

## Overview

Southwest Antennas part # 1000-048 is a high-performance monopole whip antenna designed for operation from 1.81 - 1.85 GHz, and offers 0.8 dBi of peak gain.

This rugged antenna features a fully potted and waterproof base in conjunction with a tough, flexible whip element making this antenna ideal for tactical radio systems and all-weather deployment in harsh conditions.

The black chrome SMA(m) RF connector features an extended shroud which offers additional protection for the mated RF connectors when attached to a radio.

## Features

- 1,810 - 1,850 MHz frequency coverage
- Monopole Design with built in 50 Ohm matching network
- Lightweight, extremely rugged design
- Low visibility / reflectivity matte finish
- Highly flexible whip
- Waterproof to 20 meters (65.6 ft) & fully potted design for all-weather operation in harsh conditions
- Black chrome non-rotating SMA(m) RF connector with extended body shroud

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

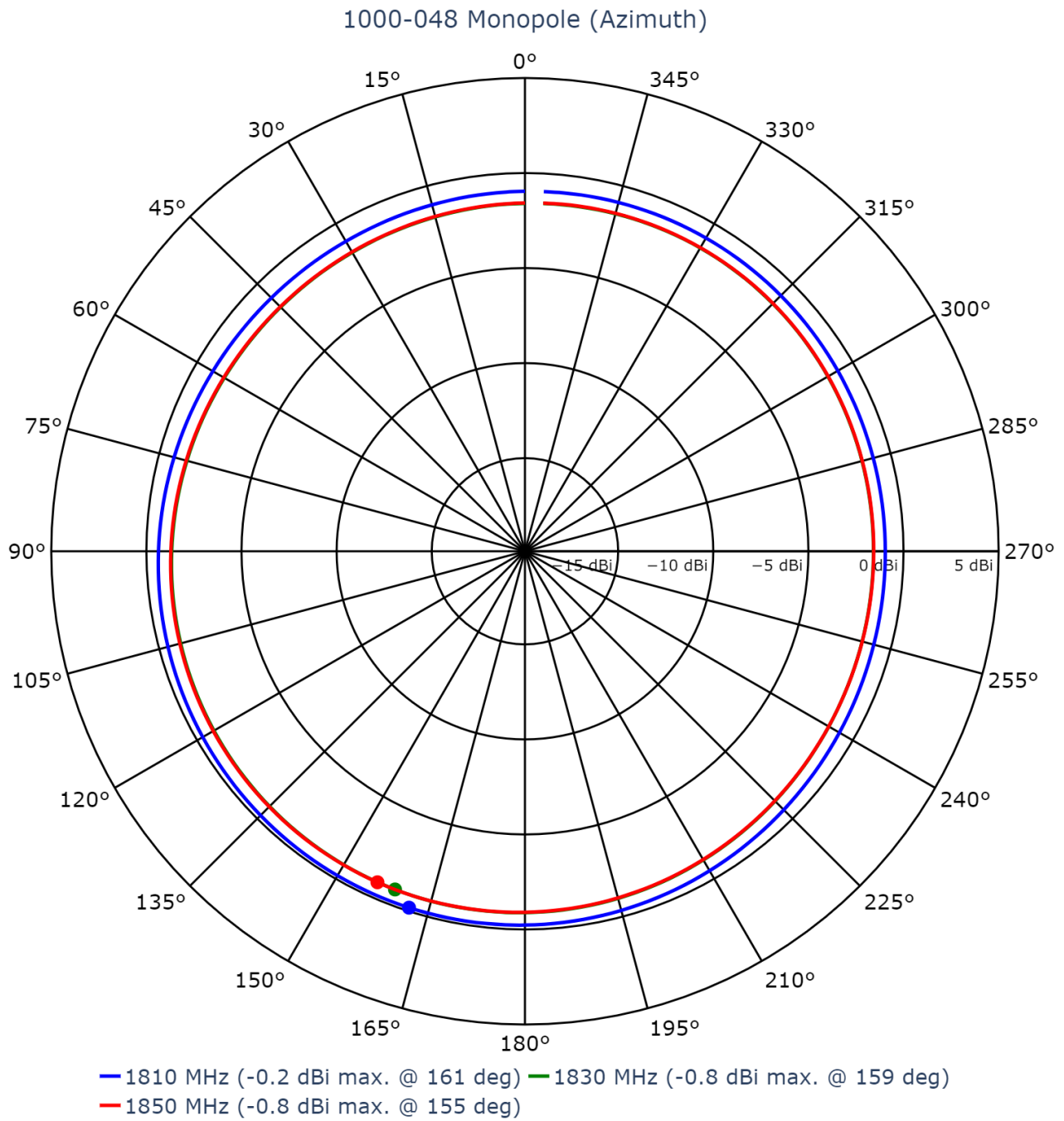
Note 2: 50 Ohm impedance is measured at antenna connector when mounted to radio counterpoise.



