



9 element VHF Yagi

Broadband High-Performance Antenna for Communication Systems

Product Overview

The TT-ANT-VY-009 antenna is a high-performance broadband RF antenna designed for reliable transmission and reception across specified frequency bands. The antenna provides optimized impedance matching, low return loss, and stable radiation characteristics. It is suitable for fixed installations, field communication setups, and RF experimentation environments.

Application Domains

Amateur (HAM) radio systems, VHF/UHF communication, RF base stations, telemetry systems, wireless communication setups, LORA, IoT and RF laboratory testing.

Product Identification

Part Number	TT-ANT-VY-009
Description	Broadband RF Antenna
Device Category	RF Radiating Element

Electrical Specifications

Frequency Range	VHF (144 - 146 MHz)
Impedance	50 Ω
VSWR	< 1.3:1 (typical)
Return Loss (S11)	< -35 dB
Gain	< 11.5 dBi (depending on design)
Half power beam width	50°
Front to Back ratio	16.7 dB
Side lobe level	16.7 dB
Polarization	Vertical / Horizontal (Based on mounting)
Power Handling	Up to 500 W
Radiation Pattern	Directional
Connector Type	SO-239

Environmental and Mechanical Characteristics

Antenna Type	Tejtronics's custom Yagi
Mounting Type	Jaw clamp to mast or beam
Material	Aluminium elements
Wind Survival Rating	Up to 120 km/h
Operating Temperature	-20°C to +70°C
Weight	4.5kg (depending on model)

Standard Status

RF Compliance	Industry standard RF performance
Declaration of Conformity	RoHS, CE

