

## Overview

Southwest Antennas Part # 1000-032 is a unique end-fed half wave dipole omni-directional antenna, designed to operate at a center frequency of 418 MHz ( $\pm 3$  MHz) and offers 3 dBi of peak gain at the horizon. The end-fed design allows the antenna to be fully ground plane independent. Rugged construction makes this antenna weatherproof and suitable for harsh environments and marine saltwater conditions.

## Features

- End-fed half wave dipole design
- Center tuned with integrated matching circuit to 418 MHz
- 3 dBi Gain
- Rugged weatherproof, outdoor design for marine environments
- Ground Plane Independent
- TNC(m) non-rotating black chrome RF connector
- Can be remotely located away from the radio by using long RF cable run

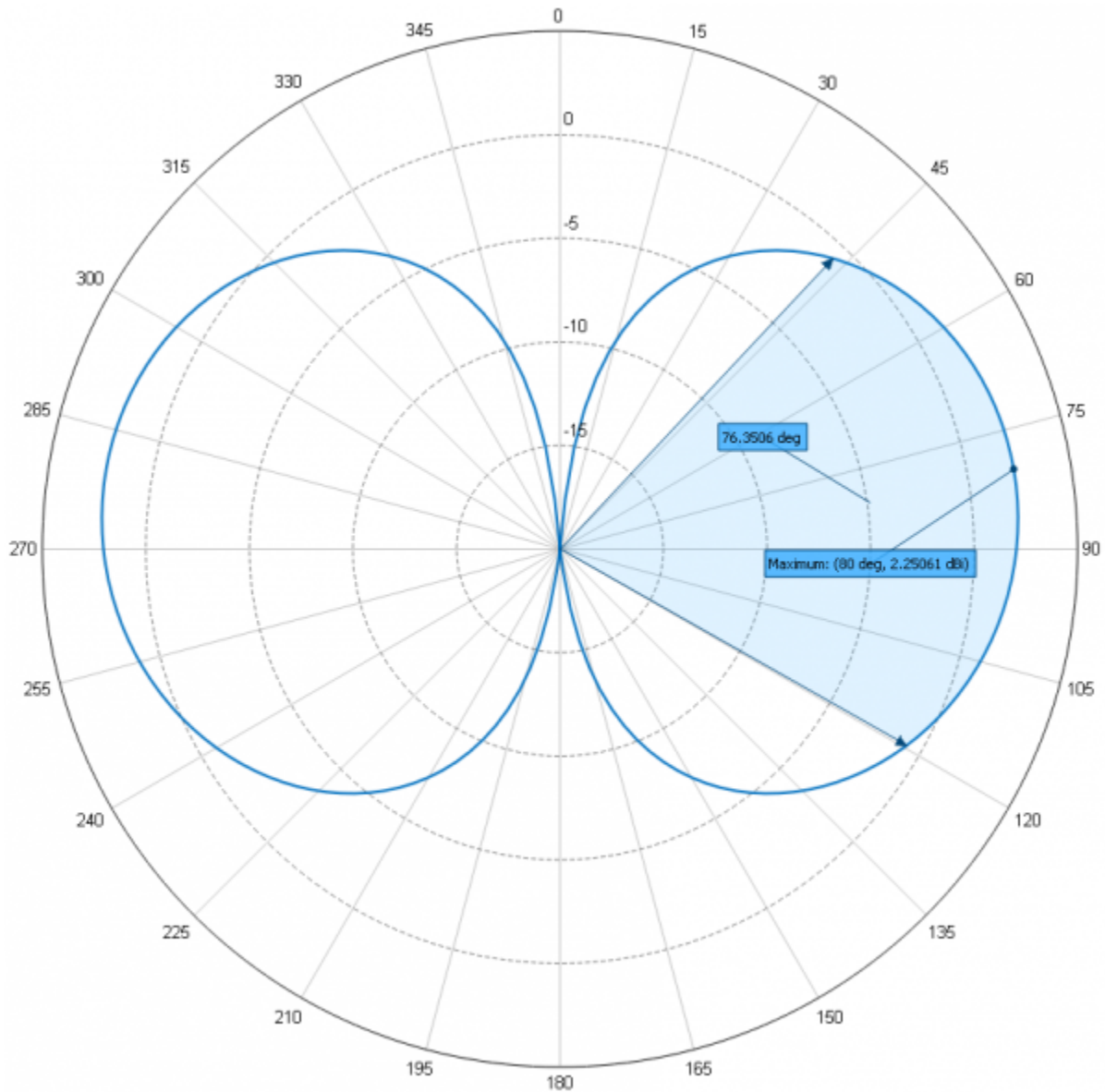
## Applications Include:

- Remote control systems
- Keyless entry systems
- Garage & gate openers
- Lighting control systems
- Security / call systems
- Home & industrial automation
- Wire elimination / wire-free alarm systems
- Maritime safety systems
- Man overboard receivers
- Wireless doorbell systems
- Wireless smoke detector receivers



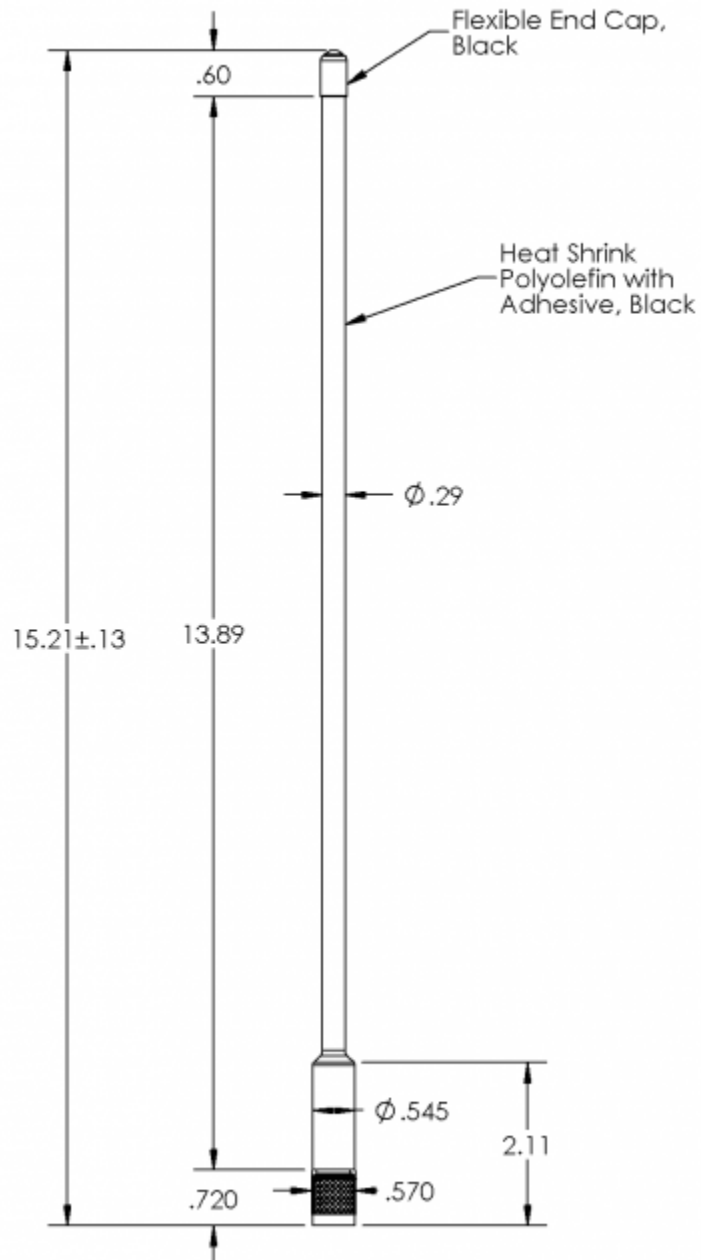
## Antenna Specifications

Parameter	Value	Units	Tolerance
Antenna Pattern	Omni Antenna		
Frequency Band	UHF		
Impedance	50	Ohms	
Minimum Frequency	0.415 / 415	GHz / MHz	
Maximum Frequency	0.421 / 421	GHz / MHz	
Frequency Bandwidth	0.006 / 6	GHz / MHz	
Maximum VSWR	<1.5:1	Ratio	
Maximum Gain	3	dBi	
Polarization	Vertical		
Maximum RF Input Power	100	Watts	
Horizontal (AZ) Beamwidth	360	Degrees	
Vertical (EL) Beamwidth	77	Degrees	
Mount Style	RF Connector		
Immersion	Must survive harsh ocean conditions, solar radiation / UV rated and impervious to salt water sea spray. Submersible to 20-meters when RF connector is mated.		
RF Connector Type	TNC(m) Non-Rotating		
RF Connector Finish	Black Chrome		
Antenna Operating Temp Range	-40 to +85	C	
Product Height	15.210 / 386.334	inches / mm	±.13"
Product Diameter	0.570 / 14.478	inches / mm	Maximum diameter of RF connector (0.29" diameter whip)
Product Weight	3.00 / 85.05	oz / grams	



**Elevation Pattern**

Referenced to +5 dBi



### Engineering Drawing

All dimensions are in inches