

BROADBAND LINEARLY POLARIZED ANTENNA

2 GHz TO 15 GHz

SINU2000-LP

KEY FEATURES

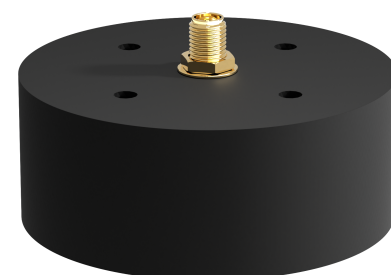
- 2 to 15 GHz continuous operation in a single element
- Cavity-backed unidirectional pattern for platform mounting
- Wide-beam coverage – symmetric E- and H-plane beams, $\sim 130^\circ$ –10 dB beamwidth for broad angular field of view
- Linear polarization with well-matched VSWR across the full band
- Low weight and compact size
- Ideal for EW, ES/SIGINT, spectrum monitoring, and broadband test

DESIGN SPECIFICATIONS

- Design: Cavity-backed 2-arm sinuous antenna
- Operating Frequency: 2.0 GHz to 15.0 GHz
- Polarization: Linear (horizontal/vertical based on orientation)
- Connector: SMA Female
- Construction: Anodized aluminum cavity with top PCB
- Mounting: #10-24 screw holes (see diagram on page 5)
- Diameter: 2.5 in [63.5 mm]
- Height: 1.0 in [25.4 mm] (not including SMA connector)
- Weight: 2.1 oz [60 g]



SINU2000-LP (Top)

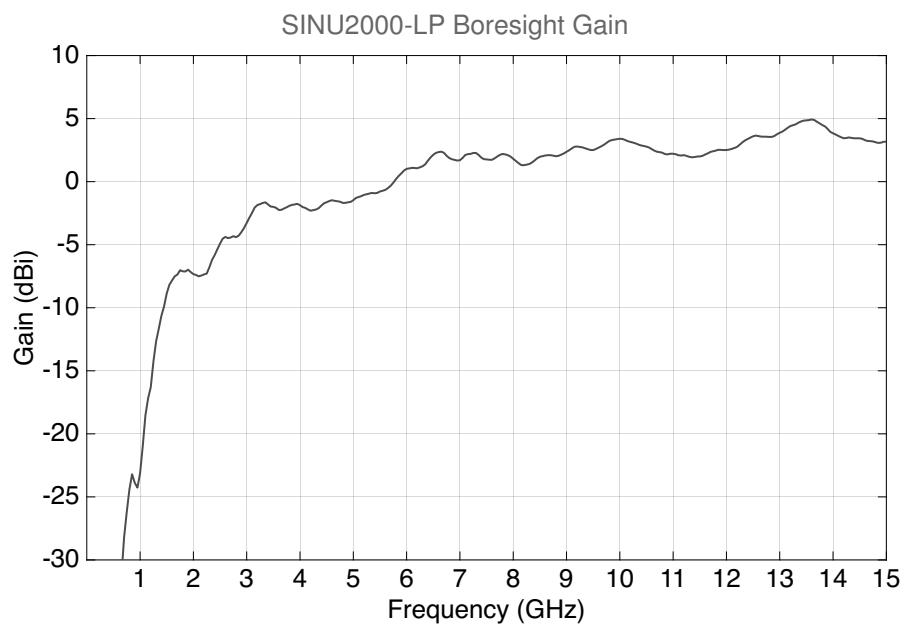
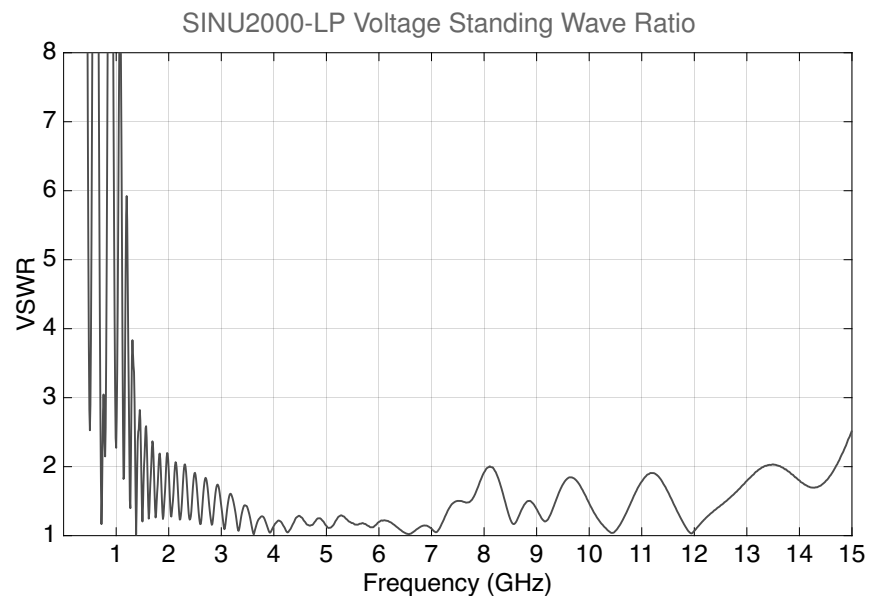


