

## Overview

Southwest Antennas part # 1001-256 is a rugged, small omni-directional antenna that offers 4.4 - 5.9 GHz frequency coverage with 3.2 dBi of peak gain.

This antenna features an integrated strain relief spring, covered by a weatherproof heatshrink seal. The integrated strain relief allows these antennas to be deployed on small tactical radio systems, MIMO / MANET mesh radios, unmanned systems, or other applications where the antenna may be bumped by a user's body or other object. The included strain relief helps protect the the attached radio and RF connector from damage.

The small form factor of the antenna makes it ideal for applications where SWAP-C considerations are paramount such as body worn or handheld radio systems, or deployment on unmanned air vehicles or unmanned ground vehicles.

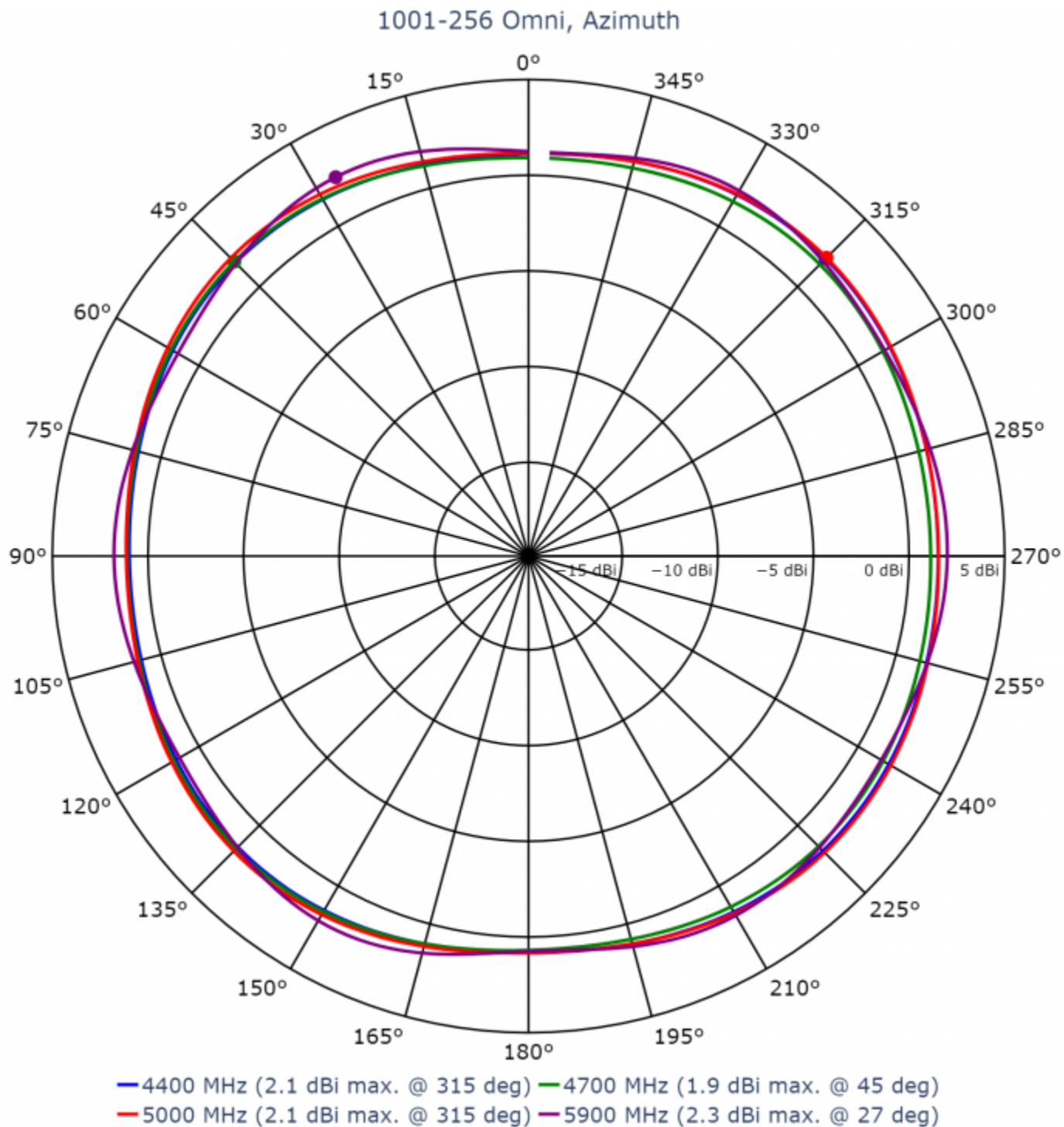
## Features:

