

M1580HCT-GN

GPS/BEIDOU/GLONASS PASSIVE ANTENNA

Part #: 100-00151-01

Description

The M1580HCT-GN is a high performance antenna designed for the GPS/Beidou/Glonass 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-GN is rated IP-67 when mounted for added protection. This product is designed for applications requiring high quality GPS/Beidou/Glonass reception.

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 -30°C to 60°C
RF Connector	SMA male
Overall dimensions	135 mm (height) x 18.5 mm (diameter)
Weight	45 grams



Mechanical Specifications

dimensions are in mm

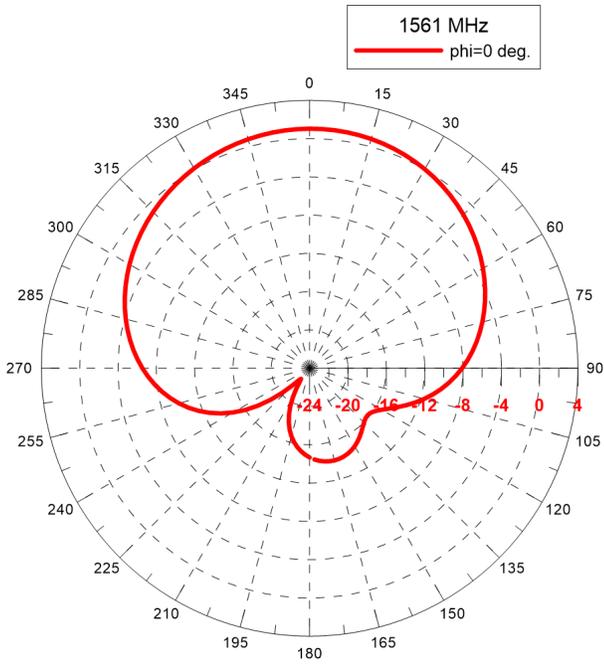
Features

- Very low axial ratio
- IP-67 mounted
- Ultra lightweight - 45 grams
- Ground plane independent

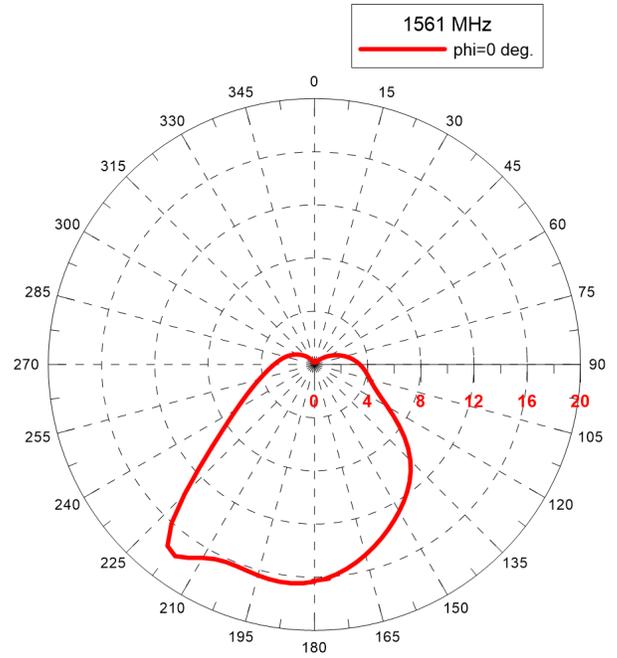
Applications

- Vehicle and fleet tracking
- Military & security
- Asset tracking
- Oil & gas industries
- Navigation devices
- Mining equipment
- LBS & M2M applications
- Handheld devices
- Law enforcement