SINU2000-LP (Bottom)

PERFORMANCE SPECIFICATIONS

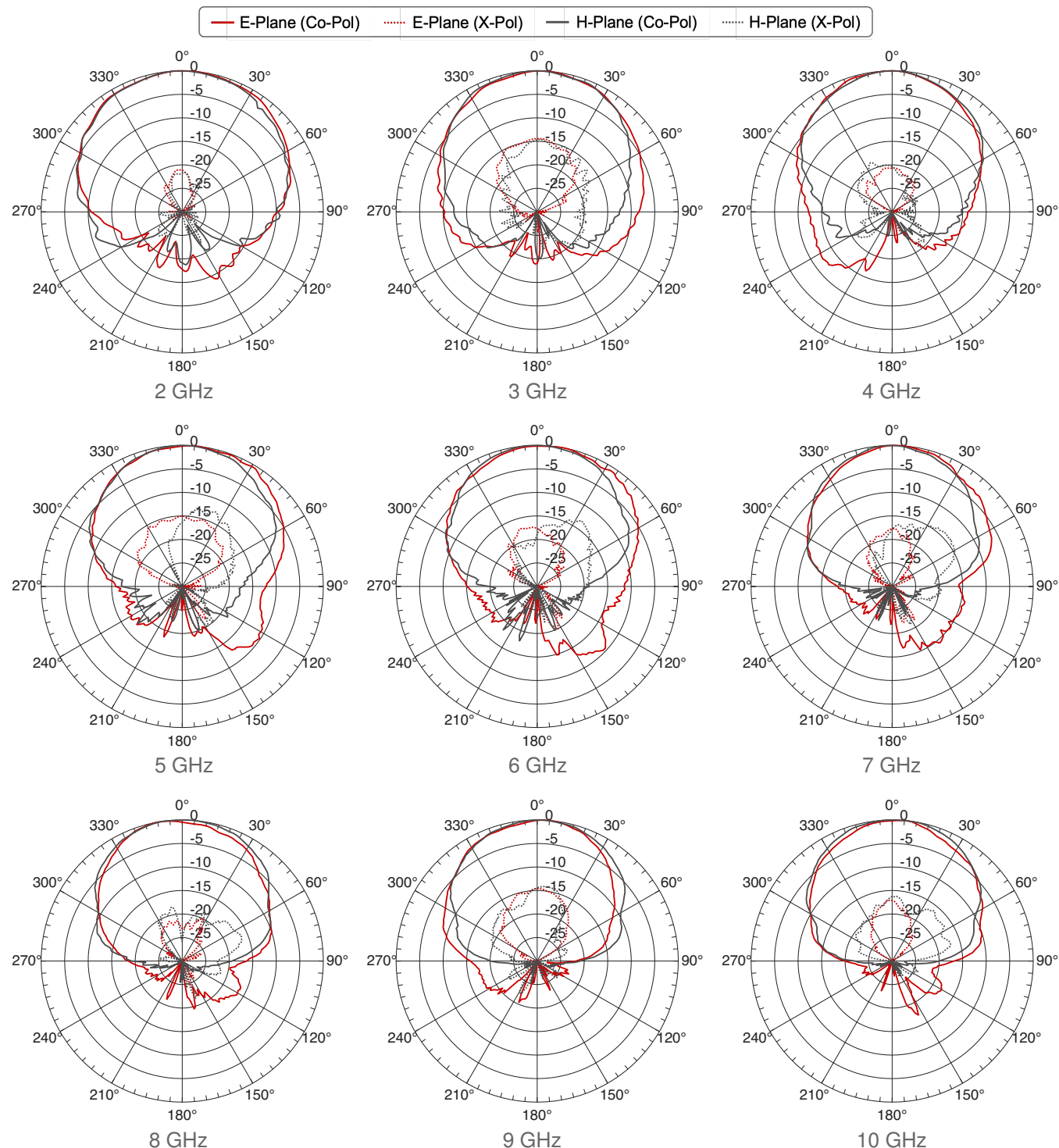
Parameter		Frequency	Min.	Typ.	Max.	Unit
VSWR		2.0 GHz – 3.0 GHz	1.1	1.5	2.5	–
		3.0 GHz – 12.0 GHz	1.02	1.4	2.5	
		12.0 GHz – 15.0 GHz	1.05	1.8	3.0	
Gain (Realized, Boresight)		2.0 GHz – 3.0 GHz	-10.0	-5.5	-1.0	dBi
		3.0 GHz – 6.0 GHz	-5.0	-1.5	2.5	
		6.0 GHz – 15.0 GHz	0.0	2.5	6.0	
HPBW	E-Plane	2.0 GHz – 15.0 GHz	55	75	110	deg.
	H-Plane		55	75	110	
10-dB BW	E-Plane	2.0 GHz – 15.0 GHz	120	130	180	deg.
	H-Plane		120	130	180	
Cross-Polarization (XPD, Boresight)		2.0 GHz – 15.0 GHz	10	16	30	dB
Input Power (CW)		2.0 GHz – 15.0 GHz	–	–	10	W
Impedance		–	50			Ω
Connector		–	SMA (female)			–

