

## Overview

Southwest Antennas Part # 1000-033 is an omni-directional monopole antenna, designed for operation across the 225 -512 MHz frequency band. The antenna features a flexible whip, with a fully potted and waterproof base that contains the antenna's matching components. This rugged design allows the antenna to be deployed in harsh operating environments.

This antenna offers the same electrical performance as Southwest Antennas Part # 1000-029, with part # 1000-033 featuring a TNC connector with longer barrel for radios with deeper mating connector interfaces.

## Features

- 225 - 512 MHz
- Monopole Design with built in 50 Ohm matching network
- Lightweight Design
- Bandwidth achieved by using internal matching components (within antenna)
- Extremely Rugged Design
- Low Visibility / Reflectivity
- Highly Flexible
- Waterproof & Fully Potted Design
- Black Chrome Non-Rotating TNC(m) RF Connector with Extended Barrel
- 20 Meter Waterproof Design (When Installed)

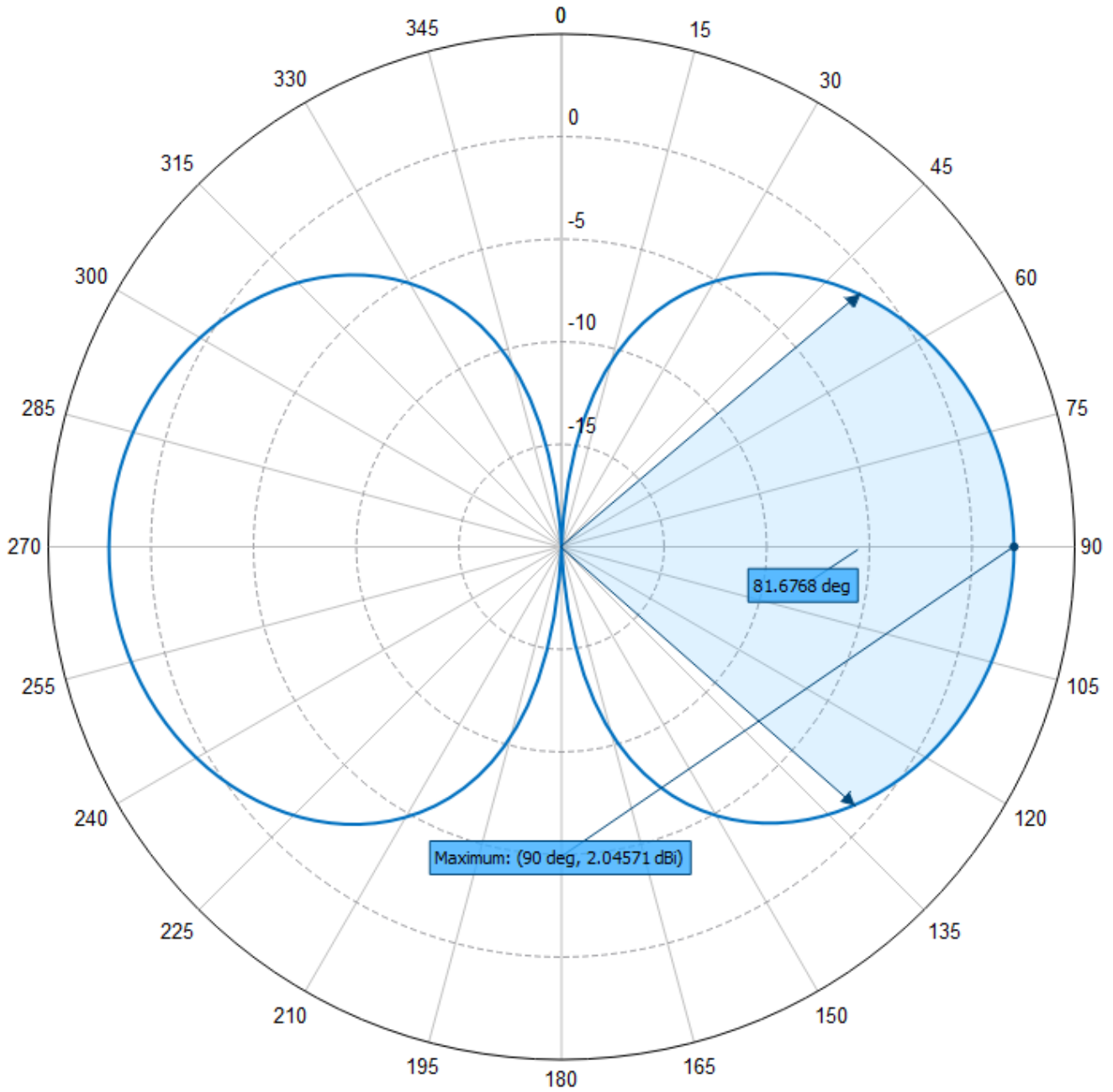
Note 1: The specifications and performance of this antenna are dependent on antenna matching network and counterpoise dimensions.

