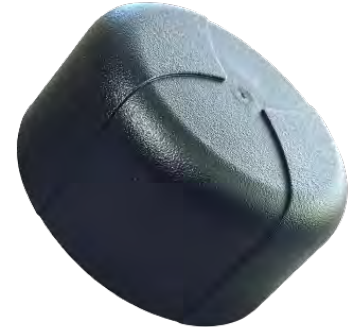




L125GRRKPA-T

Maxtena PN: M10HCT-P-TNC



Description

L125GRRKPA-T is a L1-L2-L5 GNSS passive antenna solution intended to cover all GPS, Galileo, Glonass, BeiDou bands including L-Band correction services coverage. Low profile RHCP, wide band antenna is ideal solution for high-precision applications, such as autonomous vehicle navigation, smart survey devices, and maritime positioning. This 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. Low axial ratio ensures that the antenna captures RHCP signal well and mitigates the reflected LHCP signals. Antenna ensures high signal-to-noise ratio (SNR) and GNSS signal tracking from all elevation angles in all types of environments. The antenna is ground plane independent and features a TNC-female RF connector.

Passive antenna performances

Parameter	Specification
Frequency Range	1164 - 1300 MHz 1539 - 1610 MHz
Peak gain	3.4 dBic @ upper band 3.3 dBic @ lower band
Peak efficiency	80 % @ upper band 75 % @ lower band
Axial Ratio	0.5 dB (max.) @ zenith
Polarization	RHCP
Beamwidth	120°

Features

- Full GPS, Galileo, Glonass, BeiDou bands coverage including L-Band correction services coverage
- Low Axial Ratio
- Ground plane independent
- Low phase center variation over azimuth and elevation and among different samples
- Rugged IP67 rating
- RoHs compliant
- Automotive grade electronics

Mechanical Specification

Parameter	Specification
Antenna Dimensions	Ø80 x 40 mm
Weight	104 g
Operating Temperature	-40 °C to 85 °C
Mounting Type	Connector Mount
Connector	TNC
Radome/Color	Black
Housing material	ABS/PC
Certificates	IP67

Applications

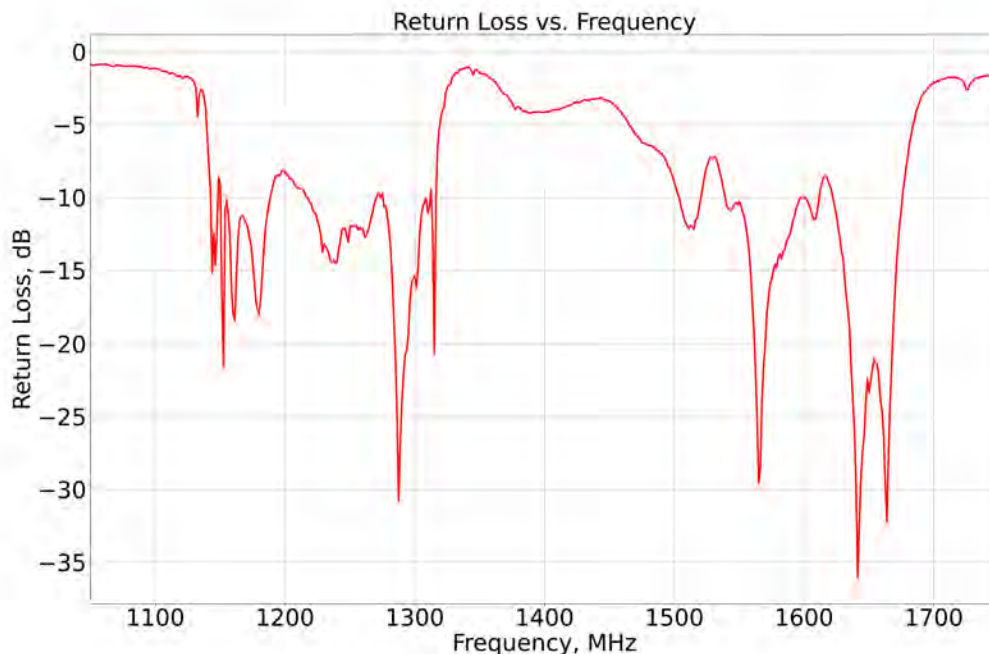
- UAV/Drones
- Unmanned Ground Vehicles (UGV)
- Unmanned Systems
- High Precision Navigation
- Military & Security
- Agriculture & FarmTech
- Marine systems

