

M1580HCT-P-SMA

GPS/BEIDOU/GLONASS PASSIVE ANTENNA

Part #: 100-00180-01



Description

The M1580HCT-P-SMA is a high performance antenna designed for the GPS/Beidou/Glonass frequency bands. The antenna is built on proprietary Maxtena Helicore® technology. This technology provides exceptional pattern control, polarization purity and high efficiency in a very compact form factor. The M1580HCT-P-SMA features a very rugged housing with an integrated SMA male connector and is rated IP-67 when mounted. This product is designed for applications requiring high quality GPS/Beidou/Glonass reception and is ideal for handheld and body worn applications. The very low axial ratio allows the antenna to have outstanding multipath rejection and operate with precision in the most challenging locations.

Electrical Specifications

Parameter	Specification
Frequency	1561 MHz (Beidou) 1575 MHz (GPS) 1602 MHz (Glonass)
Polarization	RHCP
Antenna Element Peak Gain	1.3 dBic (Beidou) 1.8 dBic (GPS) -1.7 dBic (Glonass)
Axial Ratio	0.2 dB (typical)
VSWR	1.5 (max)
Impedance	50 Ω
Operating temp.	from -40°C to +85°C
RF Connector	SMA male

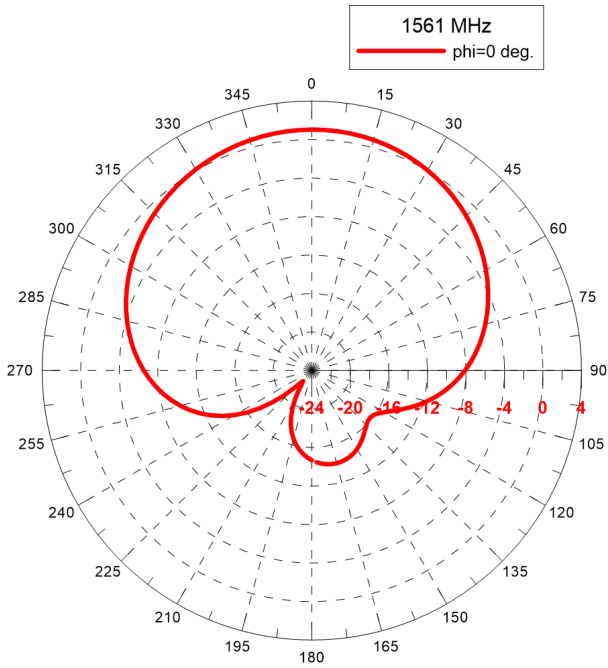
Features

- Very low axial ratio
- Superb multipath rejection
- IP-67 Rated
- Ground plane independent
- Omni Directional
- High Gain & Efficiency

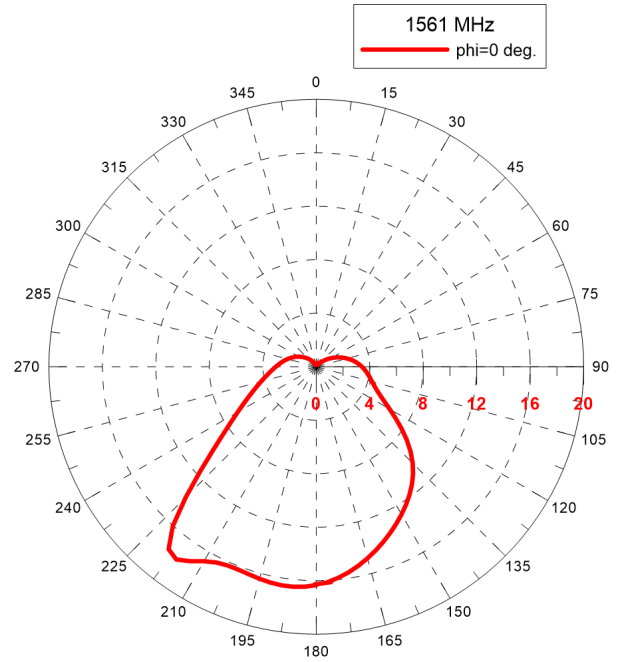
Applications

- Handheld Devices
- Military Radios & Manpacks
- Asset tracking
- Security & Surveillance
- IOT applications
- Drones & UAV
- Navigation devices
- Marine

