

**RF  
NEXUS**

# Product Datasheet

**NEX13-EXT-TR-001**

## Key Features

- WiFi
- Bluetooth/ISM/Zigbee
- 2.4/2.5 & 4.9/6.5 GHz
- Terminal Mount
- Ground Dependent
- Dimensions  
Ø 10 × 108 mm



[www.nexus-rf.com](http://www.nexus-rf.com)

## 1- Introduction

The NEX13-EXT-TR-001 is a versatile terminal mount dipole antenna designed to operate on both Bluetooth and Wi-Fi frequency bands. Standing at a compact 108mm in height with a slim 10mm diameter, its durable TPEE casing allows for flexible mounting, either in a straight position or angled, thanks to its hinged RPSMA(M) connector.

This antenna is particularly suited for various wireless technologies including Bluetooth, BLE, ZigBee, as well as Wi-Fi 6 and 7, and Wireless LAN systems. Engineered to deliver exceptional performance, the NEX13-EXT-TR-001 offers an omnidirectional radiation pattern, ensuring uniform signal distribution. It also boasts remarkably high efficiency and impressive gain across all Wi-Fi frequency bands, making it a reliable choice for high-demand wireless applications.

## 2- Specifications

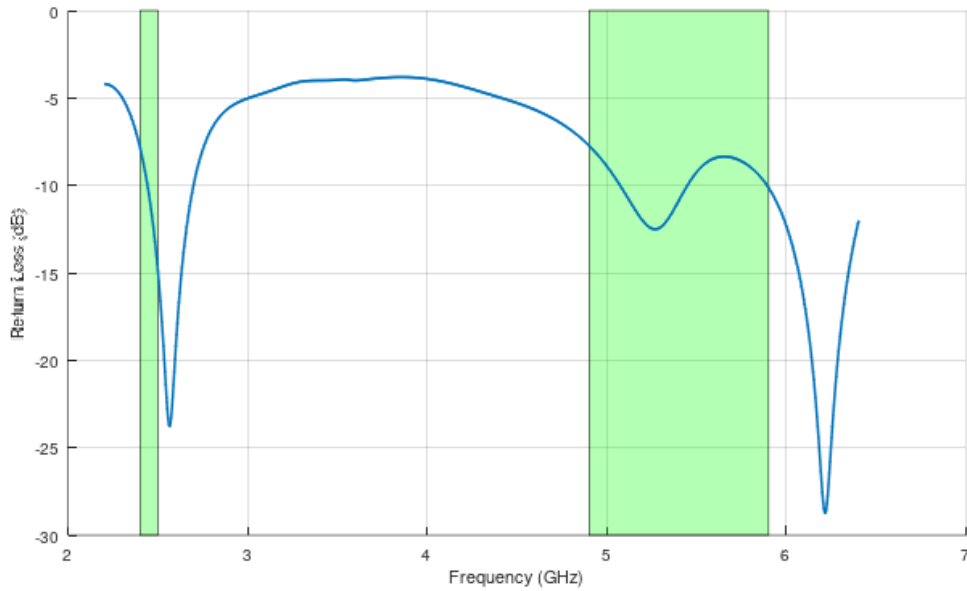
Mechanical	
Height	108mm
Diameter	Ø 10 mm
Connector	SMA(M)
Casing	TPEE
Temperature Range	-40°C to 85°C

Electrical		
Frequency (GHz)	2.4/2.5	4.9/6.5
Return Loss (dB)	-8	-8
VSWR	3:1	3:1
Efficiency	83%	82%
Peak Gain (dBi)	2.5	2.4
Impedance	50Ω	
Polarization	Linear	
Pattern	Omni Directional	