Antenna Characteristics

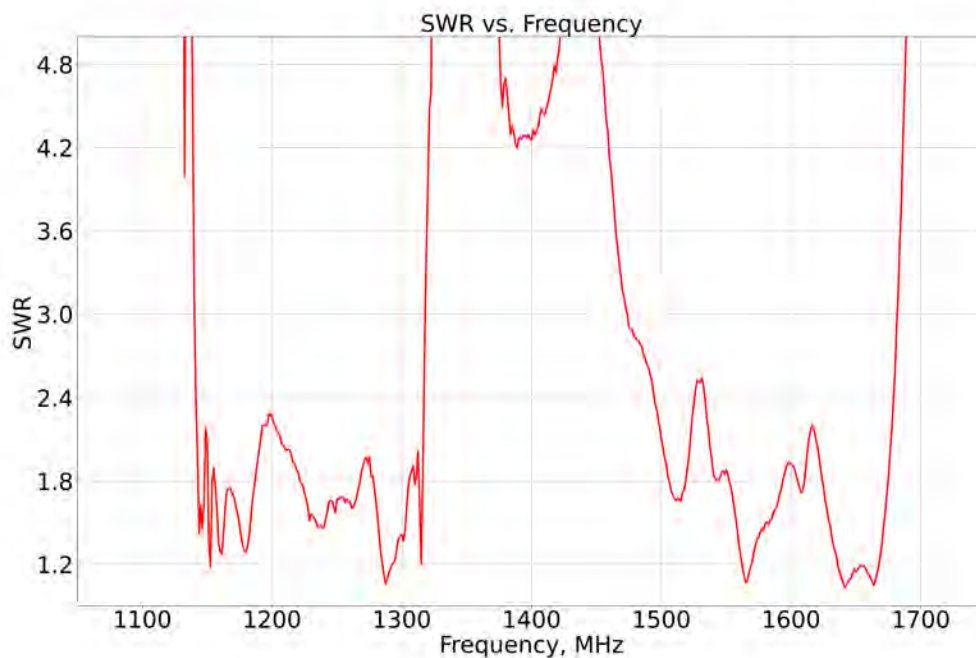


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Return Loss

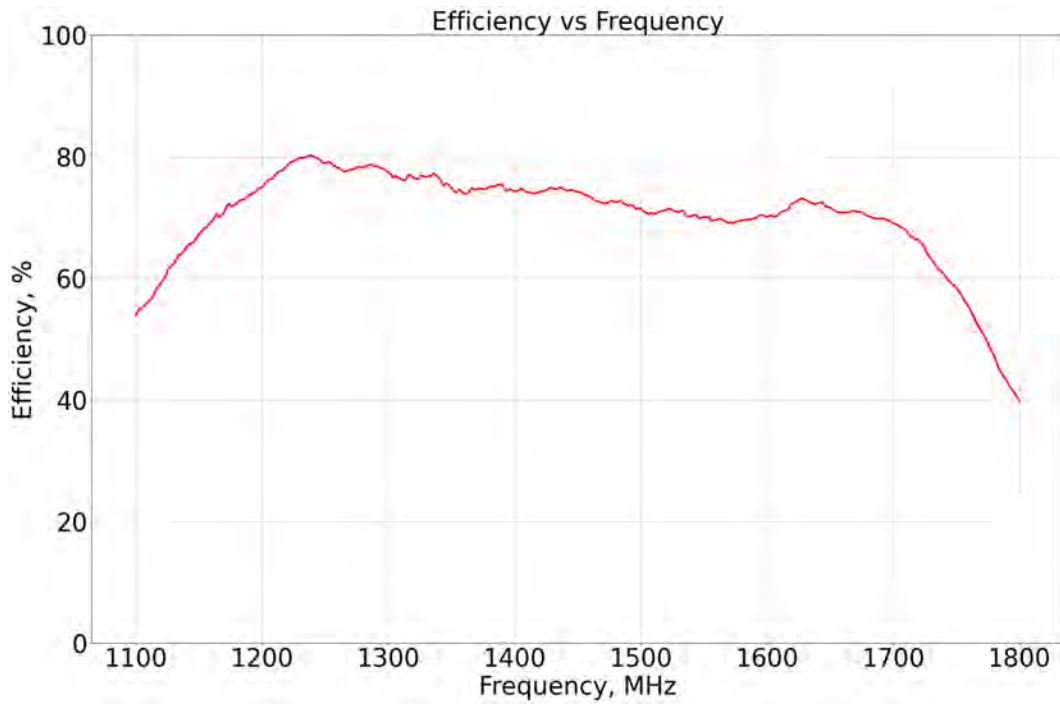


VSWR

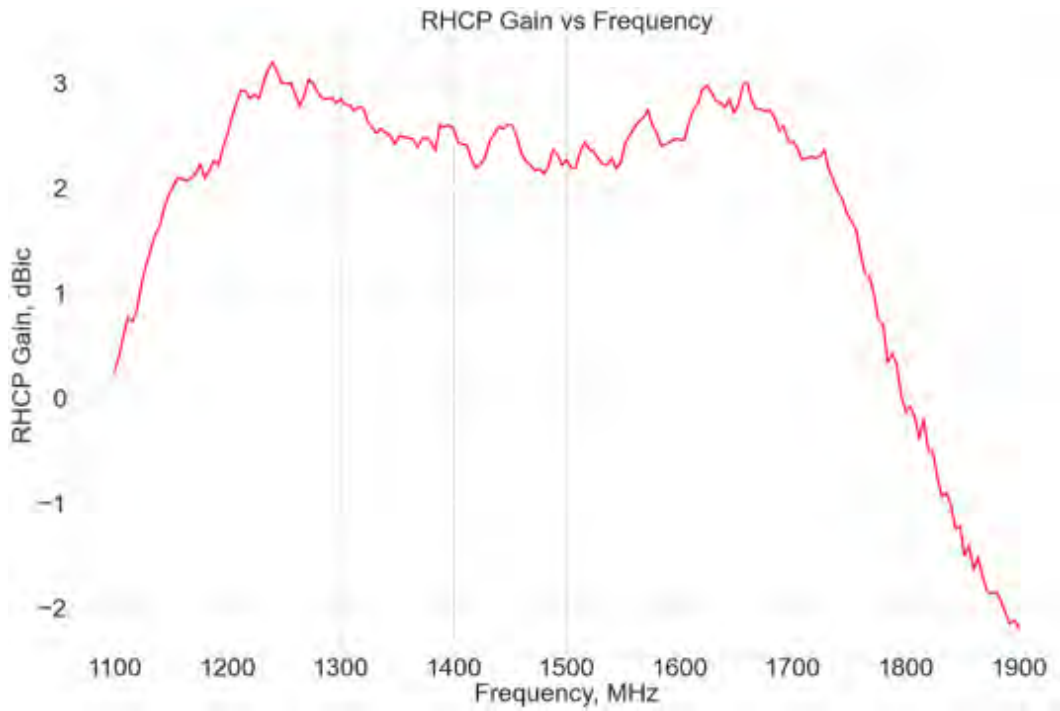


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Efficiency