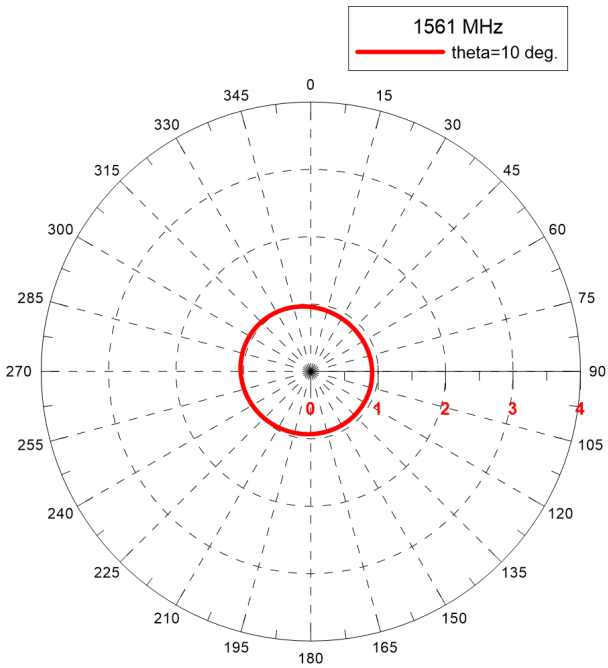
Beidou RHCP Gain-Elevation cut



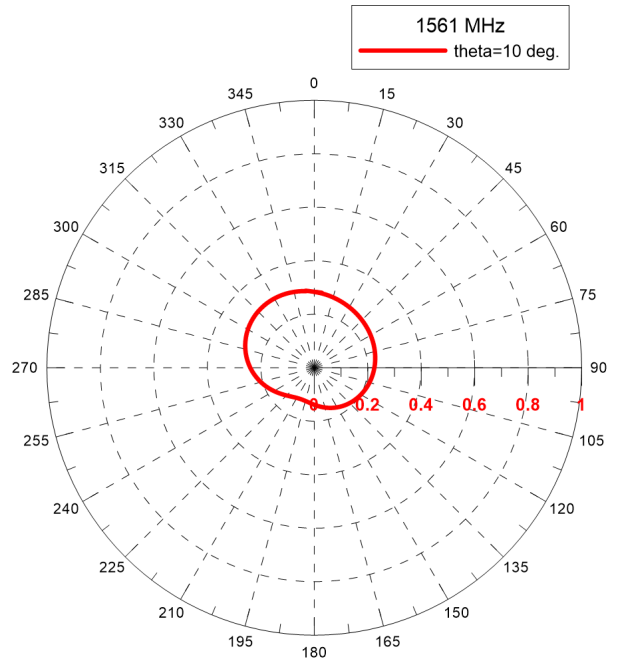
Beidou Axial Ratio-Elevation cut



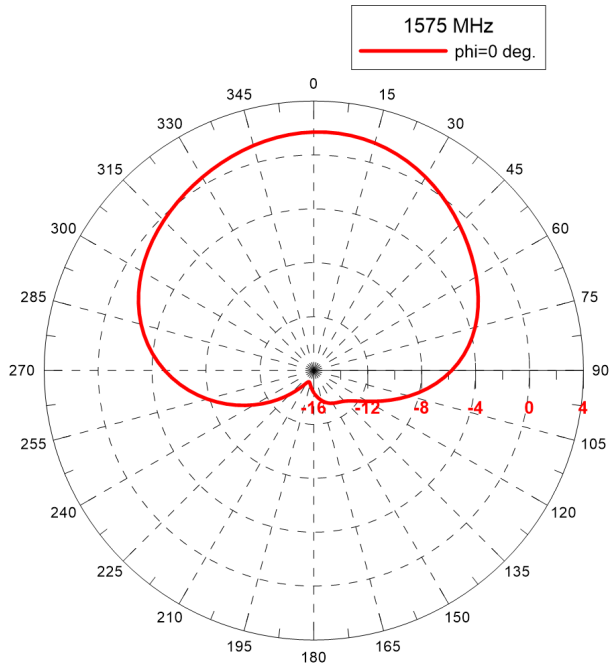
Beidou RHCP Gain-Azimuth cut



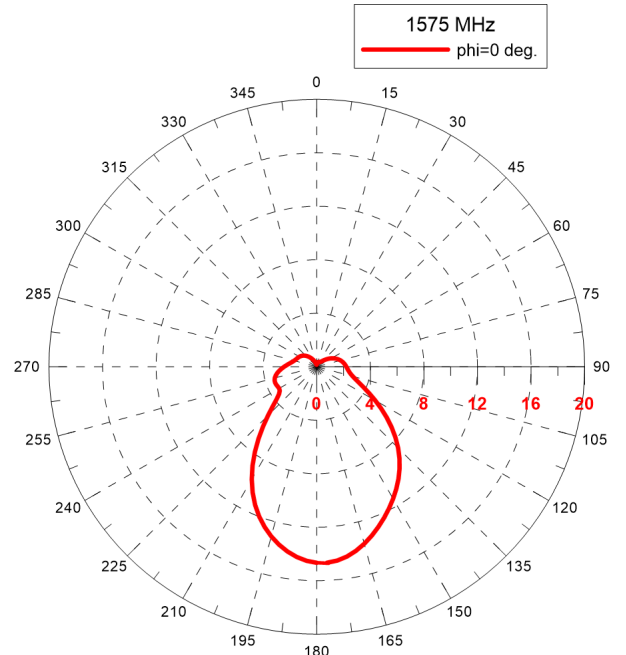
Beidou Axial Ratio-Azimuth cut



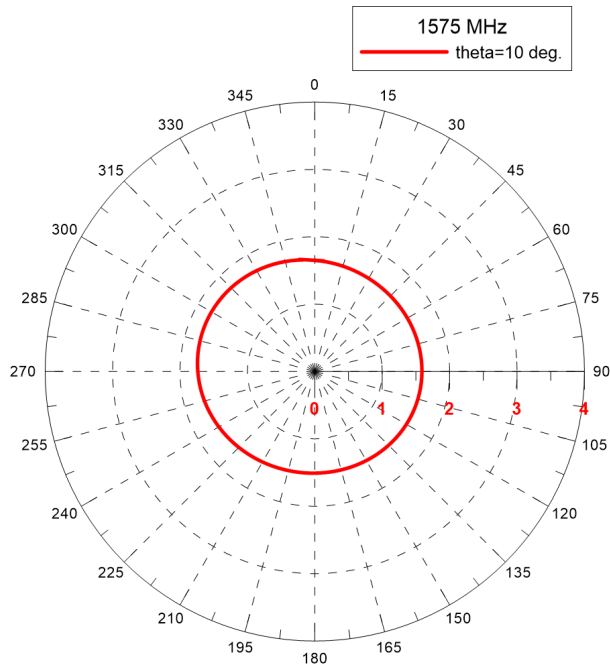