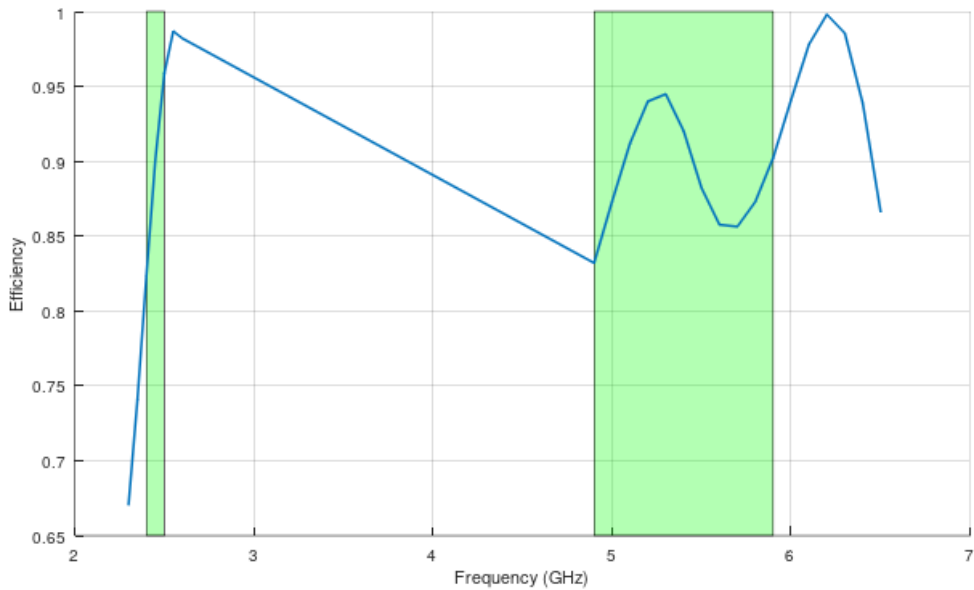
\*Data are given for antenna on 120x120 mm metal ground plane.

## 3- Antenna Parameters

### 3.1- Return Loss



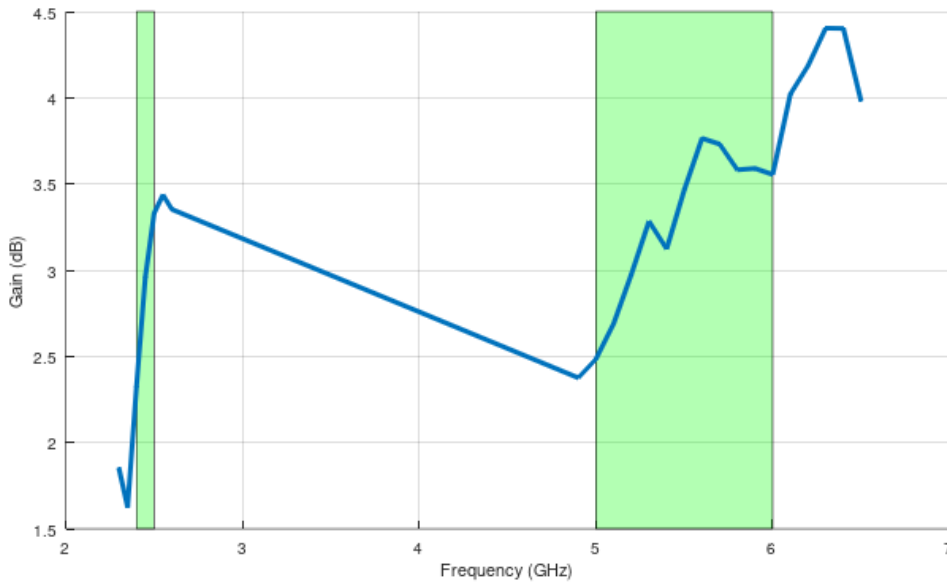
### 3.2- Efficiency



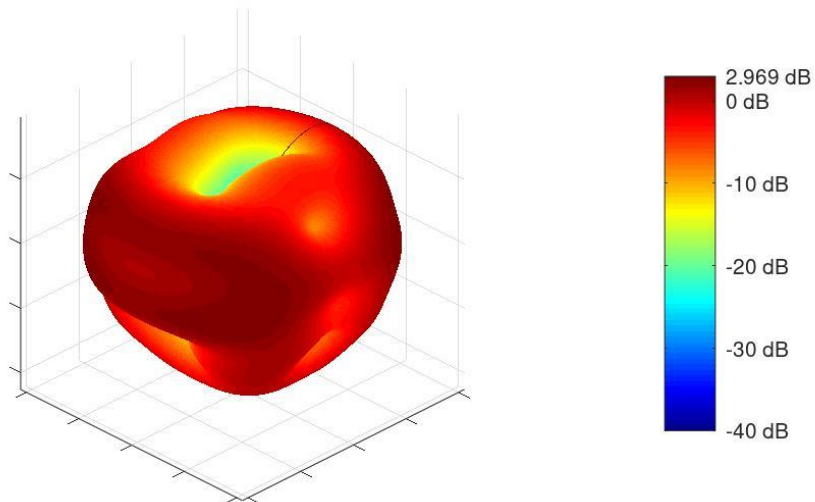
\*Data are given for antenna on 120x120 mm metal ground plane.