Product Visuals

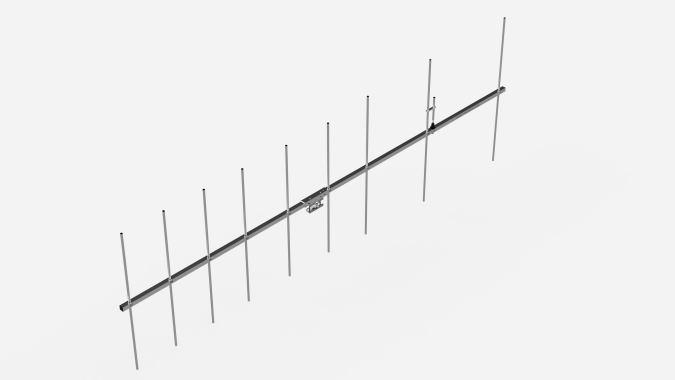


Figure 1: Antenna View

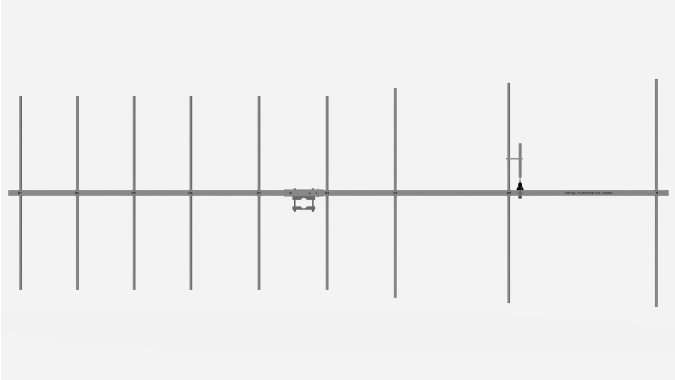


Figure 2: Mounting Configuration