GPS RHCP Gain-Elevation cut



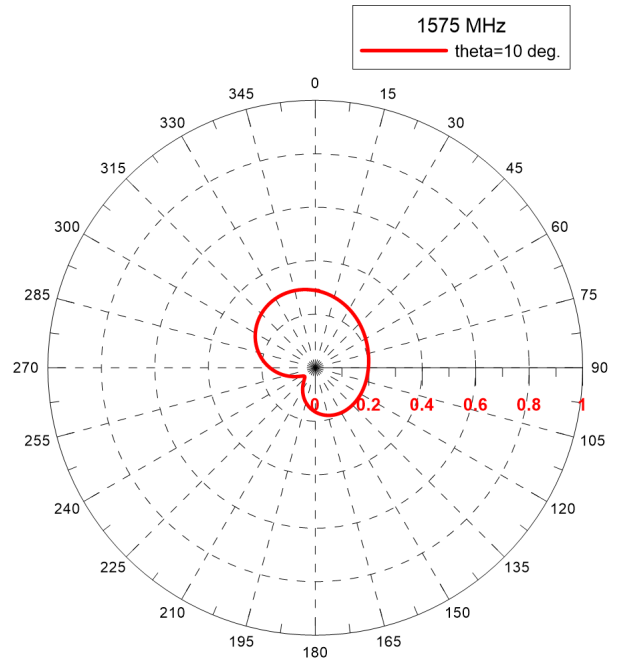
GPS Axial Ratio-Elevation cut



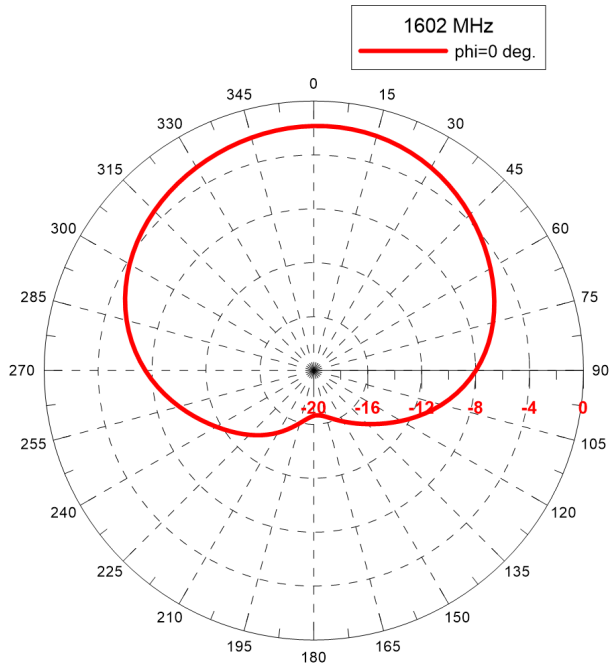
GPS RHCP Gain-Azimuth cut



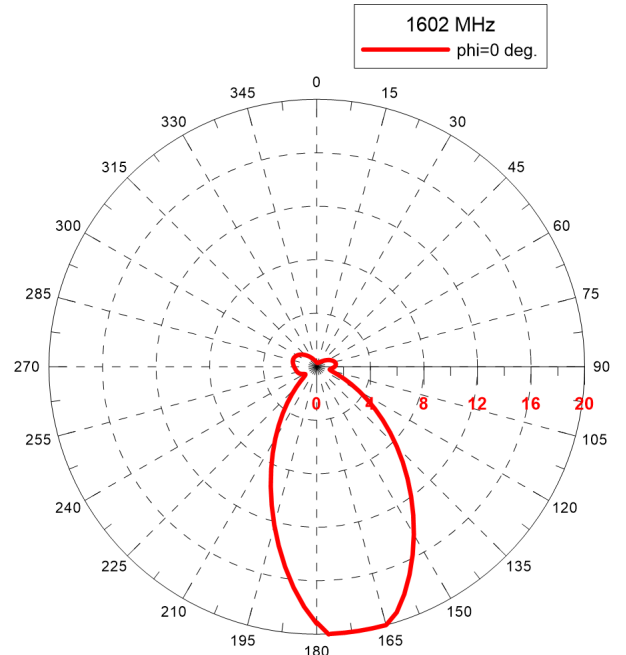
GPS Axial Ratio-Azimuth cut



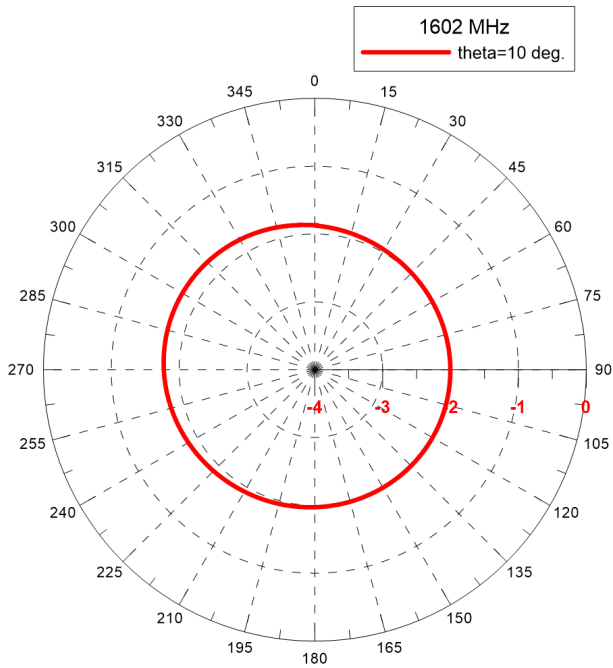
Glonass RHCP Gain-Elevation cut



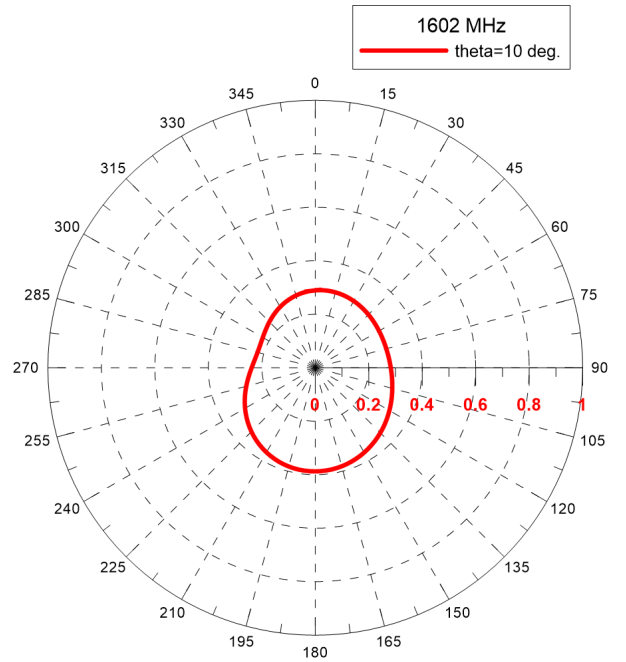