TYPICAL PERFORMANCE



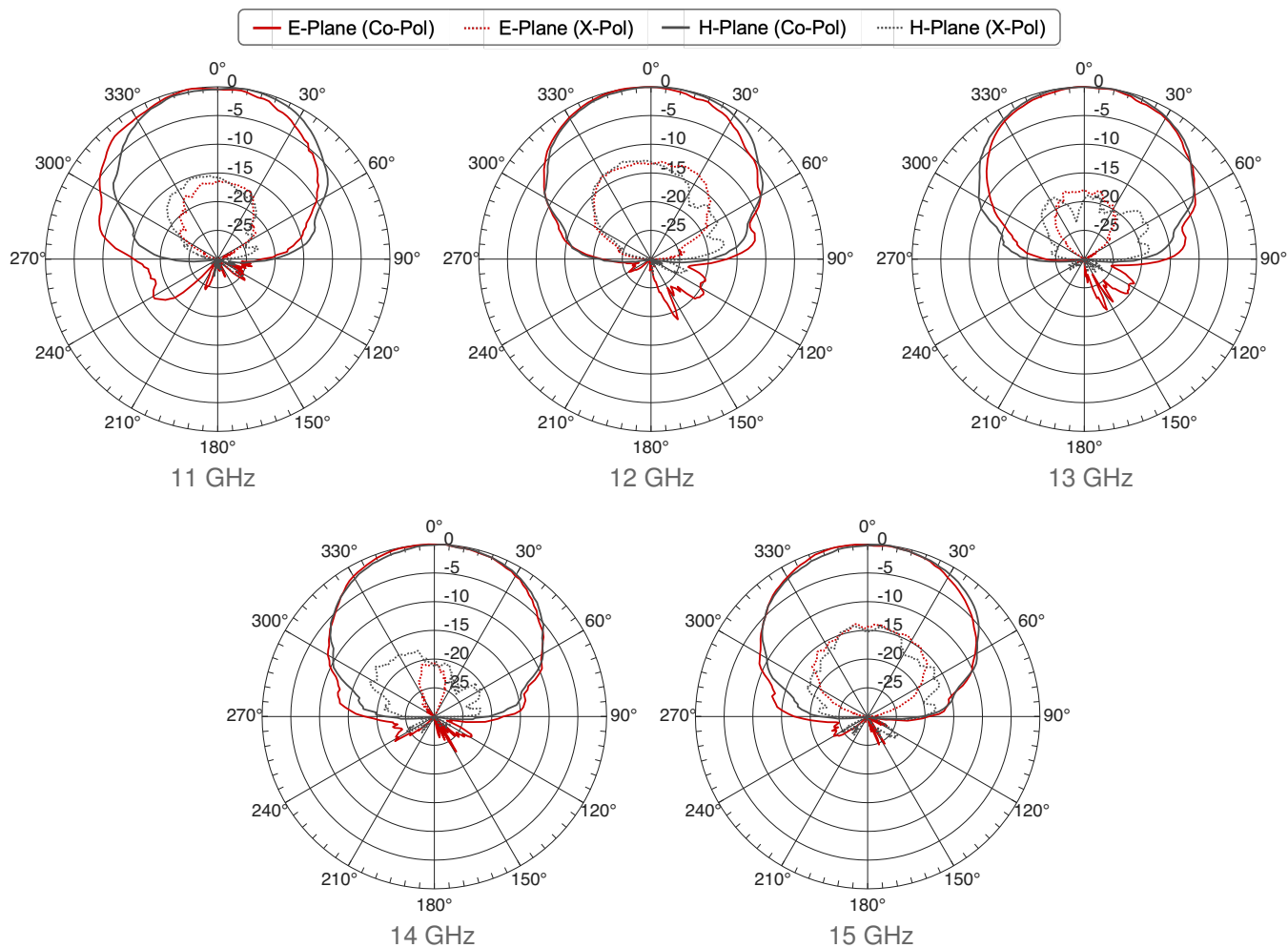
TYPICAL PERFORMANCE (CONT.)

