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.

Mechanical Specifications

dimensions are in mm

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

Features

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

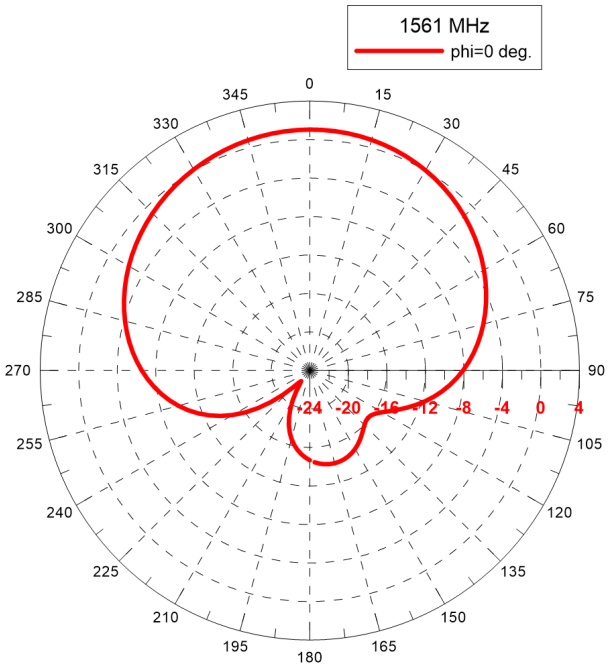
Applications

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

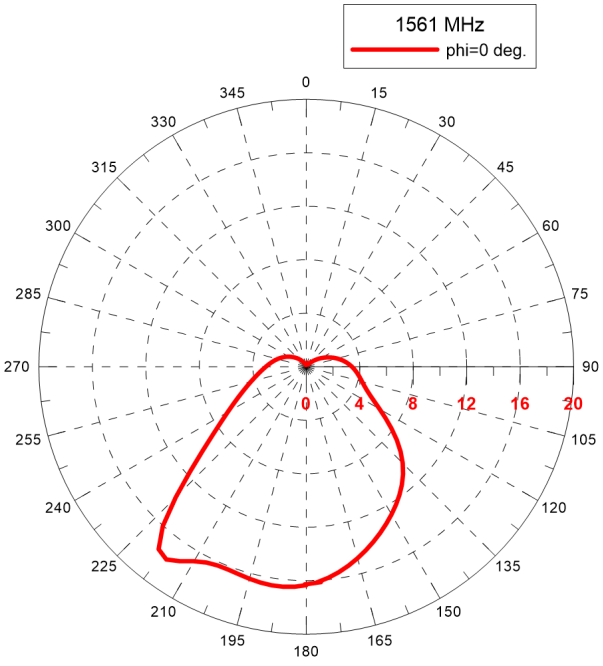
MAXTENA
WIRELESS INNOVATIONS COMPANY

Maxtena Inc.
7361 Calhoun Place, Suite 102
Rockville, MD 20855
1-877-629-8362
info@maxtena.com
www.maxtena.com