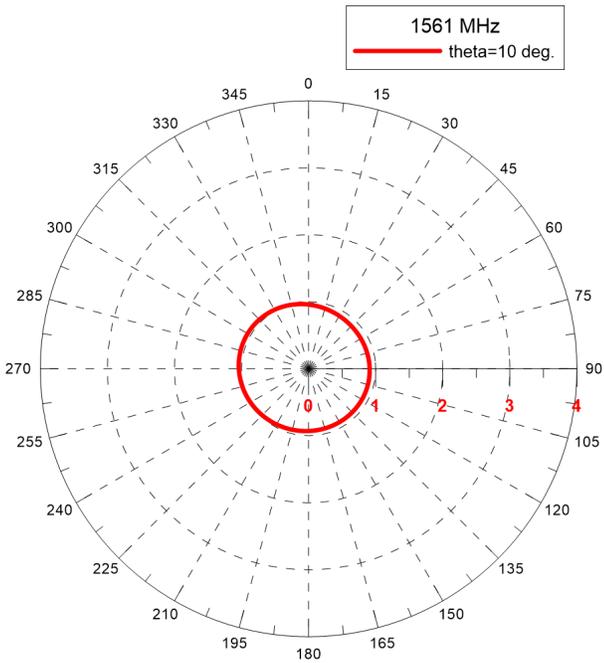
Beidou RHCP Gain-Elevation cut



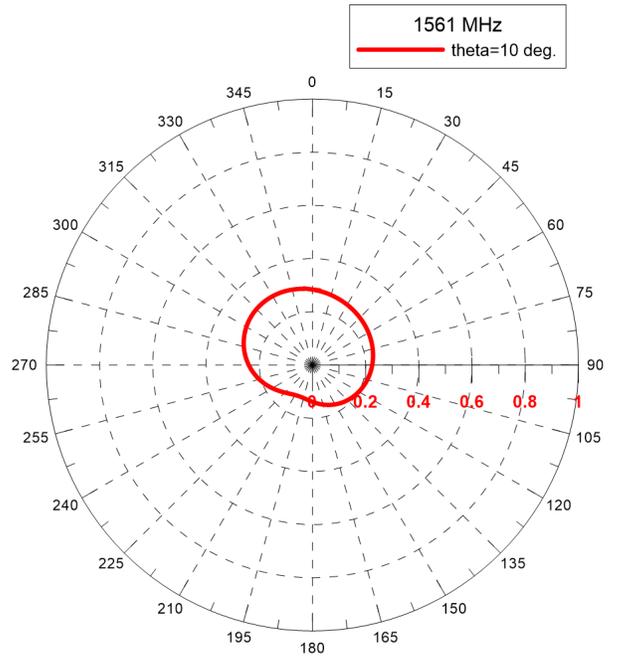
Beidou Axial Ratio-Elevation cut



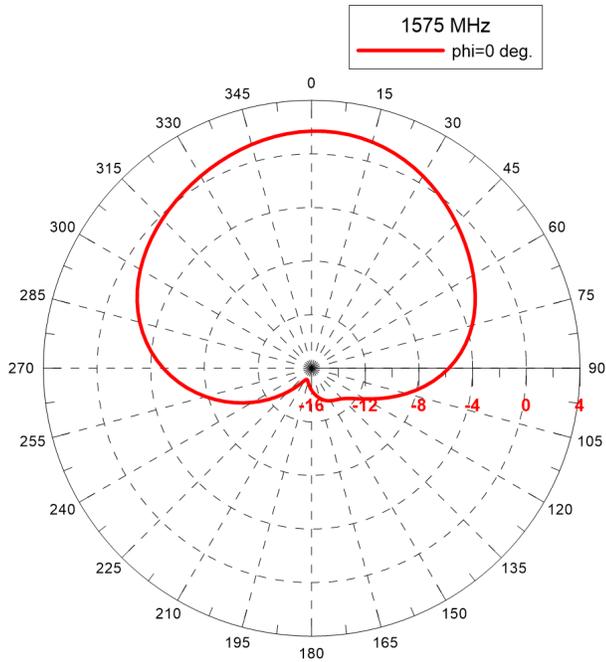
Beidou RHCP Gain-Azimuth cut



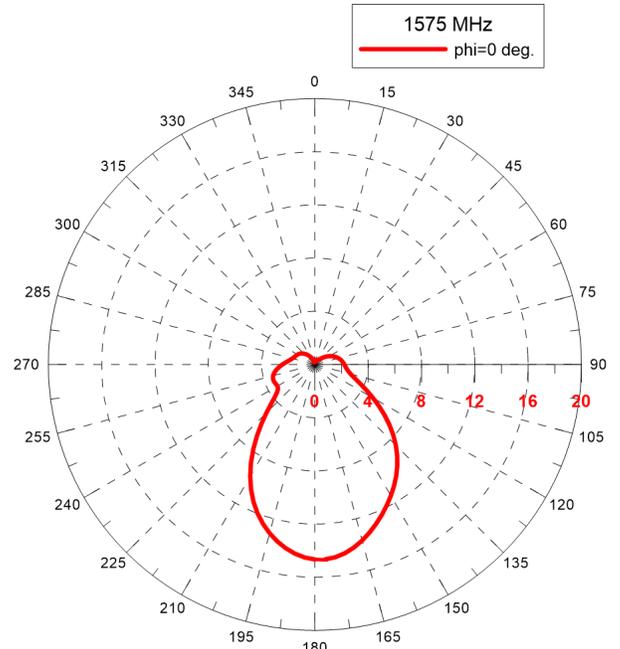
Beidou Axial Ratio-Azimuth cut



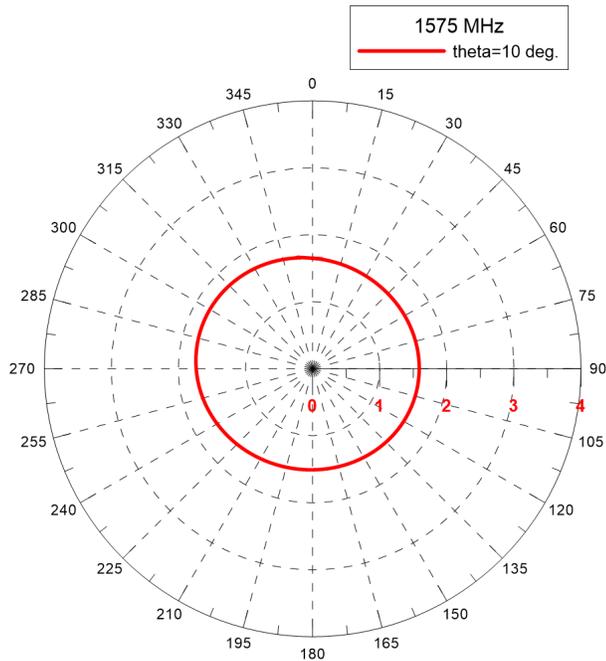
GPS RHCP Gain-Elevation cut



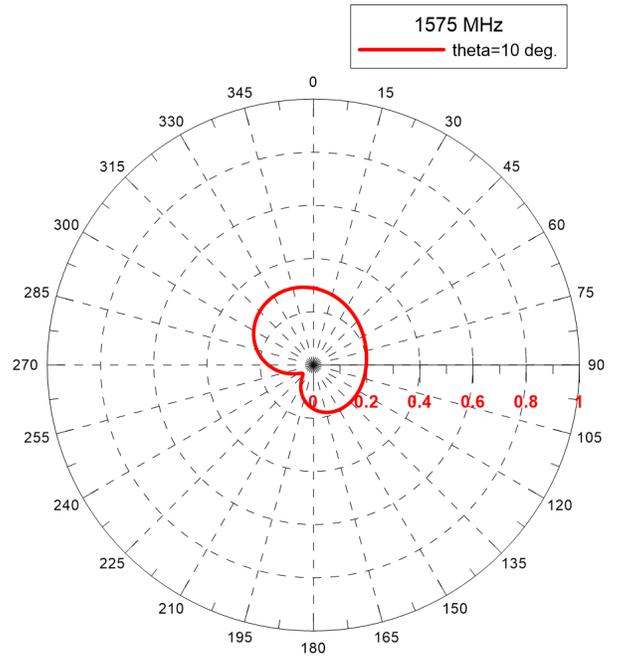
GPS Axial Ratio-Elevation cut



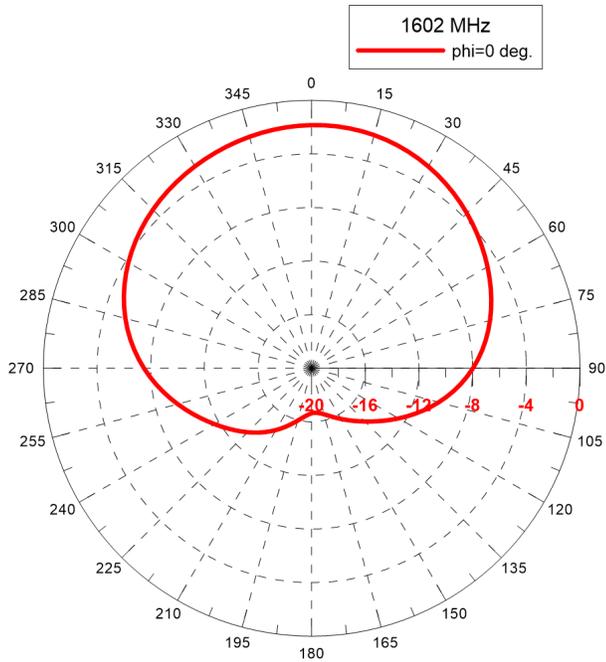
