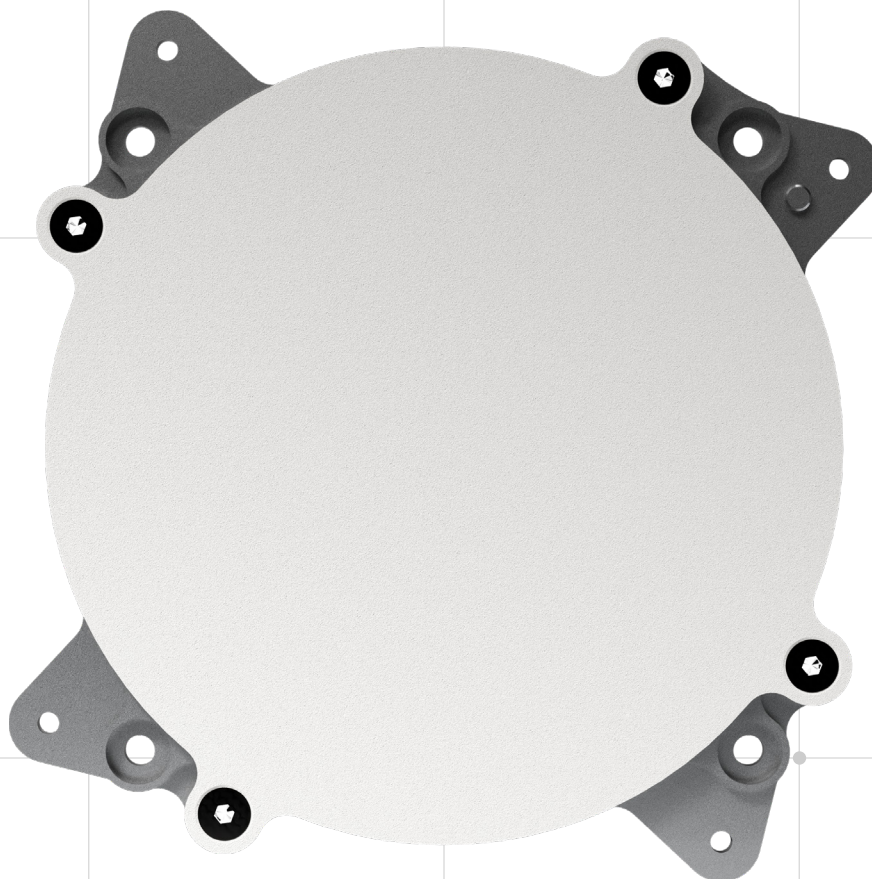


GNSS All-Bands Antenna



Anywaves' all-bands GNSS antenna is designed for LEO platforms, covering all GNSS constellations from 1.16 to 1.61 GHz. With a stable phase center and circular polarization, it ensures reliable, continuous

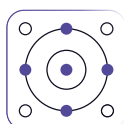
positioning. TRL 9 qualified and developed under the ESA Navisp program, it delivers high accuracy and robustness.

Rx

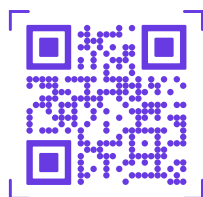
Hemispherical Coverage

Very High Accuracy

Size < 1U



Benefits



Full GNSS coverage:

Supports all major GNSS constellations and L-band services for high-precision positioning (PPP).



Unique market offering:

One of the only true all-bands GNSS antennas available.



Fully qualified:

RF, mechanical, and thermal acceptance tests included (return loss, vibration, thermal cycling).



ITAR-free:

Suitable for international programs without export restrictions.



Robust design:

Radome protection ensures reliable operation in harsh environments (temperature, ESD).