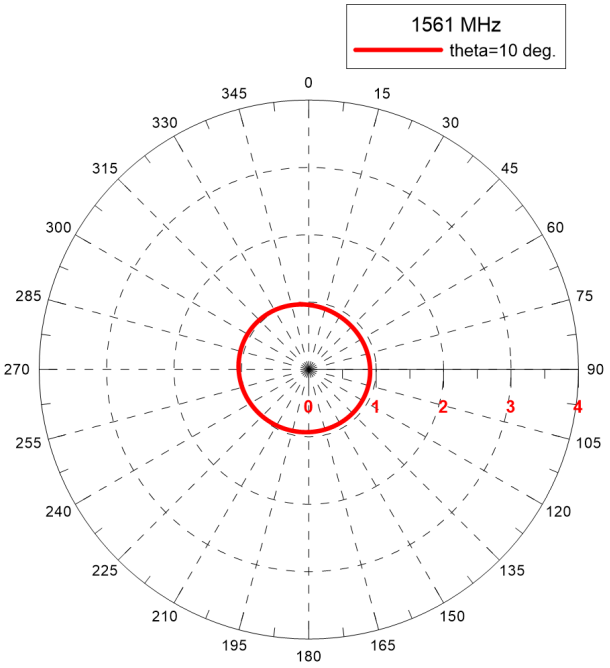
Beidou RHCP Gain-Elevation cut



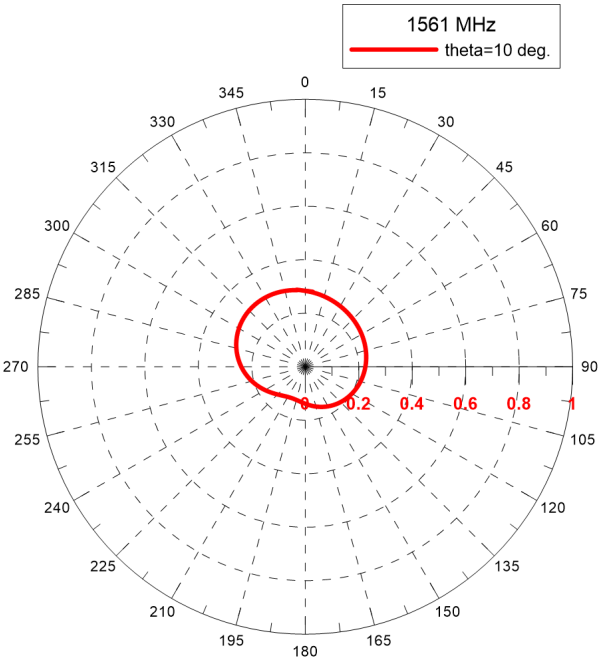
Beidou Axial Ratio-Elevation cut



Beidou RHCP Gain-Azimuth cut



Beidou Axial Ratio-Azimuth cut



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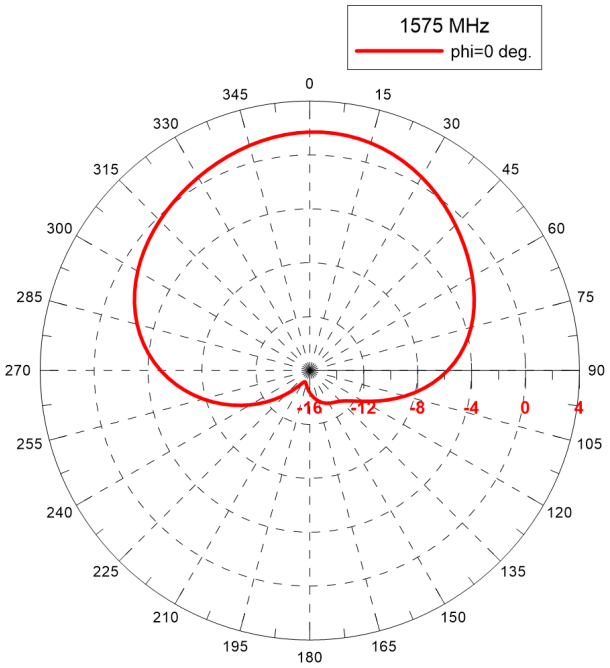
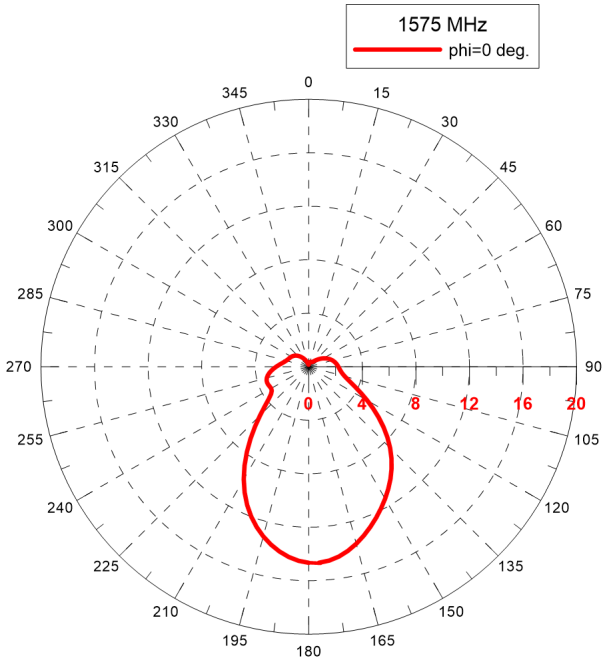
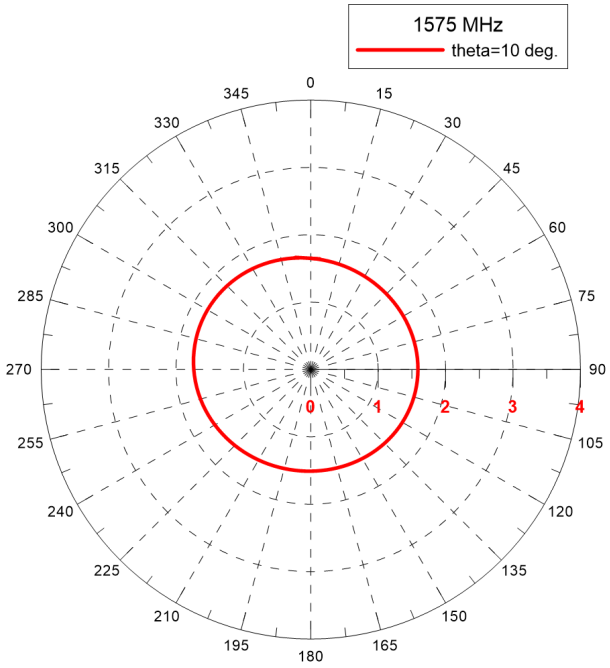
GPS RHCP Gain-Elevation cut