GPS RHCP Gain-Azimuth cut



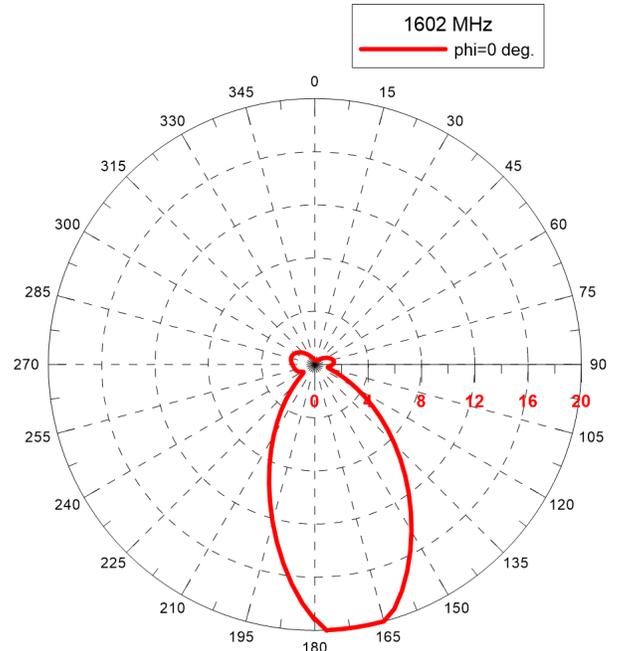
GPS Axial Ratio-Azimuth cut



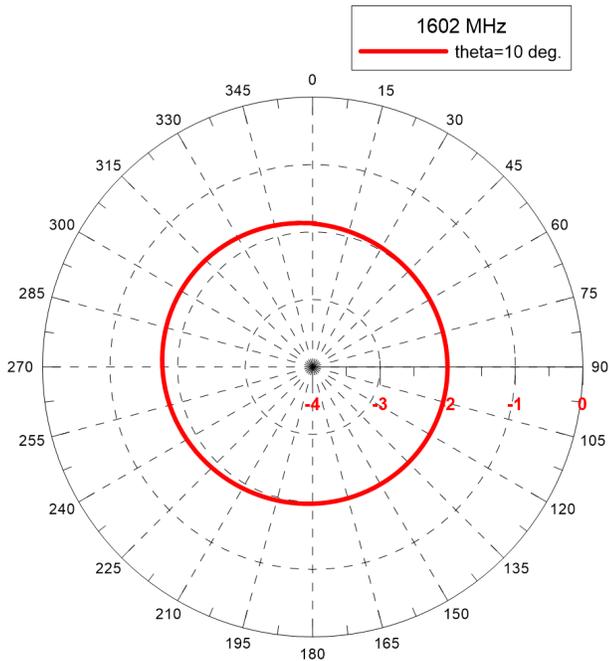
Glonass RHCP Gain-Elevation cut



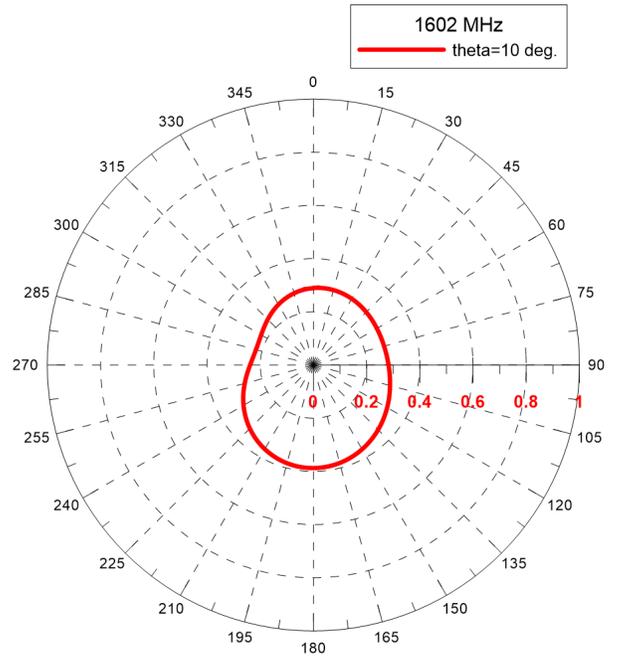
Glonass Axial Ratio-Elevation cut



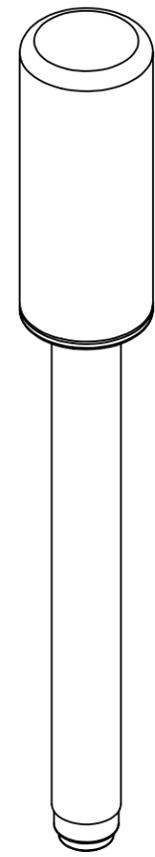
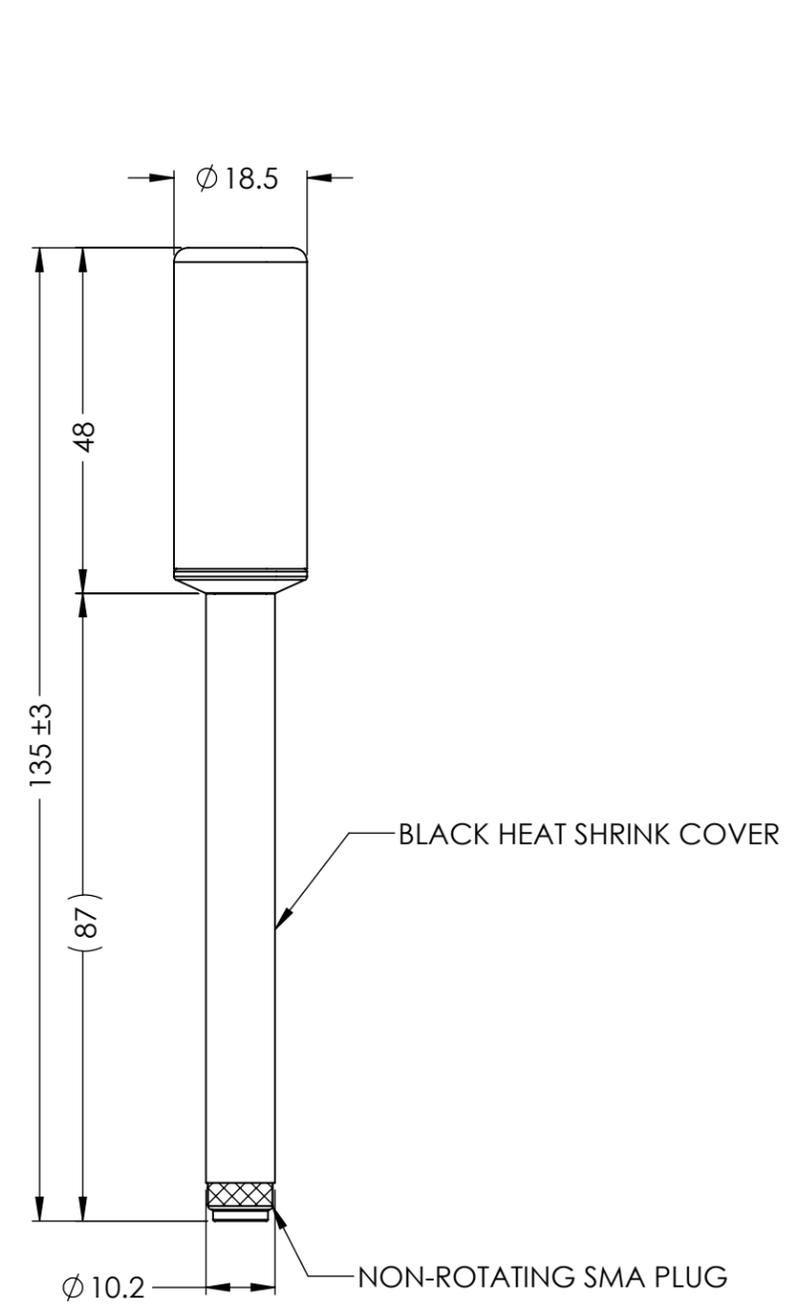
Glonass RHCP Gain-Azimuth cut



Glonass Axial Ratio-Azimuth cut



DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-05-05	MP