- Broad band coverage
- 4.4 - 5.9 GHz frequency coverage
  - Optimized for 4.91 - 4.96 GHz band operation
- Half wave dipole design
- Compact form factor
- 3.2 dBi peak gain
- 50W power handling
- Integrated strain relief spring with heatshrink cover



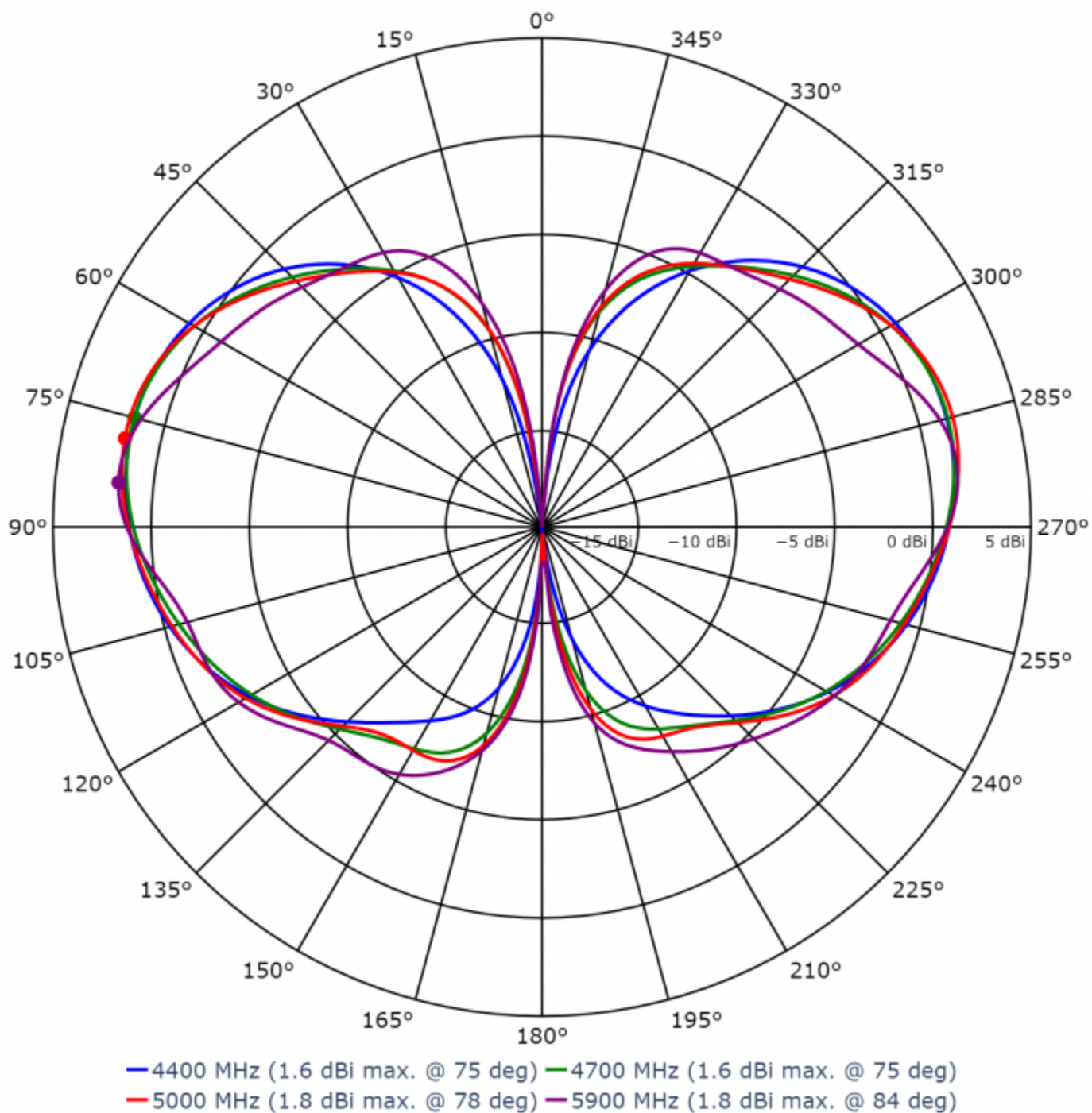
## Antenna Specifications

Parameter	Value	Units	Tolerance
Antenna Pattern	Omni Antenna		
Frequency Band	C		
Impedance	50	Ohms	
Minimum Frequency	4.4 / 4,400	GHz / MHz	
Maximum Frequency	5.9 / 5,900	GHz / MHz	
Frequency Bandwidth	1.5 / 1,500	GHz / MHz	
Maximum VSWR	2:1	Ratio	(1.5:1 from 4.9 - 5.0 GHz)
Maximum Gain	3.2	dBi	
Polarization	Vertical		
Maximum RF Input Power	50	Watts	
Horizontal (AZ) Beamwidth	360	Degrees	
Vertical (EL) Beamwidth	47 - 65	Degrees	(61 deg typical @ 4.9 GHz)
Ground Plane Required	No		
Color	Flat Black		
Maximum Wind Velocity	124 / 200	mph / kph	
RF Connector Type	SMA(m) Non-Rotating		
Product Height	3.11 / 78.99	inches / mm	±0.13"
Product Diameter	0.56 / 14.27	inches / mm	+0.20" / -.000"
Product Weight	1.1 / 31.2	oz / grams	