## 4- Radiator Patterns

### 4.1- Peak Gain

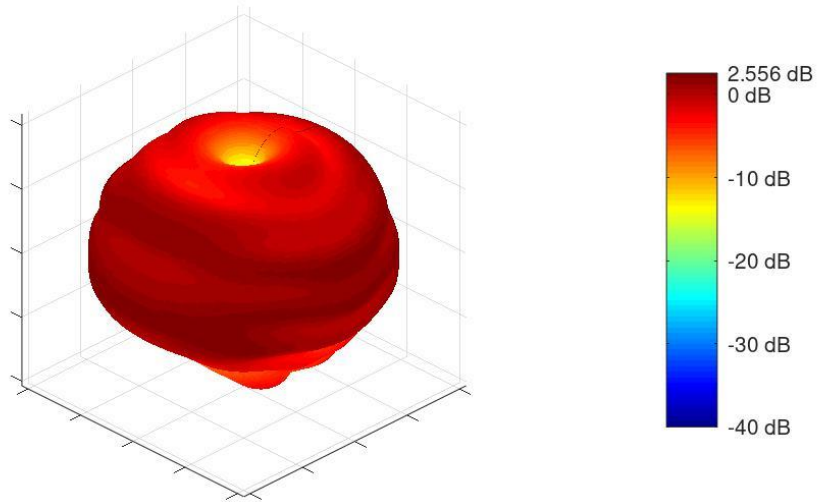


### 4.2- 2450 MHz Pattern

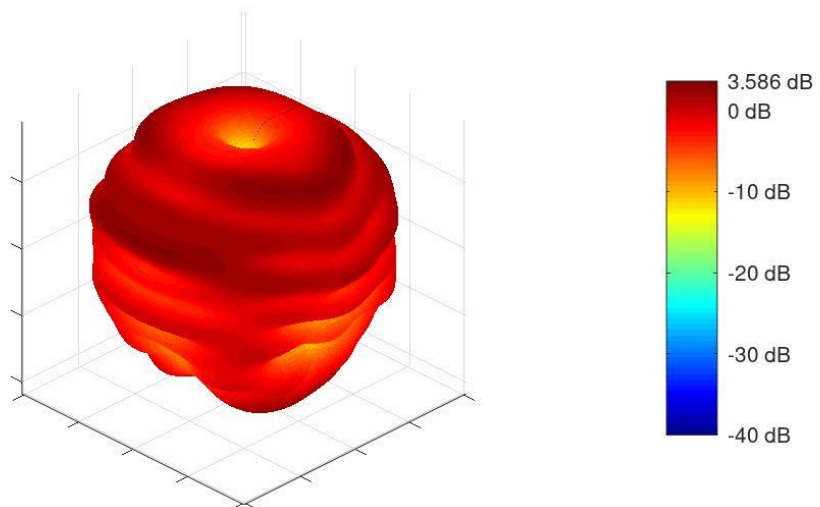


\*Data are given for antenna on 120x120 mm metal ground plane.