- NOTES:
1. RADOME MATERIAL: BLACK PC/ABS .
 2. GOOSENECK MATERIAL: STAINLESS STEEL WITH BLACK COATING.
 3. RF CONNECTOR TYPE: SMA PLUG NON-ROTATING.
 4. IP RATING: IP67

ITEM 100-00151-01 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-05-05	MP

PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF MAXTENA, INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF MAXTENA, INC IS PROHIBITED.

UNLESS OTHERWISE SPECIFIED:	NAME	DATE
DIMENSIONS ARE IN MM	DRAWN MP	2021-05-05
TOLERANCES:	CHECKED ZX	2021-05-07
FRACTIONAL ±	ENG APPR. NPC	2021-05-13
ANGULAR: MACH ± .5° BEND ±	MFG APPR.	
ONE PLACE DECIMAL ± 1.0	Q.A.	
TWO PLACE DECIMAL ± .50		
INTERPRET GEOMETRIC TOLERANCING PER:	CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.	
	DO NOT SCALE DRAWING	

MAXTENA, INC		
TITLE: 100-00151-01 M1580HCT-GN		
SIZE B	DWG. NO. 117-00439-01	REV A
CAGE CODE: 5KQH7	SCALE: NONE	SHEET 1 OF 1

8 7 6 5 4 3 2 1

D C B A

D C B A

8 7 6 5 4 3 2 1