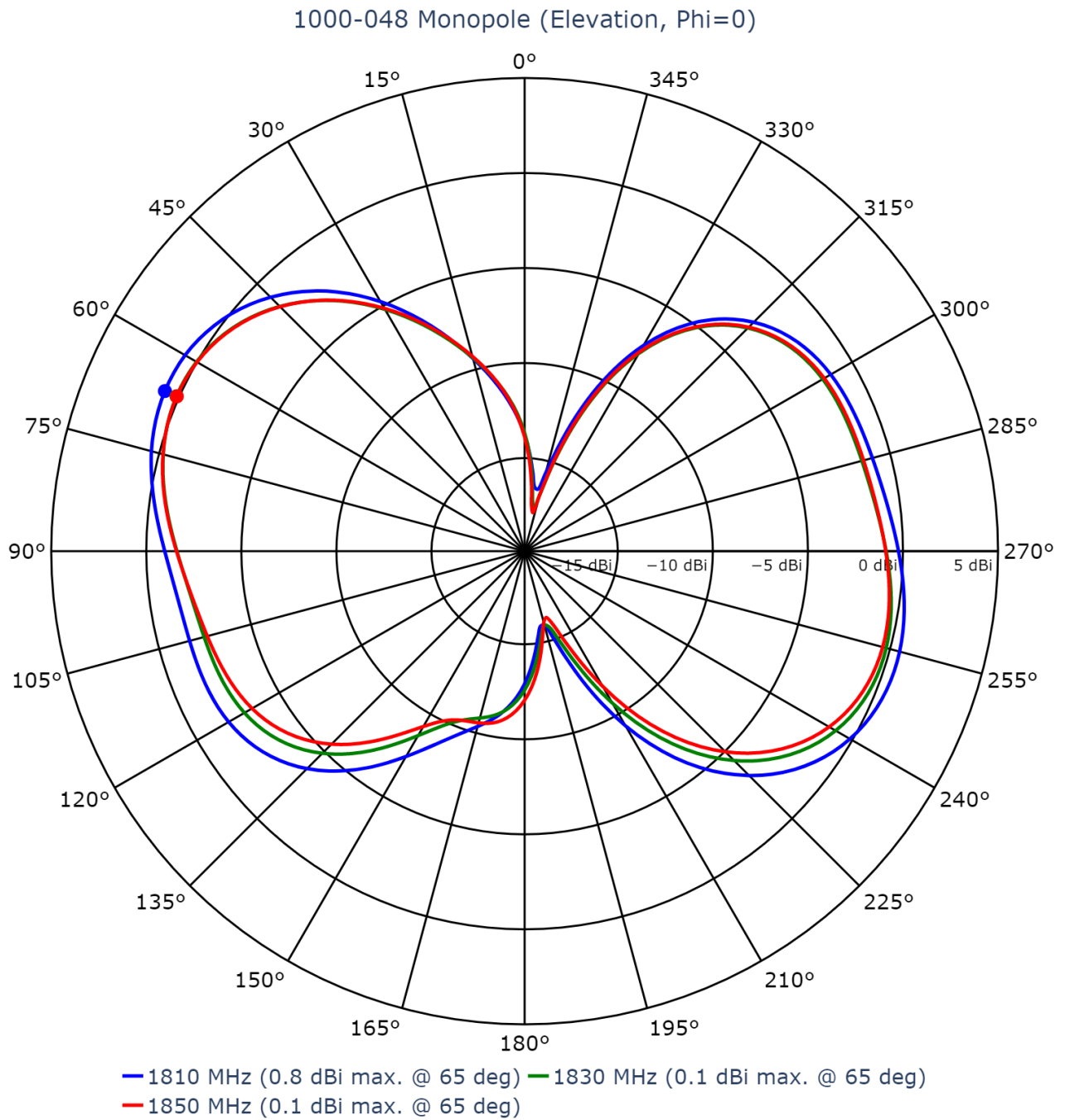
### Product Specifications

Parameter	Value	Units	Tolerance
Antenna Pattern	Omni Antenna		
Frequency Band	L		
Impedance	50		
Minimum Frequency	1.81 / 1,810	GHz / MHz	
Maximum Frequency	1.85 / 1,850	GHz / MHz	
Frequency Bandwidth	0.04 / 40	GHz / MHz	
Maximum VSWR	1.5:1	Ratio	
Maximum Gain	0.80	dBi	When mounted to a counterpoise of 1.29" x 1.86" x 3.34"
Polarization	Vertical		
Color	Black		
Maximum RF Input Power	8	Watts	
Horizontal AZ Beamwidth	360	Degrees	
Vertical EL Beamwidth	73 - 99	Degrees	
Radome Material	Black Polyolefin with Black End Cap		
Ground Plane Required	Yes		
Immersion	Waterproof to 20 meters / 65.6 ft when fully mated		
RF Connector Type	SMA(m) Non-Rotating		
RF Connector Finish	Black chrome finish, extended body shroud		
Operating Temperature Range	-20 to +60	C	
Storage Temperature Range	-40 to +75	C	

Parameter	Value	Units	Tolerance
Product Height	4.13 / 104.90	inches / mm	±0.13"
Product Diameter	.570 / 14.478	inches / mm	At widest spot on base
Product Weight	1.30 / 36.85	oz / g	