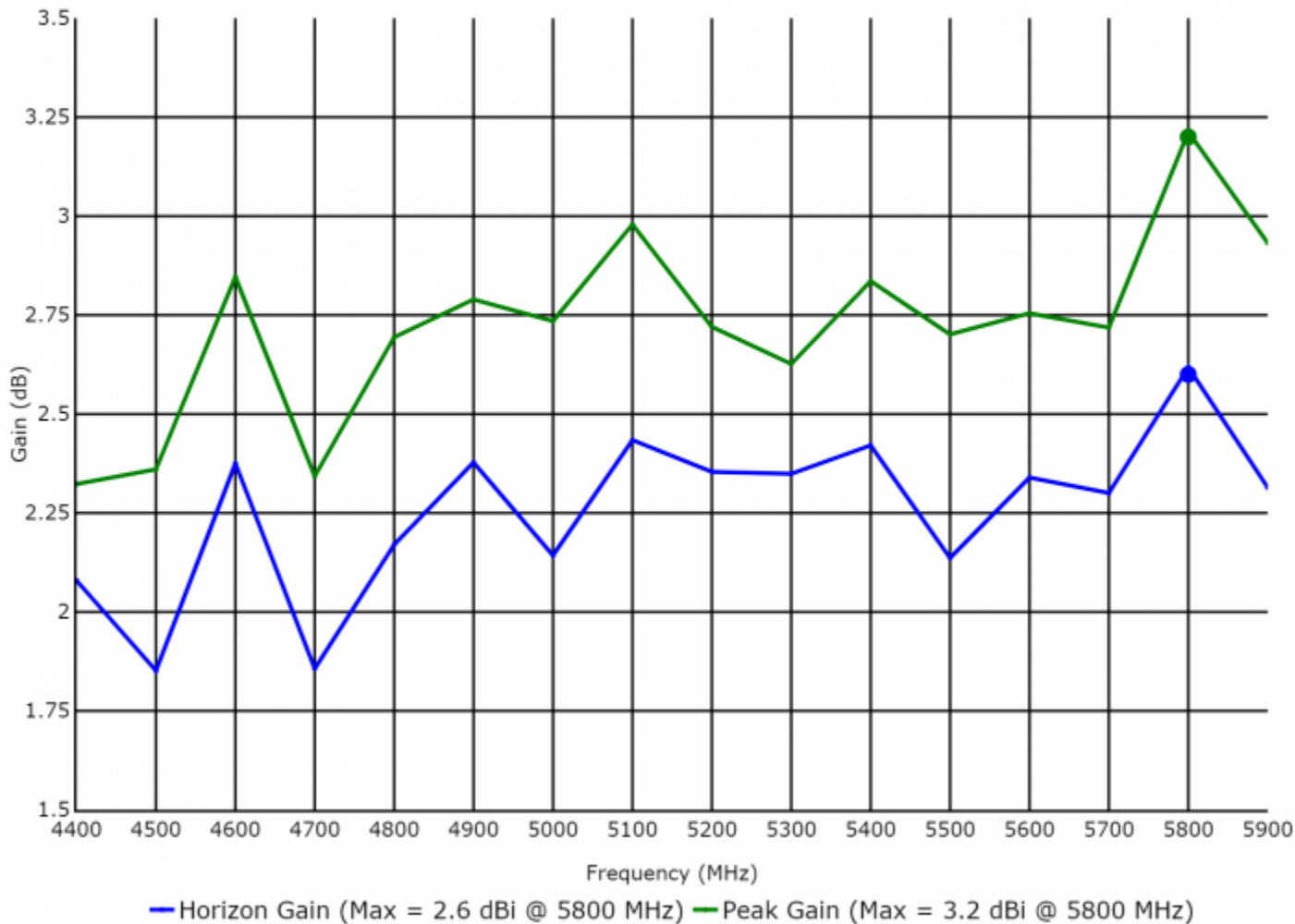
**Azimuth Pattern**

1001-256 Omni, Elevation

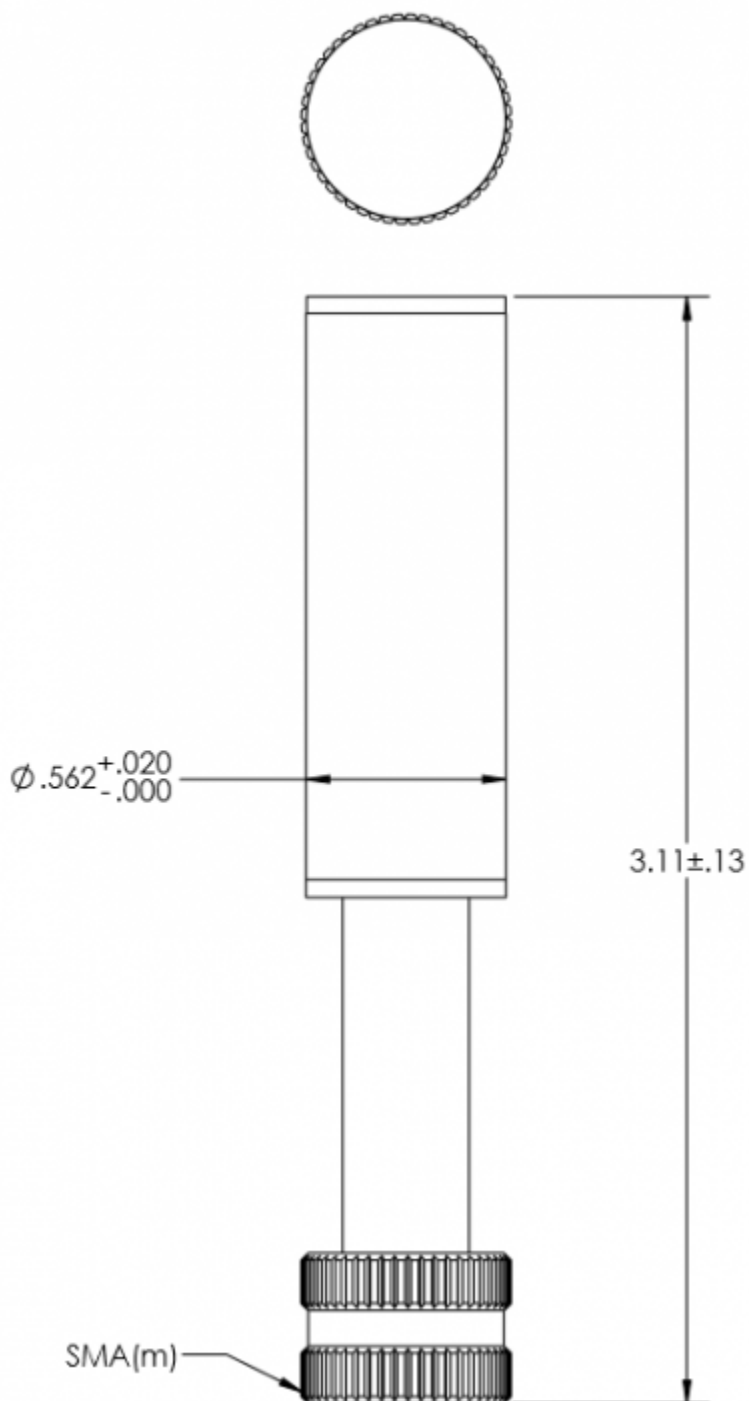


**Elevation Pattern**

1001-256 Omni, Gain vs Freq



Gain vs. Frequency Plot



**Engineering Drawing**

All dimensions are in inches