### 4.3- 5000 MHz Pattern

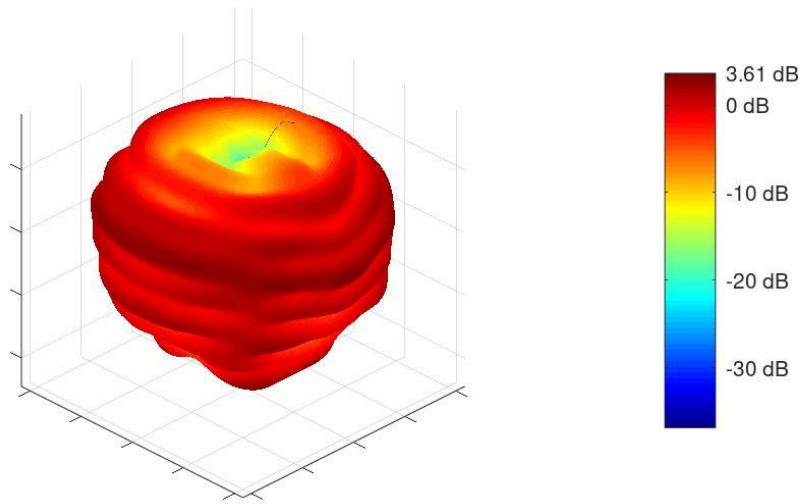


### 4.4- 5500 MHz

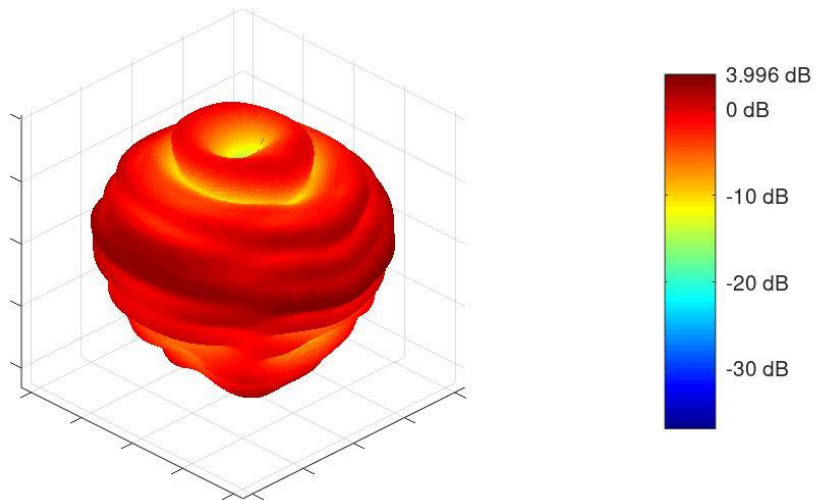


\*Data are given for antenna on 120x120 mm metal ground plane.

### 4.5- 6000 MHz Pattern

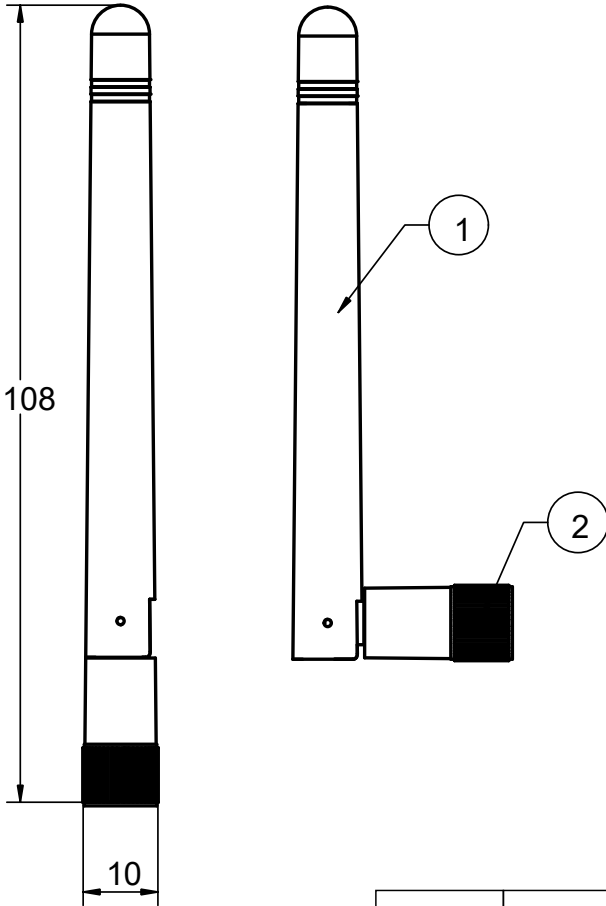


### 4.6- 6500 MHz




\*Data are given for antenna on 120x120 mm metal ground plane.

# 5- Technical Drawing

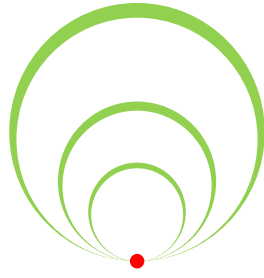


Technical drawing of a Terminal Mount Antenna. The drawing shows two views: a front view on the left and a side view on the right. The front view shows a vertical antenna with a total height of 108 and a diameter of 10. The side view shows the antenna's profile, including a mounting base. Callout 1 points to the main antenna body, and callout 2 points to the mounting base. A table below the drawing lists the materials for callouts 1 and 2.

1	TPEE
2	RP-SMA

Author: Talha Çalış	Legal owner: RF NEXUS Corp.	Scale: M 3:2	Sheet of 1
Appr.:		Toler. #/ - ?	Size: A4
TITLE: Terminal Mount Antenna		Part material:	
		Part number:	
		Drawing no.:	
		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](http://www.nexus-rf.com)**



**[info@nexus-rf.com](mailto:info@nexus-rf.com)**



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