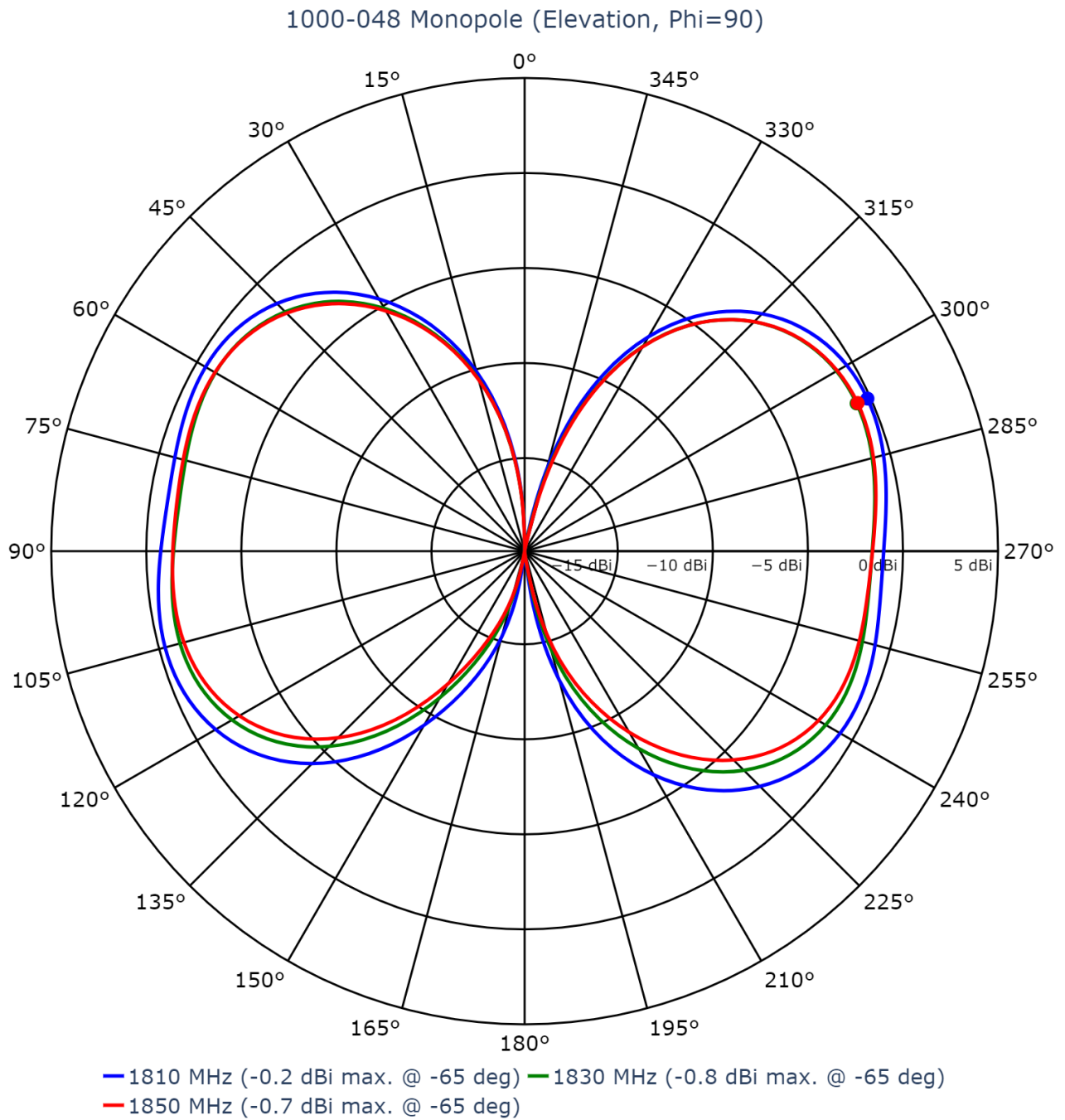


**Azimuth Pattern**



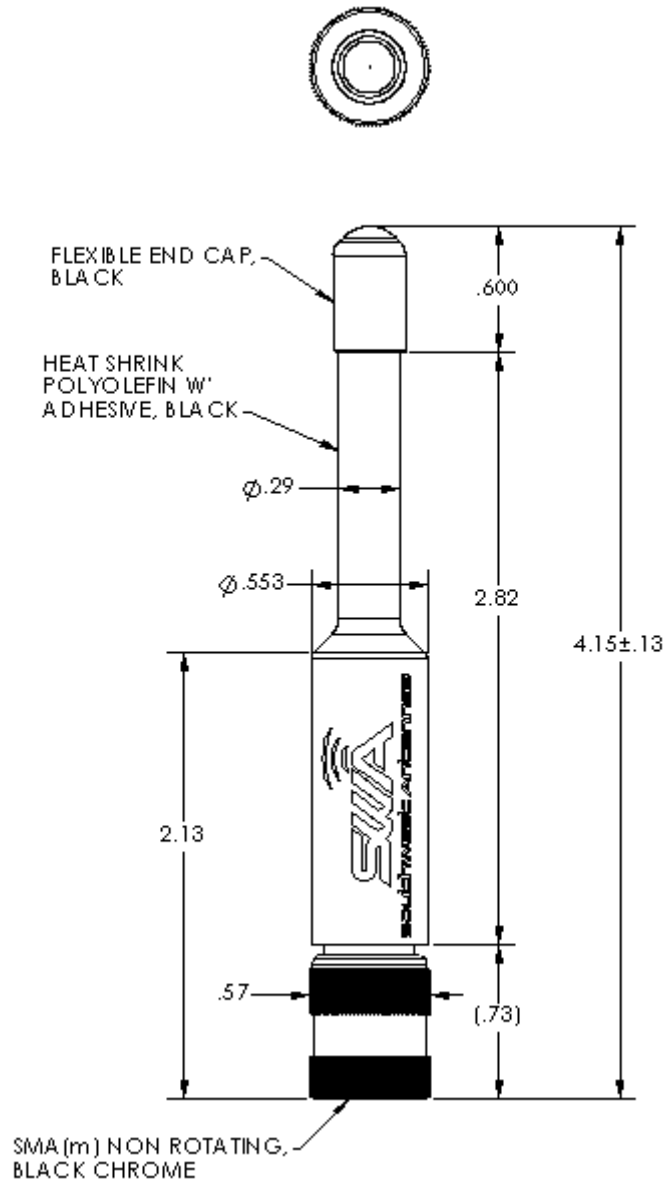
### Elevation Pattern

Phi = 0



**Elevation Pattern**

Phi = 90



### Engineering Drawing

All dimensions are in inches