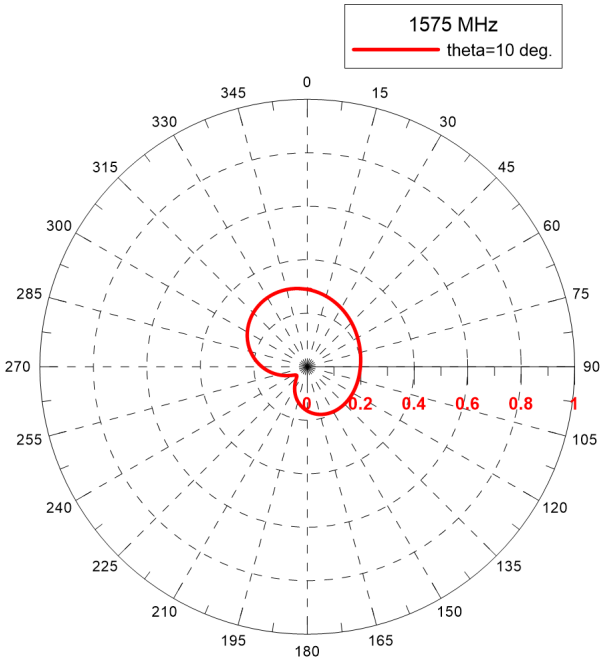
GPS Axial Ratio-Elevation cut



GPS RHCP Gain-Azimuth cut



GPS Axial Ratio-Azimuth cut



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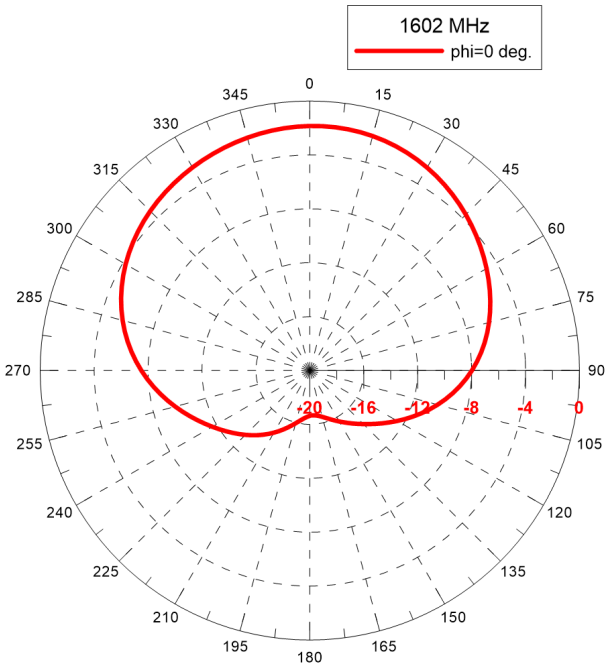
Glonass RHCP Gain-Elevation cut