RF Performance

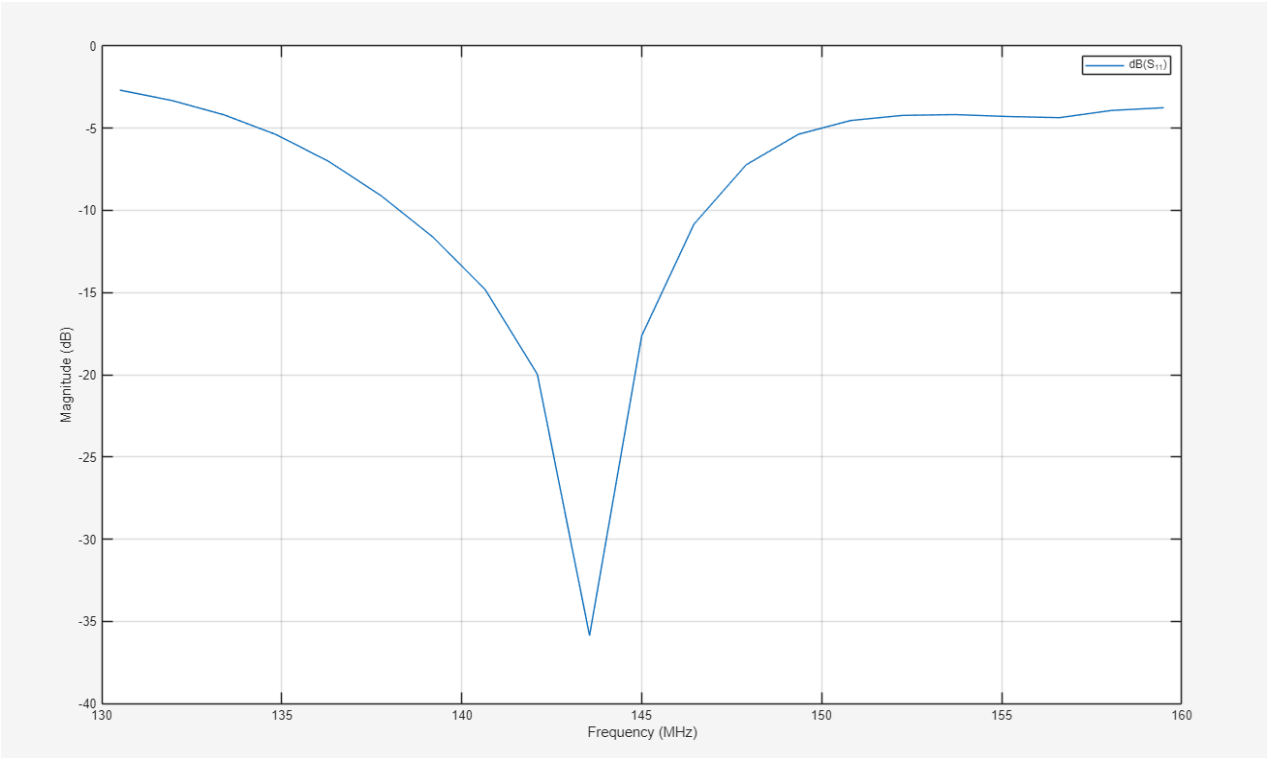


Figure 3: Return Loss (S11) vs Frequency

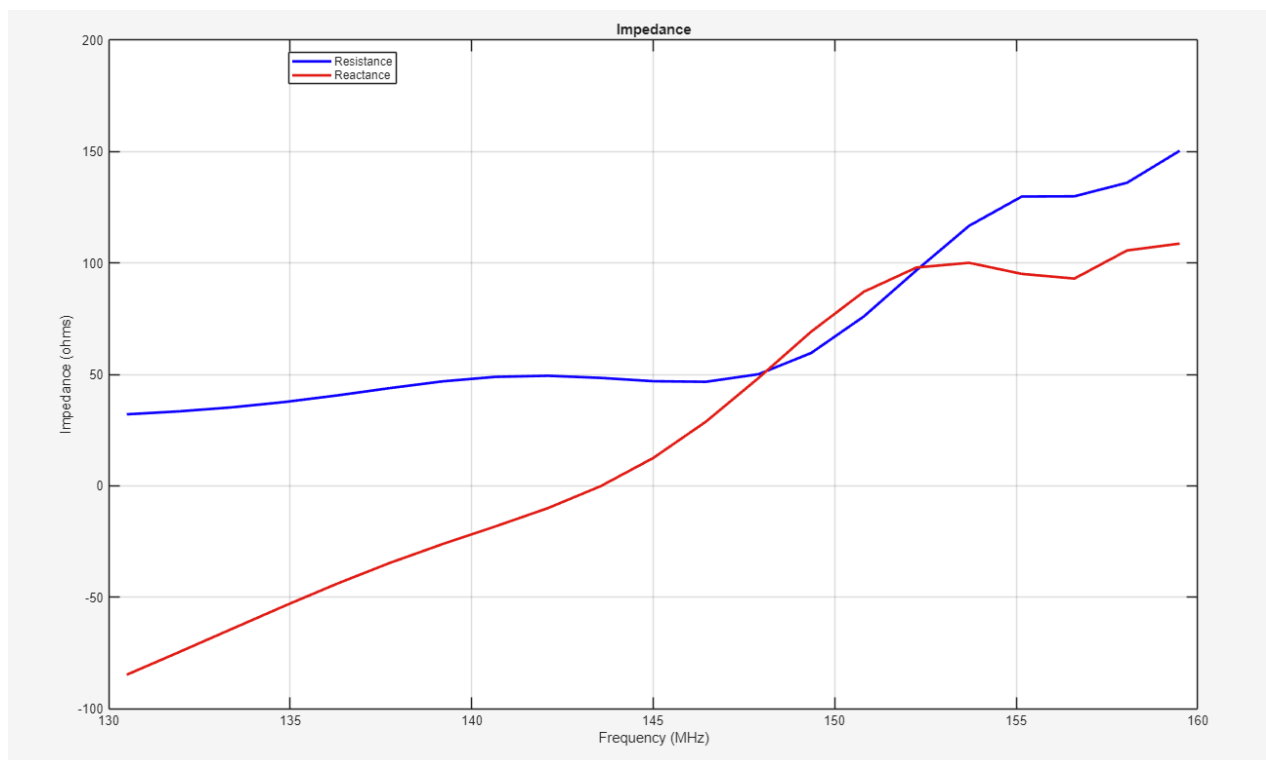