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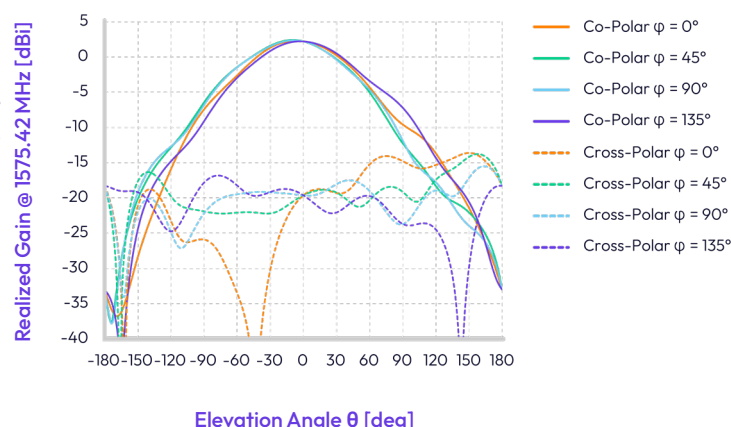
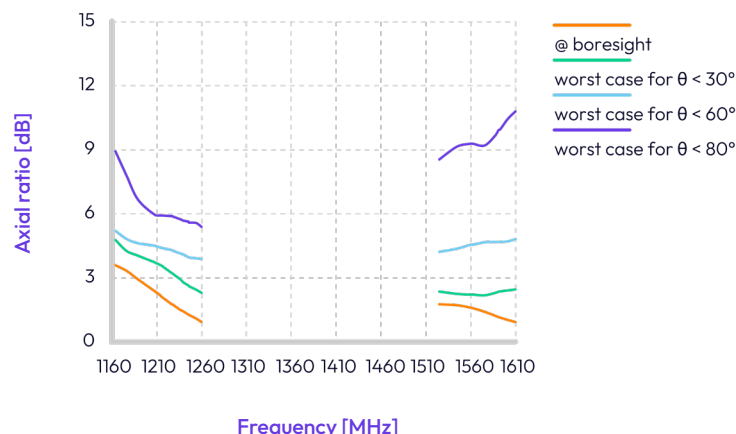
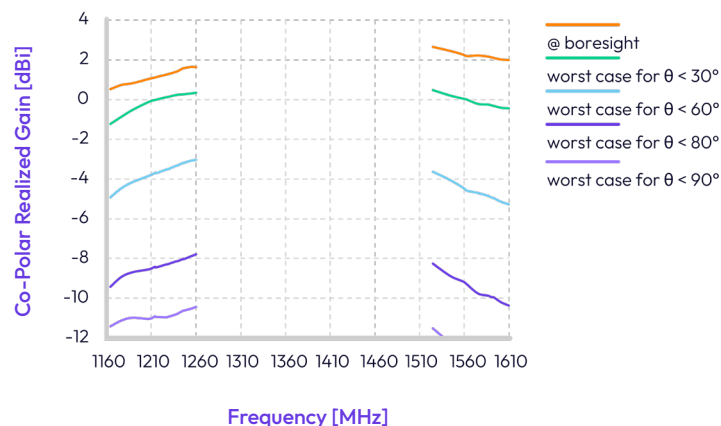
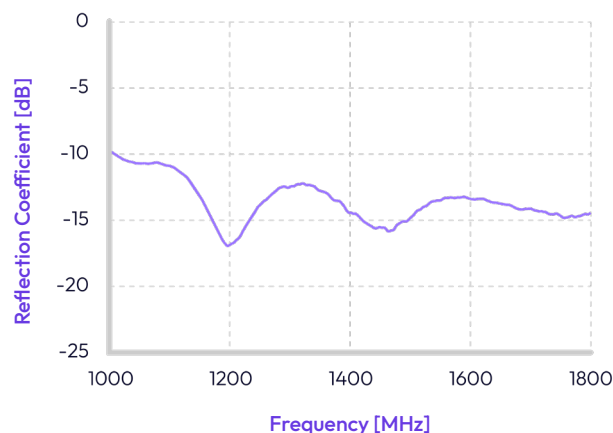
Rx

Hemispherical Coverage

Very High Accuracy

Size < 1U

Typical Measured Performance



Typical Measured Performance

Frequency Band	1160 MHz to 1610 MHz: GPS L1/L2/L5, Galileo E1/E5a/E5b/E6 Glonass G1/G2/G3, Beidou B1/B2a/B2/B3 Inmarsat L-band: 1 525 – 1 559 MHz
Polarization	Right Hand Circular Polarization
Reflection Coefficient	≤ -10 dB
Realized Gain	@ boresight > 0 dBi
Gain Variation	In all individual sub-bands: < 0.6 dBi
Axial Ratio	@ boresight < 3 dB Variation within a sphere of radius < 4.7 mm for all bands
Phase Center	---
Position(± 30° FoV) (Maximum Variation vs Frequency)	Variation within a sphere of radius < 1.8 mm for individual sub-bands
Phase Center Variation (± 30° FoV) (Maximum Variation vs Elevation)	Variation < 0.4 mm within ± 30° Variation < 2.6 mm within ± 60°
Group Delay Variation	< 1.2 ns

Physical Characteristics

Envelope Size	99.4 mm x 99.4 mm x 15.2mm Protruding height: 8.7 mm
Mass (With Connector)	130g
Connector	Coaxial SMA female (50Ω)
Mechanical Interface	4 x M3 (unthreaded hole)
Qualification Temperature	- 120°C / + 120°C
Protective Radome	PEEK coated with SG121FD white paint (on Flight Models only) resistant to thermal and radiation environments and preventing electrostatic discharges.
Acceptance Tests	Flight Models - Radio Frequency - Mechanical - Thermal Engineering Models - Radio Frequency Only