

Overview

Southwest Antennas Part # 1032-013 is an omni-directional bifilar antenna with an operational frequency of 2.1 - 2.5 GHz and 3.7 dBic gain. This antenna includes an internal LNA with 13 dB of active gain.

The antenna's bifilar design and right-hand circular polarization (RHCP) make it ideal for communication with overhead aircraft or UAVs due to the lack of keyhole null in the antenna's radiation pattern.

Features:

- Broad Band Coverage
- 2.1 - 2.5 GHz
- RHCP Bifilar Design
- 3.7 dBic Passive Gain
- 13 dB LNA Gain
- 1.0 dB LNA Noise Figure
- Line Power: 60 mA @ 6 to 24 VDC
- Rugged G10 Radome, Flat Black
- End Cap Lettering "2.1 - 2.5"

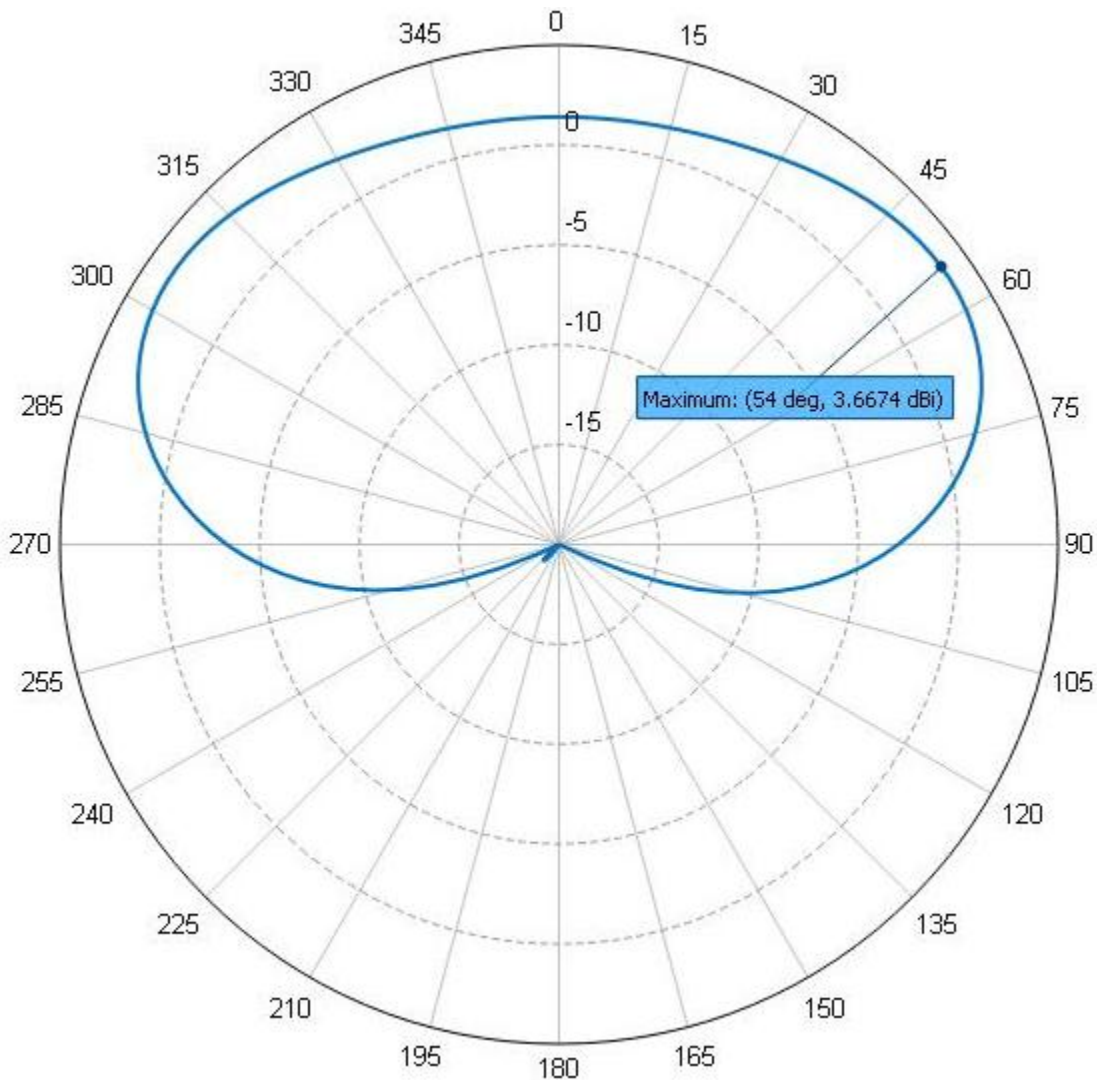


Antenna Specifications

Parameter	Value	Units	Tolerance
Antenna Pattern	Hemispherical Antenna		
Frequency Band	S		
Impedance	50	Ohms	
Minimum Frequency	2.1 / 2,100	GHz / MHz	
Maximum Frequency	2.5 / 2,500	GHz / MHz	
Frequency Bandwidth	0.4 / 400	GHz / MHz	
Maximum VSWR	<2:1	Ratio	