Glonass Axial Ratio-Elevation cut



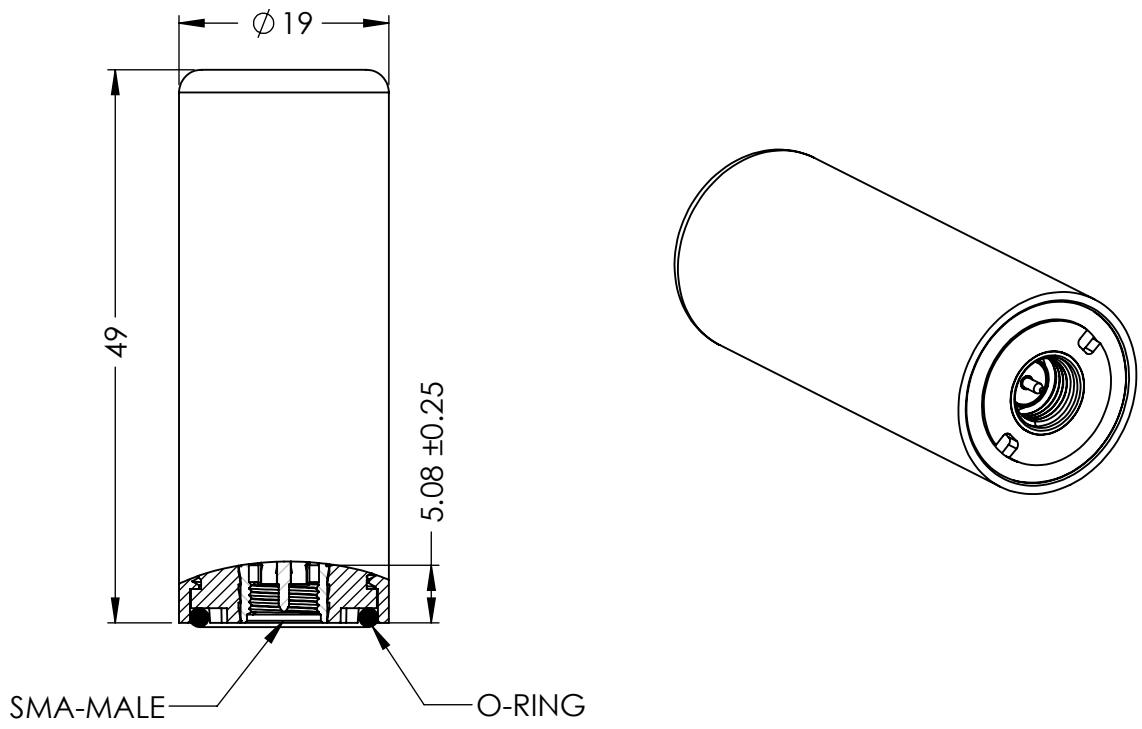
Glonass RHCP Gain-Azimuth cut



Glonass Axial Ratio-Azimuth cut

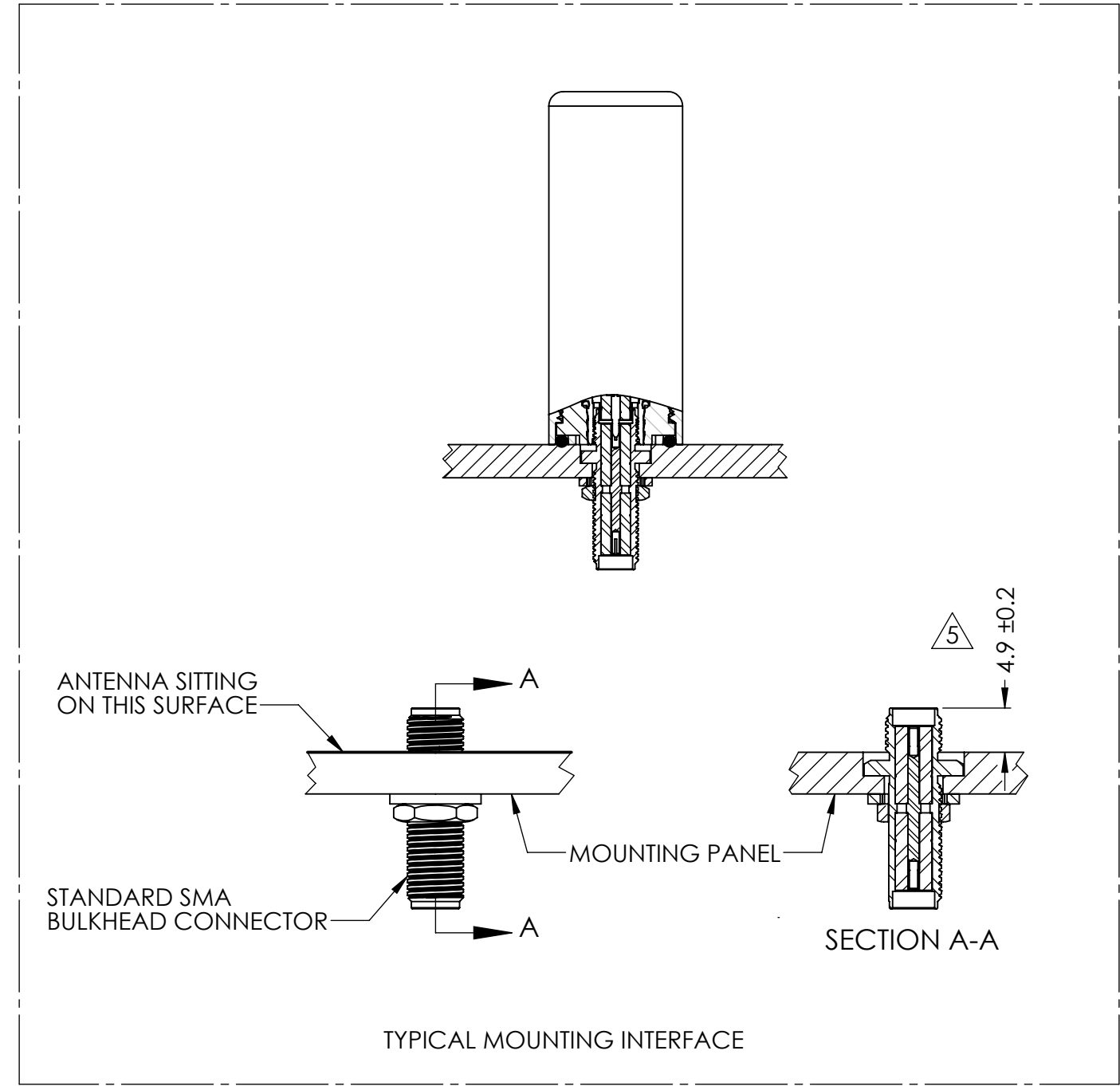


DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-06-14	SZ



NOTES:

1. CONNECTOR TYPE: SMA-MALE.
2. HOUSING MATERIA: ABS/PC.
3. COLAR: BLACK.
4. DUST AND WATER-RESISTANCE: IP67.
5. RECOMMEND A 4.9MM MOUNTING HEIGHT FOR MOUNTING INTERFACE SEALING AND ELECTRICAL CONNECTION. ASSEMBLY TORQUE SHALL BE NO MORE THAN 8 IN*LB.



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DIMENSIONS ARE IN MM	DRAWN	SZ 2021-06-14
TOLERANCES:	CHECKED	ZX 2021-06-14
FRACTIONAL ±	ENG APPR.	NPC 2021-06-14
ANGULAR: MACH ± .5° BEND ±	MFG APPR.	
INTEGER ± 2	Q.A.	
ONE PLACE DECIMAL ± 1.0		
TWO PLACE DECIMAL ± 0.50		
INTERPRET GEOMETRIC TOLERANCING PER:		
	CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.	
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SIZE	DWG. NO.	REV
B	117-00450-01	A
CAGE CODE: 5KQH7	SCALE: NONE	SHEET 1 OF 1