Figure 4: Impedance vs Frequency

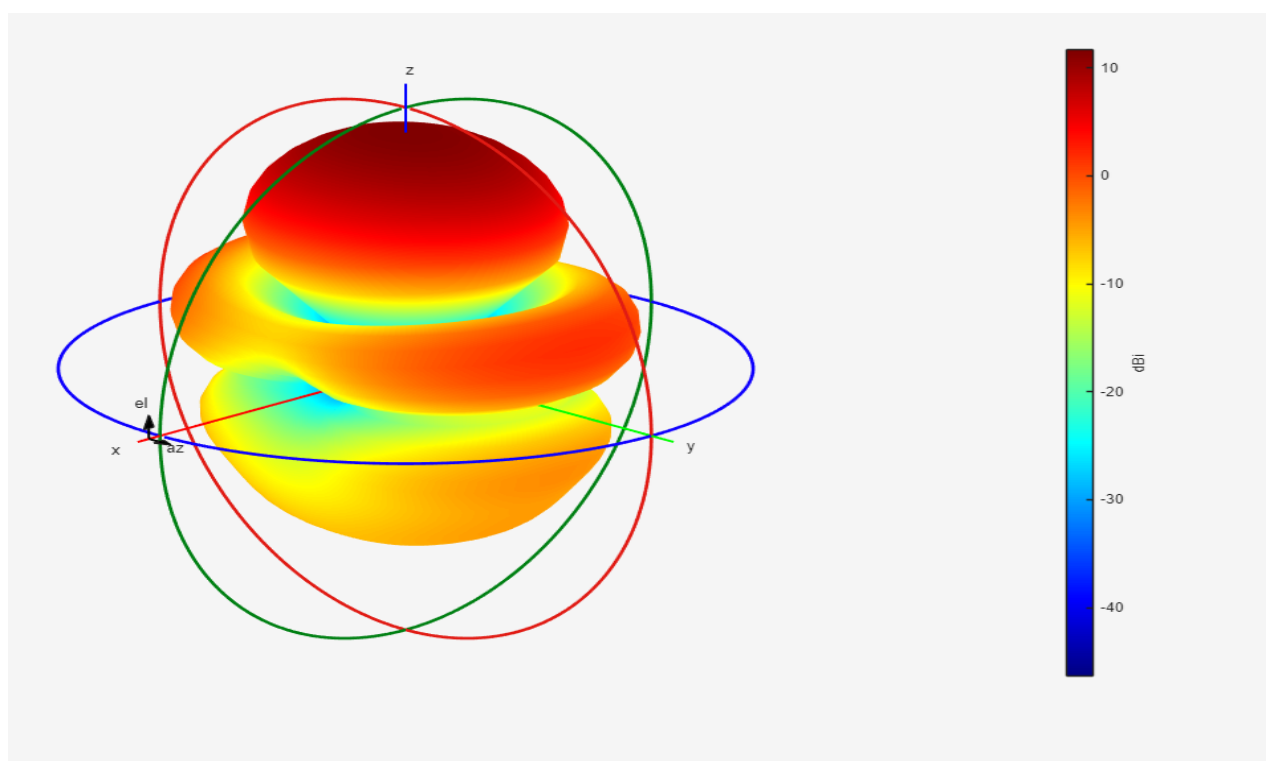


Figure 5: Radiation Pattern

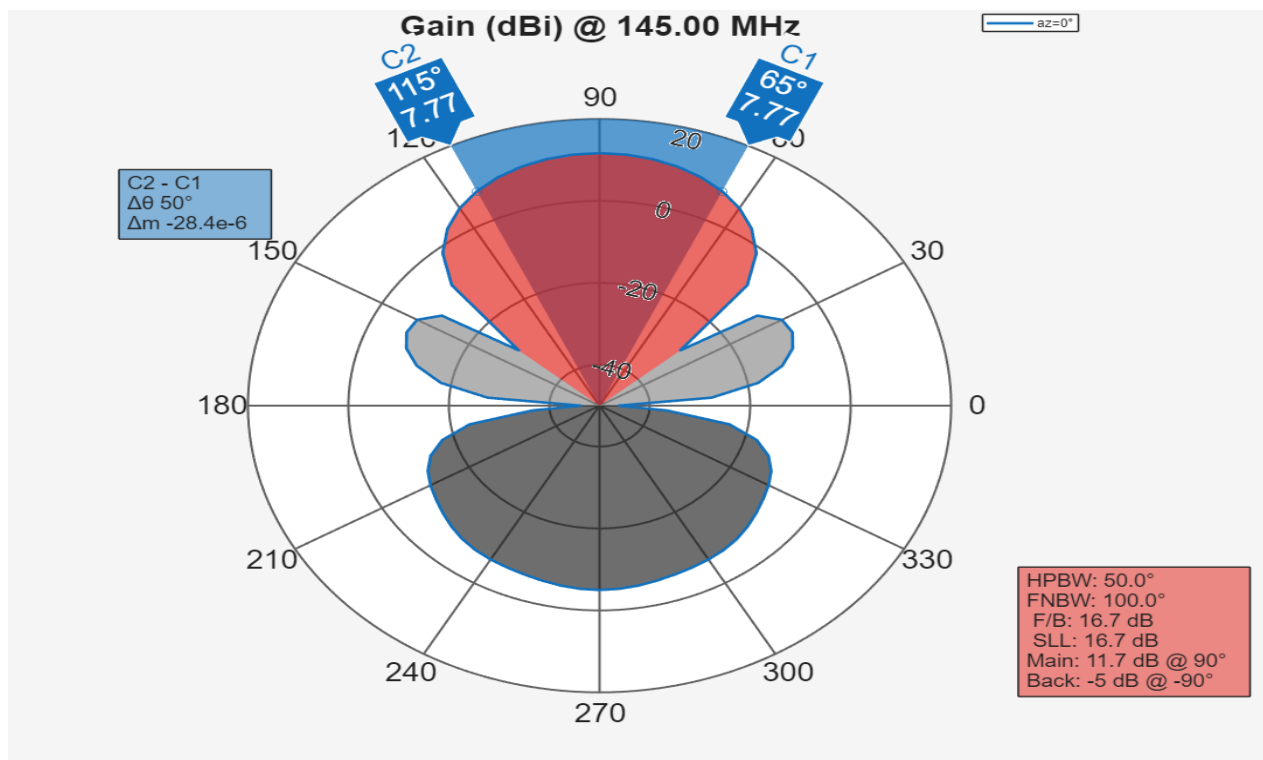


Figure 6: Azimuth Pattern