Maximum Gain	3.70	dBic	
Polarization	RHCP		
Maximum RF Input Power	50	Watts	
Horizontal (AZ) Beamwidth	360	Degrees	
Vertical (EL) Beamwidth	157	Degrees	
Ground Plane Required	No		
Color	Black		
Maximum Wind Velocity	124 / 200	mph / kph	
RF Connector Type	Type-N(m)		
RF Connector Features	Black Chrome		
Product Height	12.44 / 315.98	inches / mm	±0.13"
Product Diameter	1.58 / 40.13	inches / mm	+0.02" / -.000"
Product Weight	4.5 / 127.6	oz / grams	

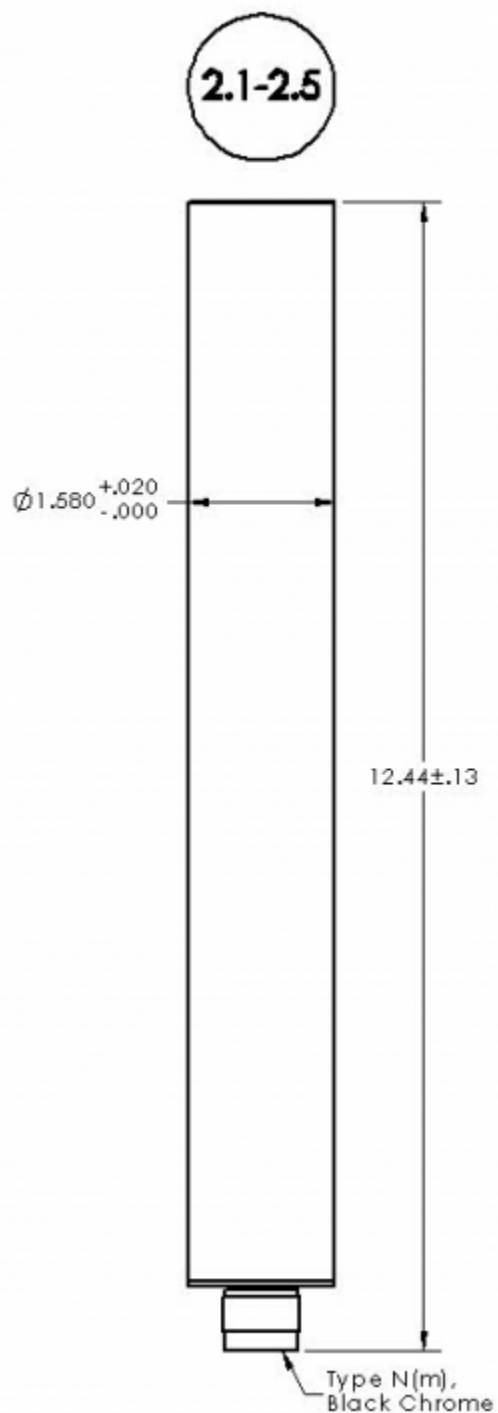
LNA Specifications

Parameter	Value	Units	Tolerance
LNA Impedance	50	Ohms	In & Out
LNA Min Frequency	0.5 / 500	GHz / MHz	
LNA Max Frequency	4 / 4,000	GHz / MHz	
LNA Gain	13	dB	@ 2.3 GHz
LNA NF	1.0	dB	@ 2.3 GHz
Output P1dB	22.5	dBm	@ 2.3 GHz
Output IP3	33.7	dBm	Referred to LNA output
LNA DC Current	60	mA	+6V to +24V Line Powered



Elevation Pattern

Referenced to 3.7 dBic|Passive gain shown, LNA add 13 dB of in-line amplification



Engineering Drawing

All dimensions are in inches