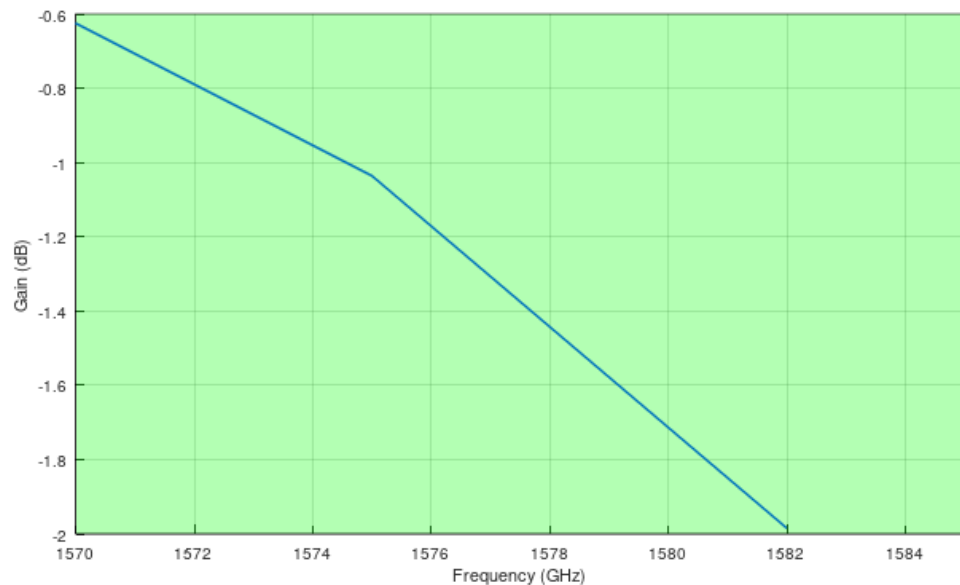
*Data are given for antenna on 70x70 mm metal ground plane.

4- Radiator Patterns

4.1- Peak Gain



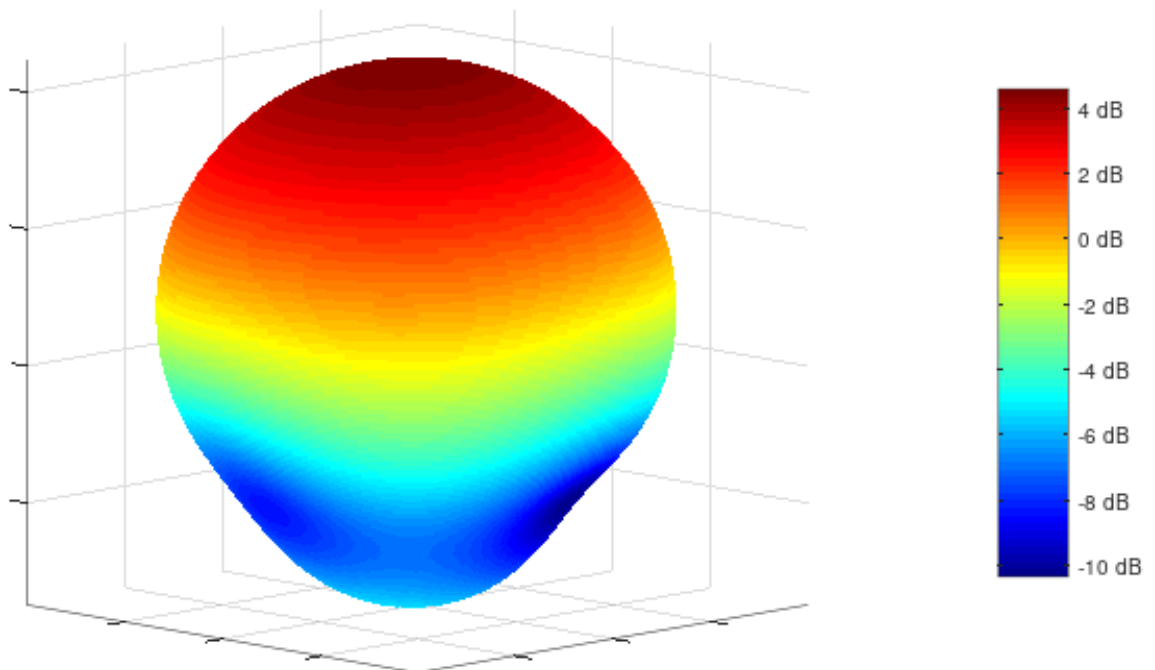
4.2- Average Gain



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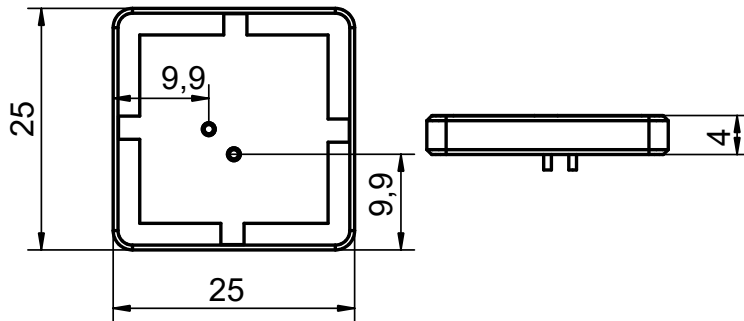
4- Radiation Patterns


4.2- 2450 MHz Pattern

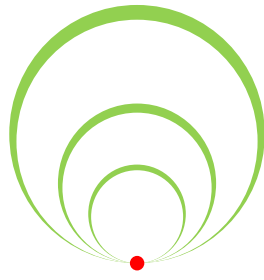


*Data are given for antenna on 70x70 mm metal ground plane.

5- Technical Drawing



Author: Talha Çalış	Legal owner: RF Nexus Corp.	Scale: M 2:1	Sheet of 1
Appr.:		Toler. #/ - ?	Size: A4
TITLE: L1 Dual Band Antenna		Part materia PM	Part number PN
		Drawing no.: DN	
		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 !	



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