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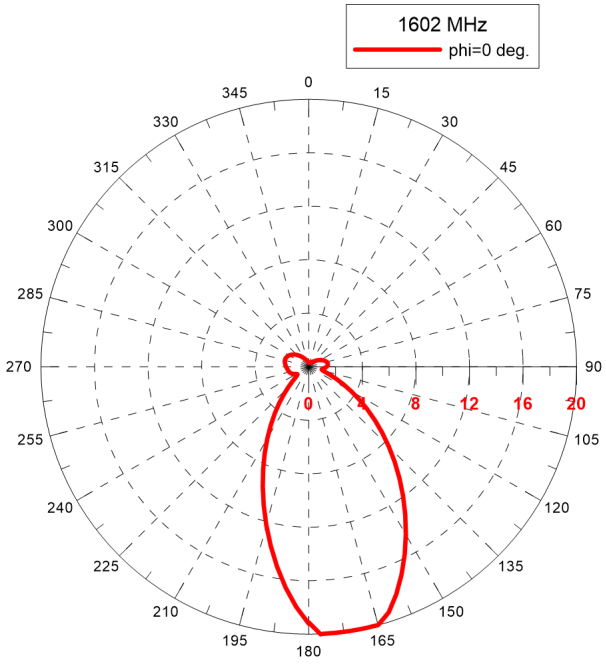
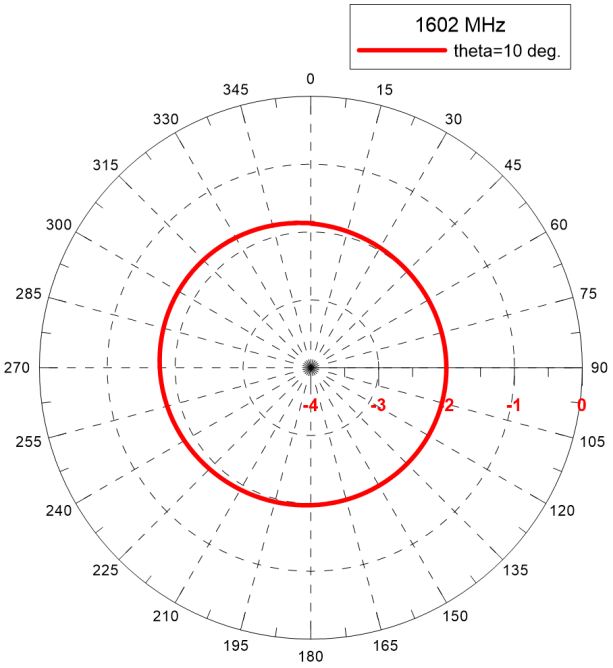
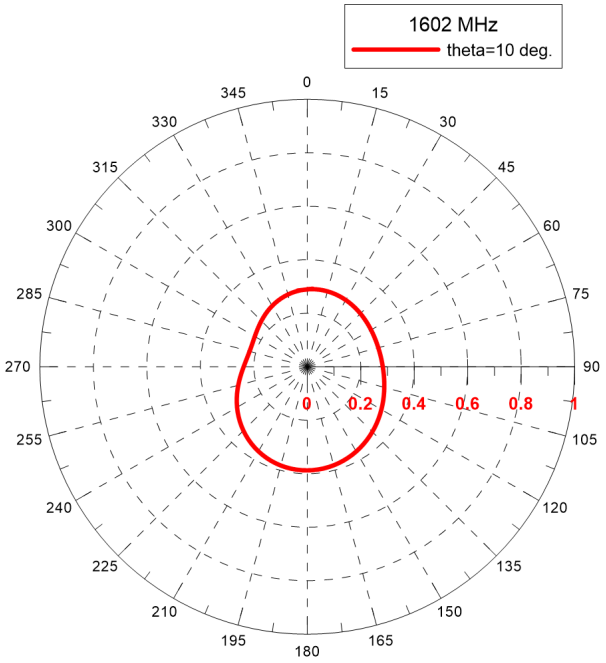


Glonass RHCP Gain-Azimuth cut



Glonass Axial Ratio-Azimuth cut



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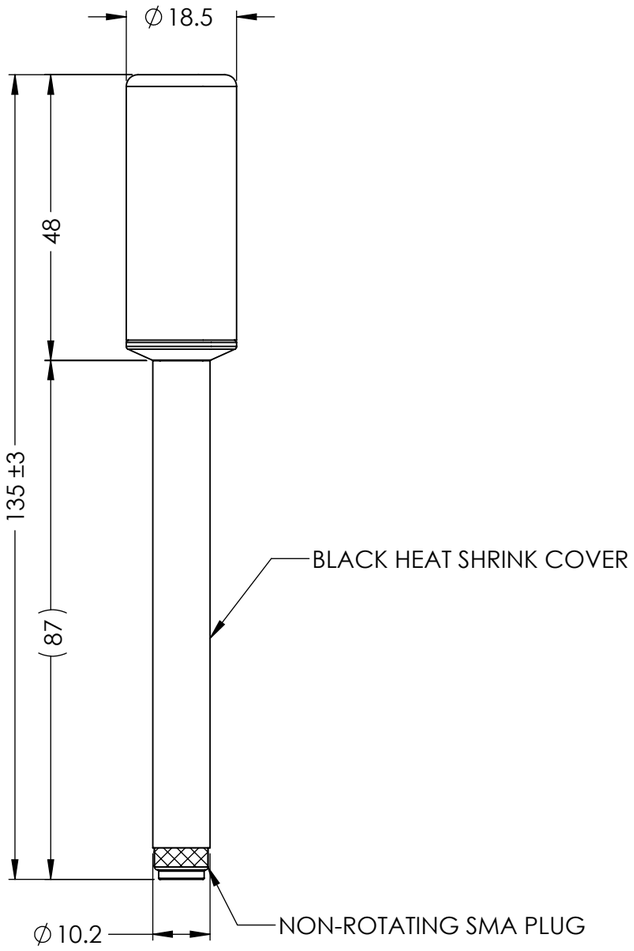
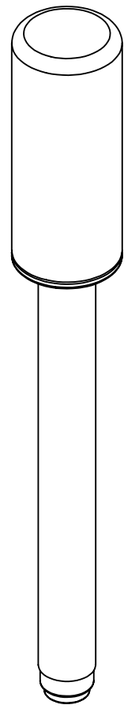
DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-05-05	MP





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

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

MAXTENA, INC

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