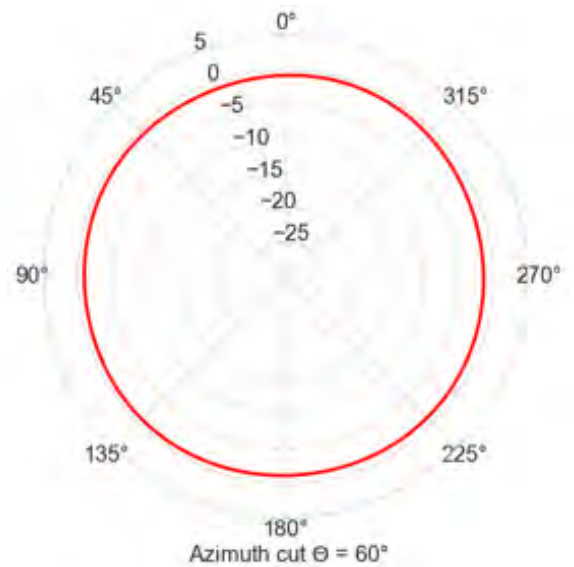
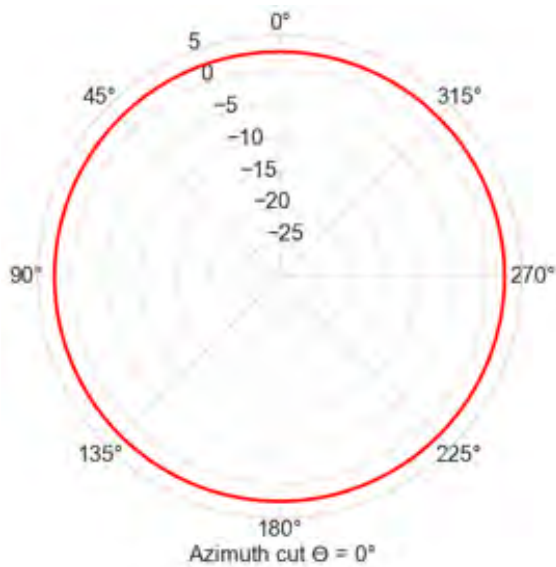
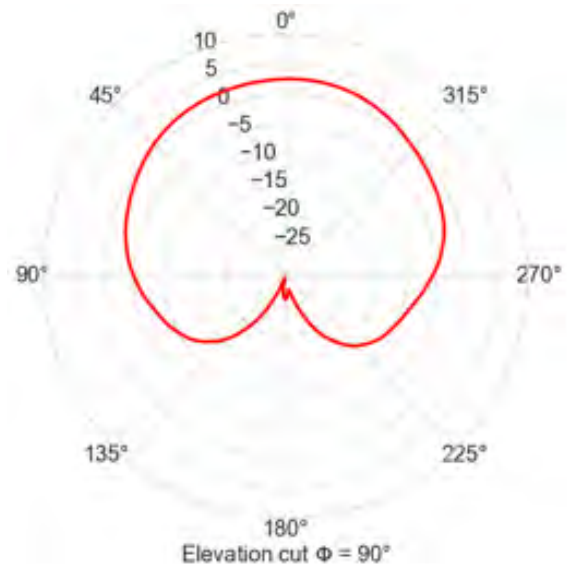
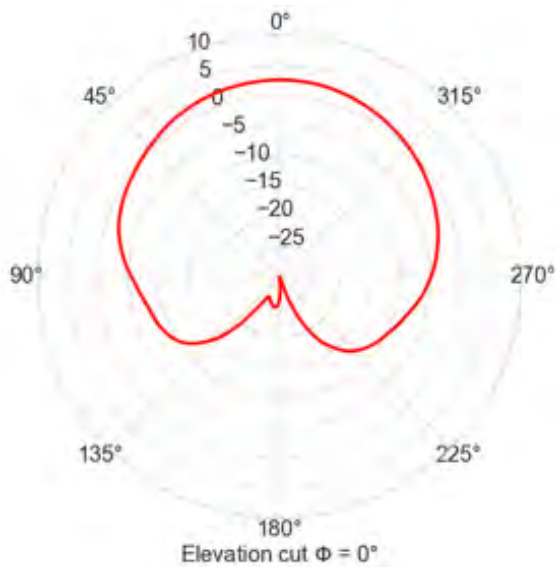
Gain



2D Radiation Patterns

Maxtena's M10HCT-P-TNC has unique features that make it the best option for high-accuracy GNSS applications. Full hemispherical coverage is achieved by an exceptionally large 3 dB beamwidth, ensuring full view of sky and satellites in lower elevation angles. Highly symmetric radiation pattern guarantees there will be no direction of weak reception or blind spots.