SINU2000-LP Normalized Radiation Patterns

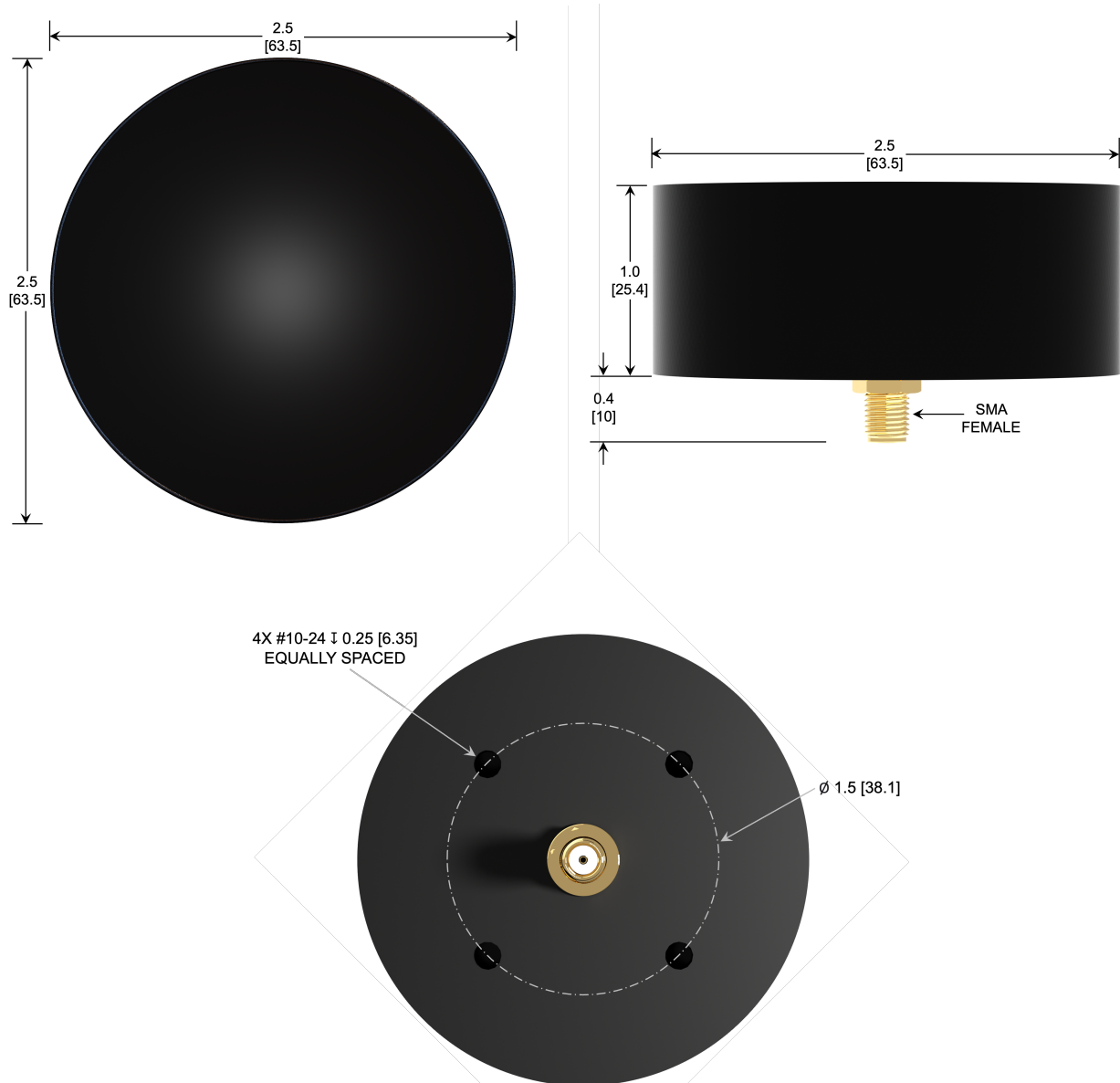


TYPICAL PERFORMANCE (CONT.)

SINU2000-LP Normalized Radiation Patterns (cont.)



CAD DRAWING



NOTES:

1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL
2. DIMENSIONS ARE IN INCHES [mm]
3. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME