

**RF
NEXUS**

Product Datasheet

NEX11-EXT-TR-001

Key Features

- Bluetooth
- Zigbee/Z-Wave/WiFi/ISM
- 2.4/2.5 GHz
- Terminal Mount
- Ground Dependent
- Dimensions
Ø 8 × 49 mm



1- Introduction

The NEX11-EXT-TR-001 is a highly efficient dipole antenna designed for 2.4GHz wireless applications. With a compact size of just 49mm in height and 8mm in diameter, this durable antenna is built to withstand both indoor and outdoor environments. It features an SMA(M) connector, allowing for straight-angle mounting to the device, providing flexibility in installation. This makes it well-suited for 2.4GHz protocols such as Bluetooth, ZigBee, and other similar wireless systems.

The NEX11-EXT-TR-001 is engineered to deliver exceptional performance and reliability, ensuring stable and high-quality wireless connections. Its omnidirectional radiation pattern guarantees consistent signal coverage in all directions, while its high efficiency and impressive gain across the 2.4GHz frequency range make it an excellent choice for demanding Bluetooth, ZigBee, and Wireless LAN setups. Whether used indoors or outdoors, this antenna offers robust performance for a wide range of wireless networking needs across 2.4GHz protocols.

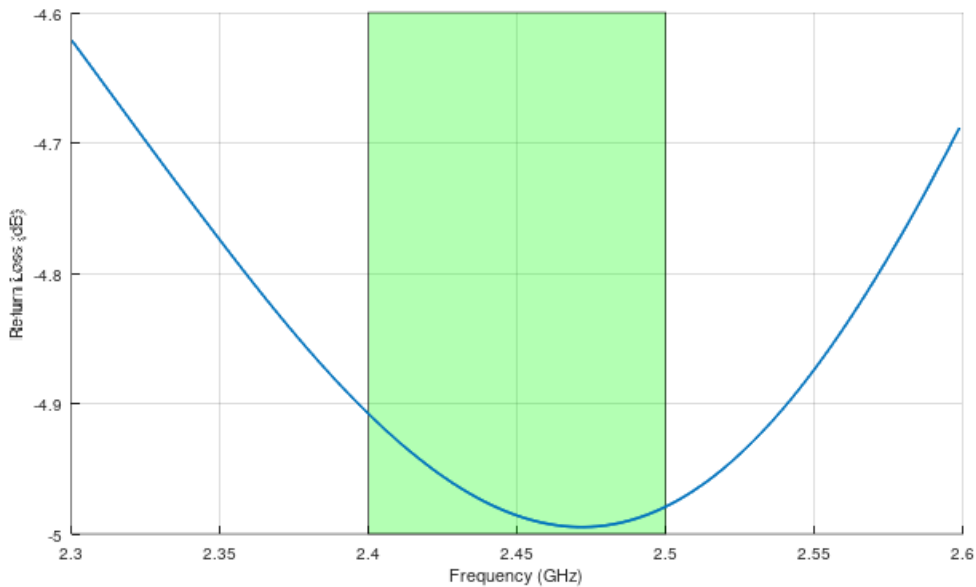
2- Specifications

Mechanical	
Height	49mm
Diameter	Ø8 mm
Connector	SMA(M)
Casing	TPEE
Weight	6g
Temperature Range	-40°C to 85°C
Electrical	
Frequency (GHz)	2.4/2.5
Return Loss on Ground (dB)	-5
VSWR on Ground	3.5:1
Efficiency on Ground	68%
Peak Gain on Ground (dBi)	3
Impedance	50Ω
Polarization	Linear
Pattern	Omni Directional

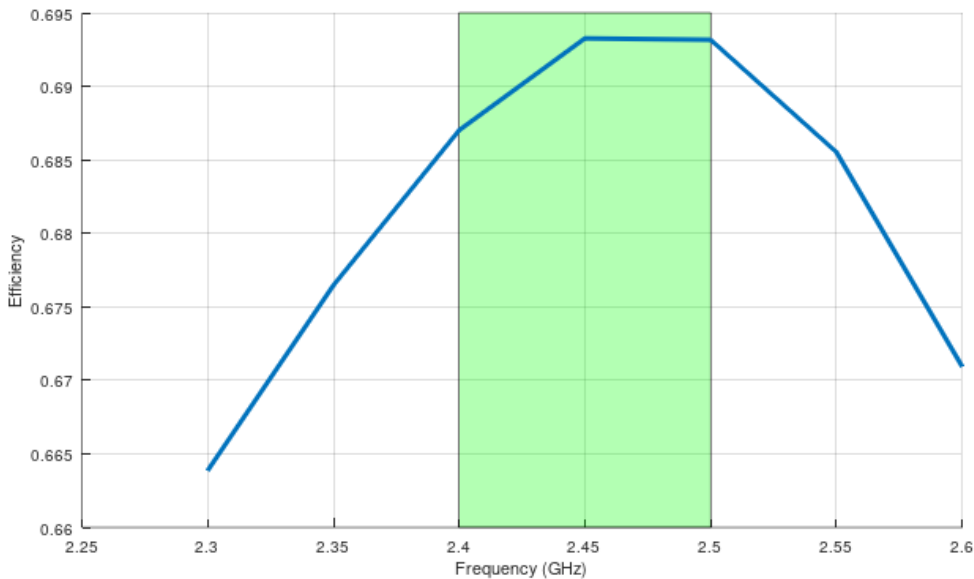
*Data are given for antenna on 120x120 mm metal ground plane.

3- Antenna Parameters

3.1- Return Loss



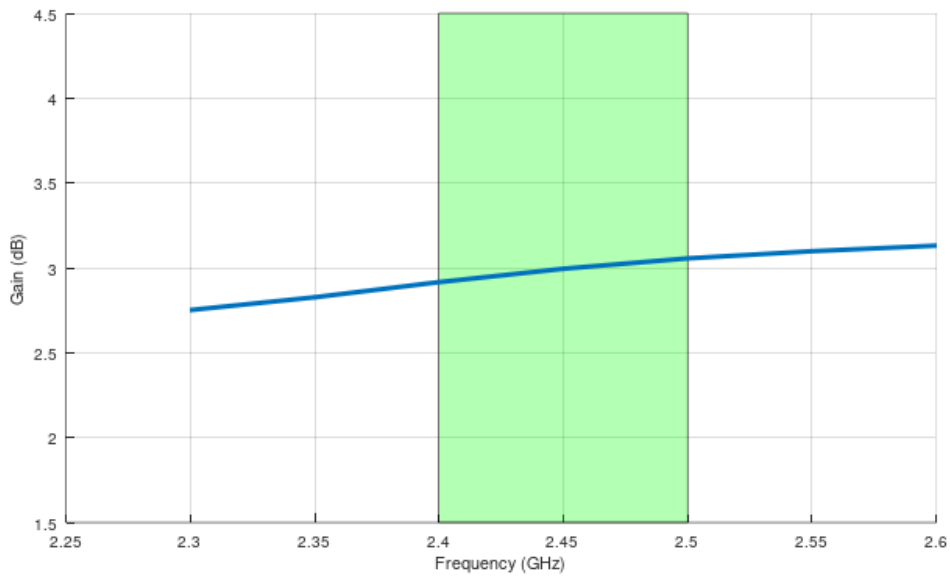
3.2- Efficiency



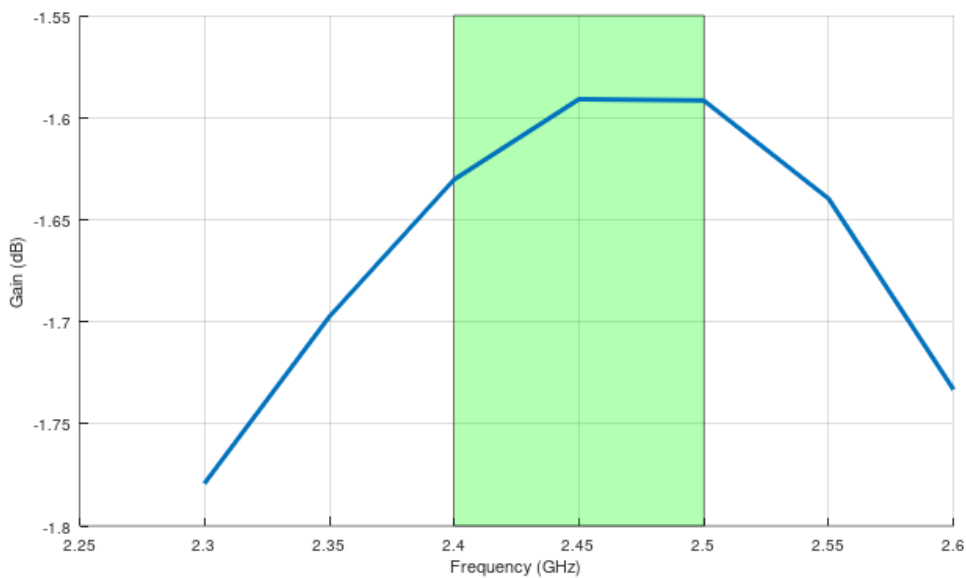
*Data are given for antenna on 120x120 mm metal ground plane.

