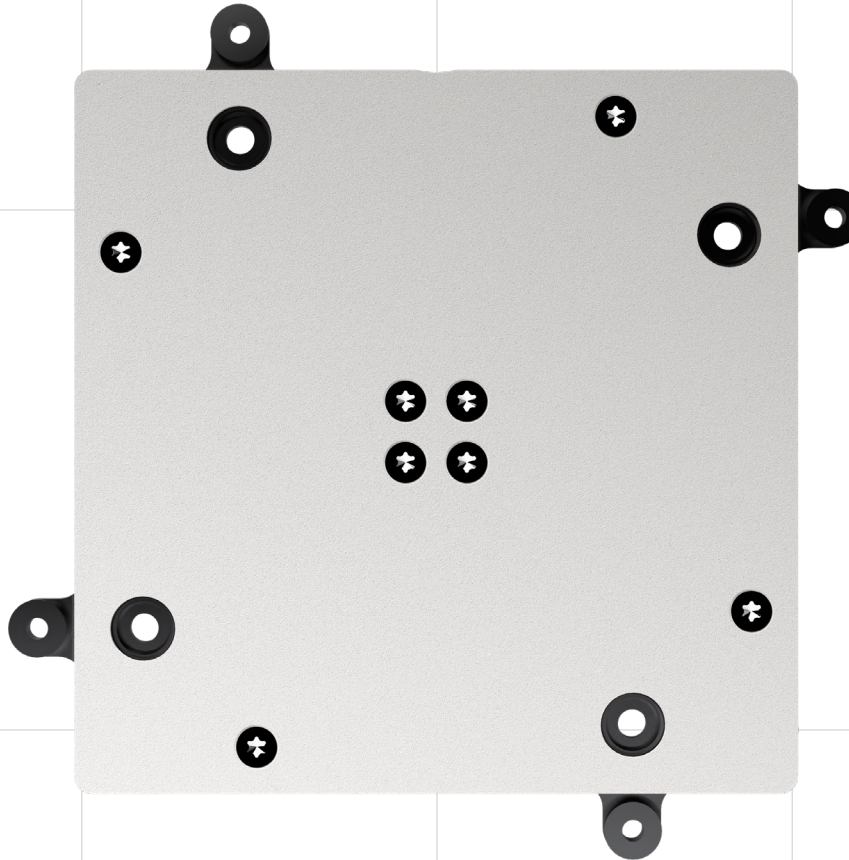


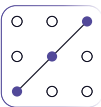
Compact X-Band Antenna



Anywaves' Compact X-Band Antenna is an ultra-low-profile antenna designed for payload telemetry from the satellite to the ground station.

This antenna features a broadside directive beam, with high-quality circular polarization, to enable higher data rates for the payload telemetry downlink. Due to its very compact design, it is perfectly suitable for nanosatellites and LEO platforms.

NB : compatible with Anywaves Test Hat for X-Bands Antennas.

Tx		RHCP or LHCP	Ultra Low Profile	Size < 1U
   Benefits				+ High Data-Rate Payload Telemetry + High Cross-Polarization Discrimination + Fully Qualified: RF, Mechanical, and Thermal Acceptance Tests Included (Return Loss, Z-Axis Random Vibration, Thermal Cycling). anywaves.com
				+ ITAR-free: Suitable for international programs without export restrictions. + Robust Design: Radome Protection Ensures Reliable Operation in Harsh Environments (Temperature, ESD). ANYWAVES