Note 2: 50 Ohm impedance is measured at antenna connector when mounted to radio counterpoise.



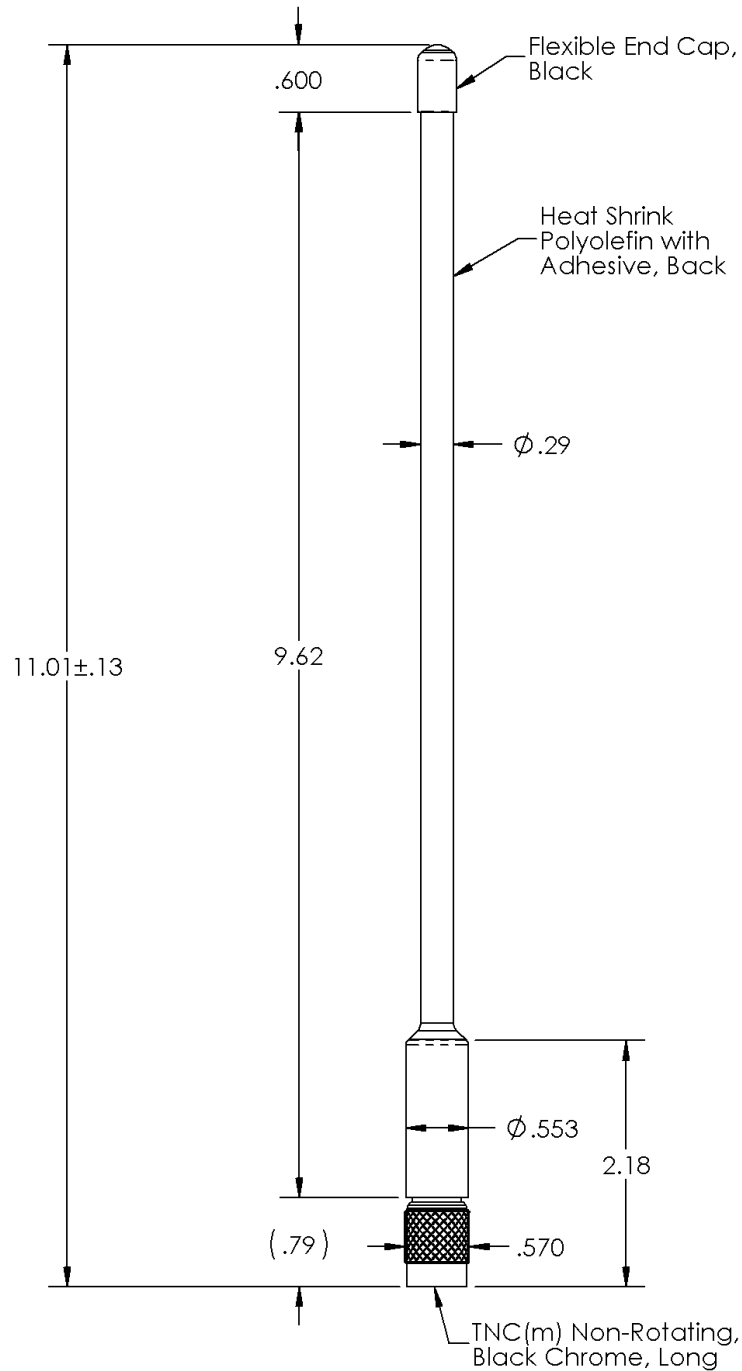
**Product Specifications**

Parameter	Value	Units	Tolerance
Antenna Pattern	Omni Antenna		
Frequency Band	VHF & UHF		
Impedance	50		
Minimum Frequency	0.225 / 225	GHz / MHz	
Maximum Frequency	0.512 / 512	GHz / MHz	
Frequency Bandwidth	0.287 / 287	GHz / MHz	
Maximum VSWR	3.0:1	Ratio	
Maximum Gain	2.00	dBi	When mounted to a counterpoise of 5 x 7 x 20 cm
Polarization	Vertical		
Color	Black		
Maximum RF Input Power	10	Watts	Dependent on matching network losses
Horizontal AZ Beamwidth	360	Degrees	
Vertical EL Beamwidth	82	Degrees	
Radome Material	Black Polyolefin with Black End Cap		
Ground Plane Required	Yes		
RF Connector Type	TNC(m) Non-Rotating		
RF Connector Finish	Black Chrome		
Product Height	11.01 / 279.65	inches / mm	±0.13"
Product Diameter	.570 / 14.478	inches / mm	
Product Weight	2.00 / 56.70	oz / g	



**Elevation Pattern**

Referenced to +5 dBi



### Engineering Drawing

All dimensions are in inches