L1 band



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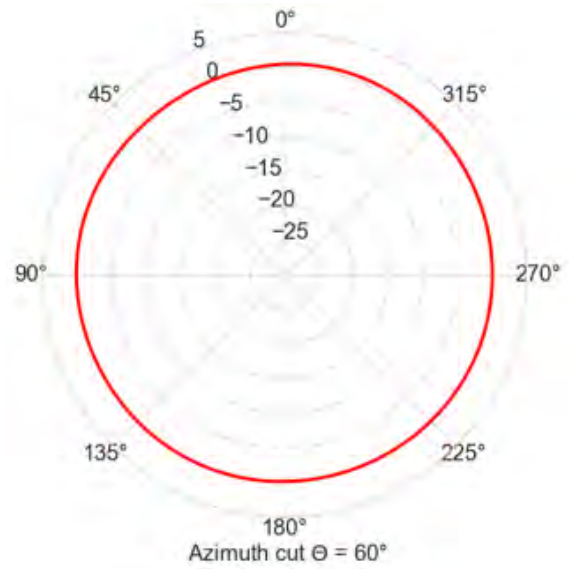
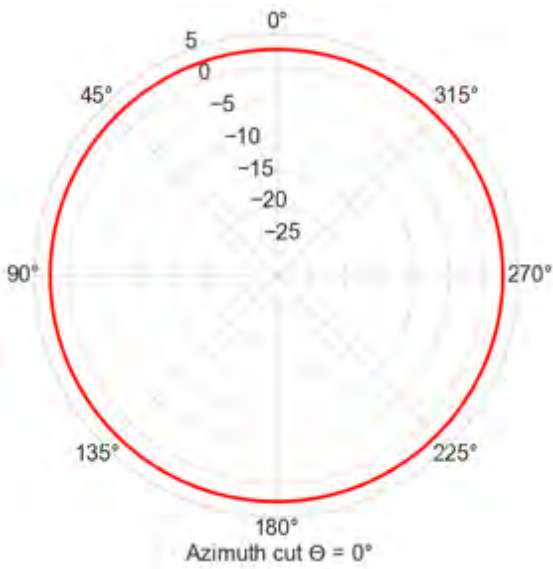
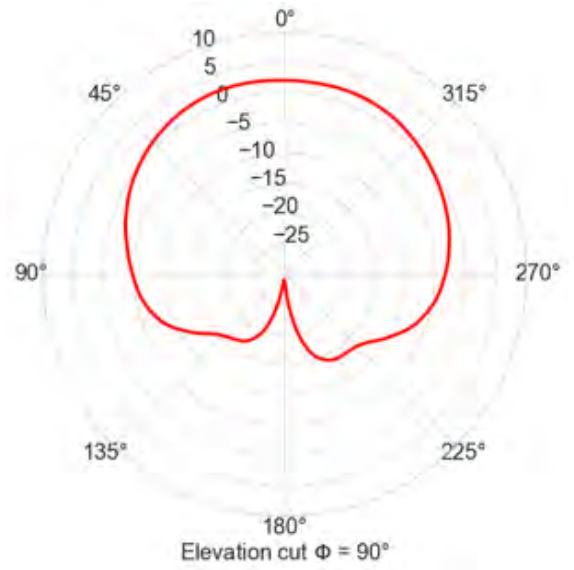
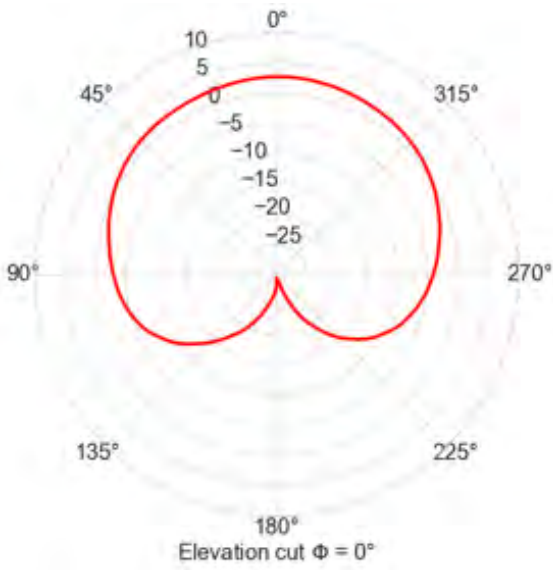
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L2 band