4- Radiator Patterns

4.1- Peak Gain



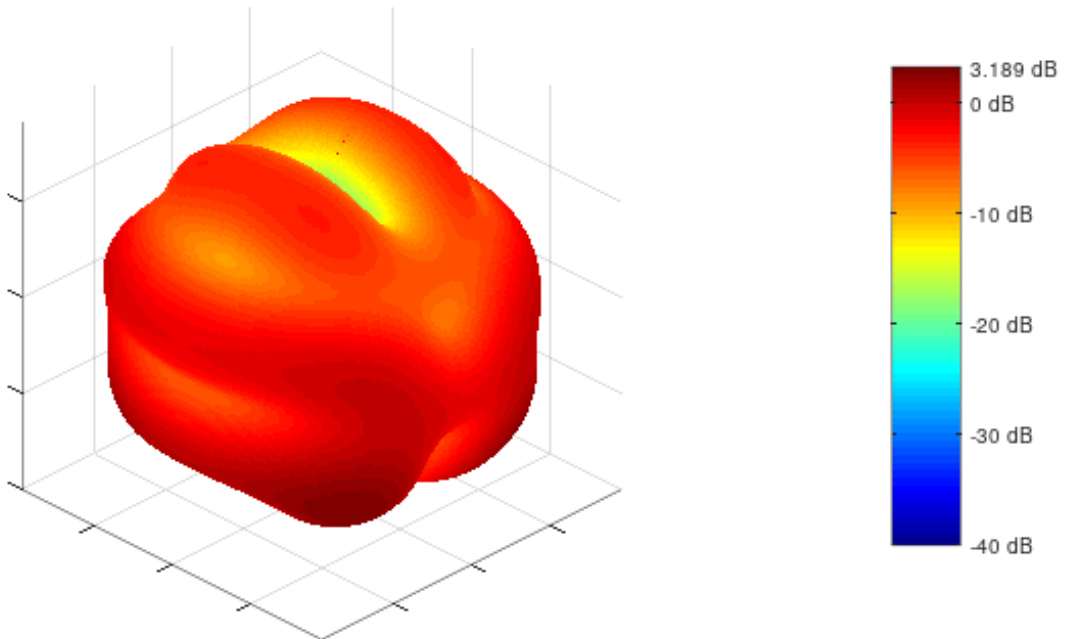
4.2- Average Gain



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

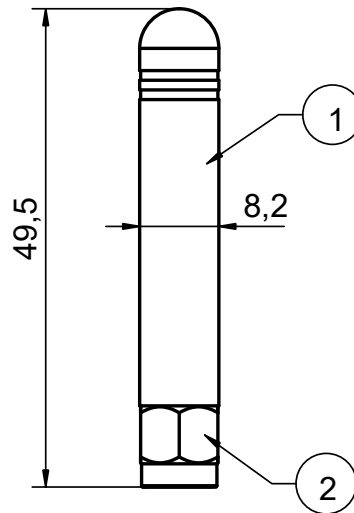
4- Radiaton Patterns

4.1- 2450 MHz Pattern



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

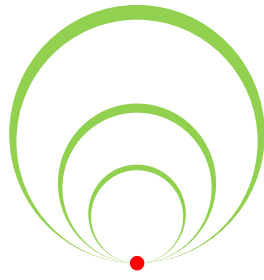
5- Technical Drawing



1	TPEE
2	SMA-M

Author: Talha Çalış	Legal owner: RF NEXUS Corp.	Scale: M 2:1	Sheet of 1
Appr.:		Toler. #/ -	Size: A4
TITLE: Terminal Mount Antenna		Part materia PM	Part number PN
		Drawing no.: 1	
		Date: 04.08.2024	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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