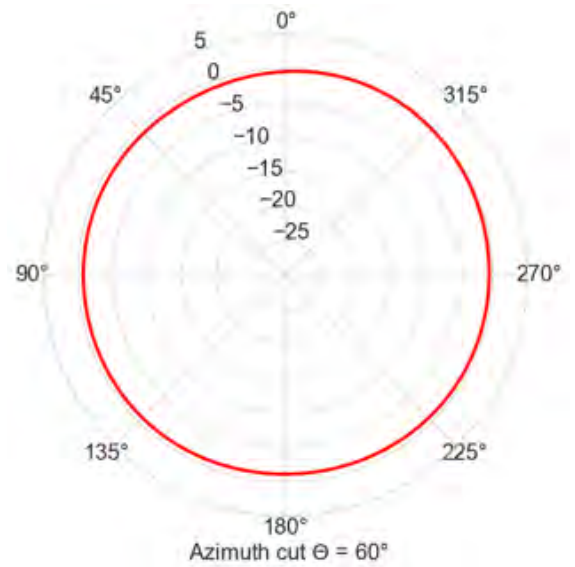
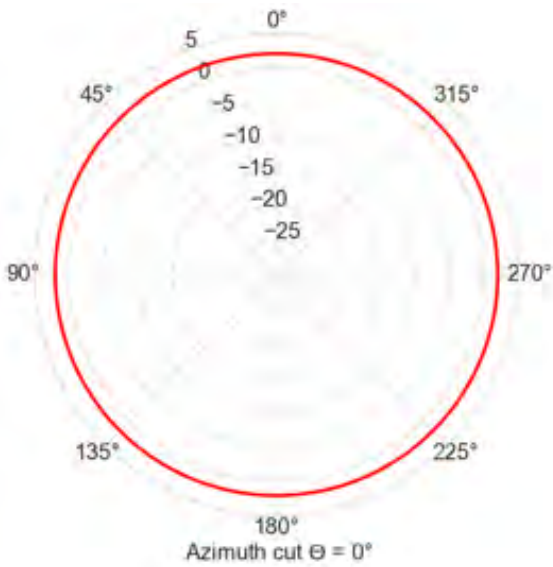
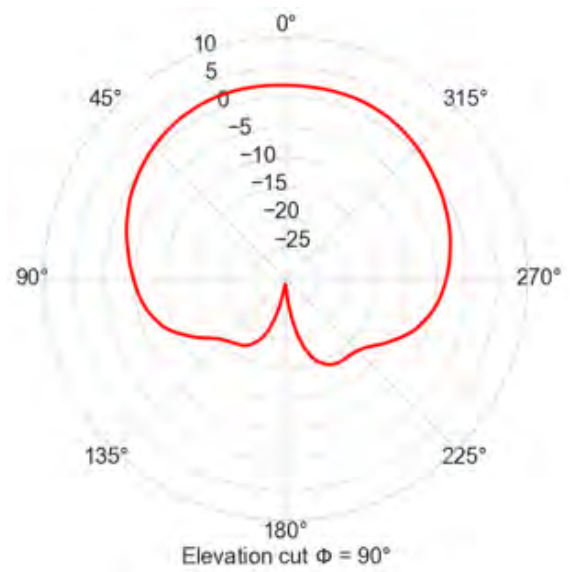
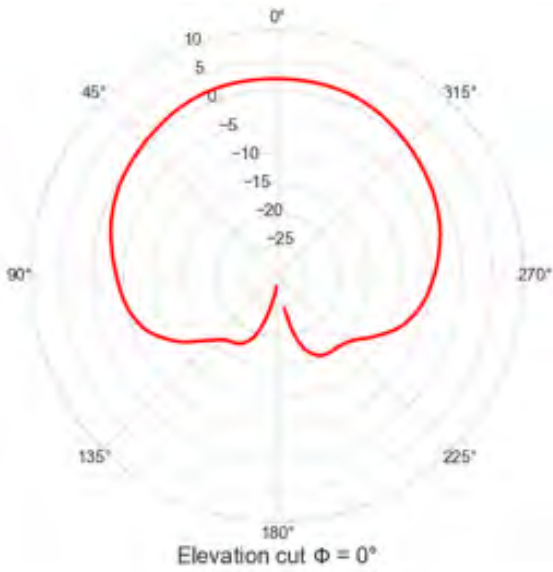


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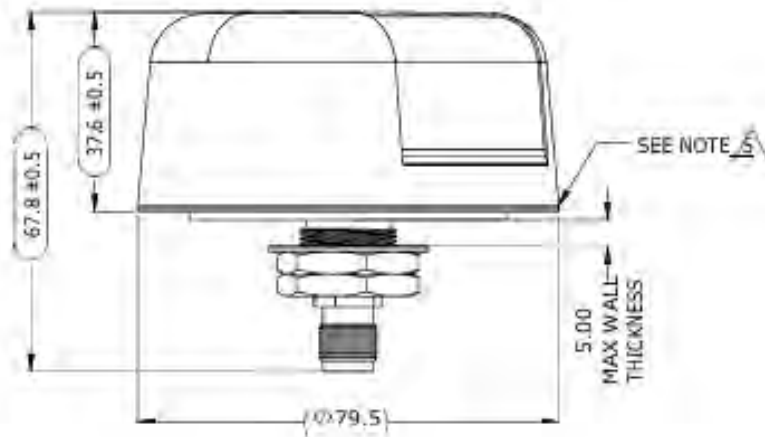
L5 band



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DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
1	INITIAL RELEASE	2022-09-25	MP