Data Downlink Antennas

Compact X-Band Antenna



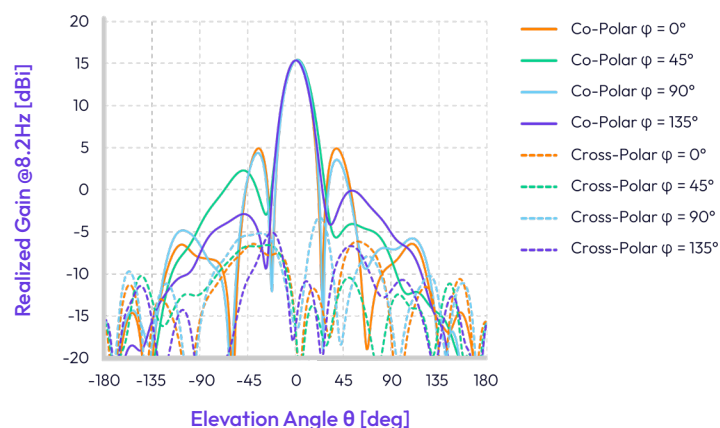
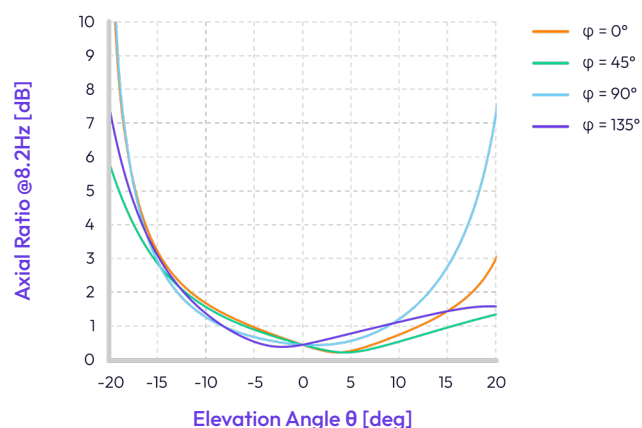
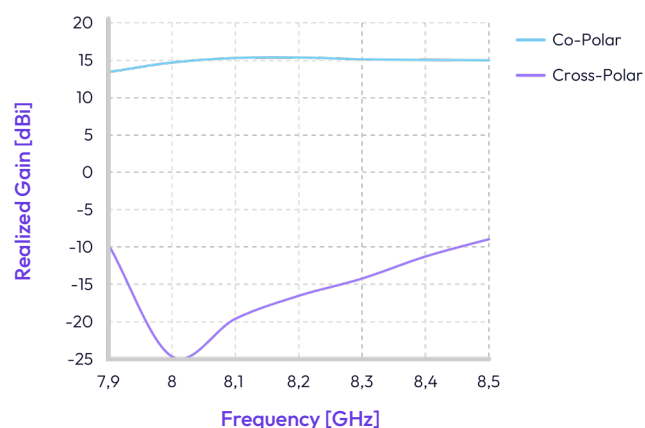
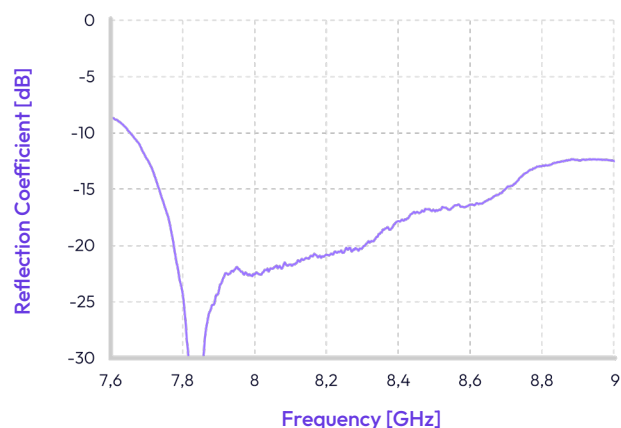
Tx

RHCP or LHCP

Ultra Low Profile

Size < 1U

Typical Measured Performance



Typical Measured Performance

Frequency Band	From 7.9 GHz to 8.5 GHz
Bandwidth	600 MHz
Polarization	Right or Left Hand Circular Polarization
Reflection Coefficient	< -15 dB
Half Power Beam Width	~20° ($\pm 10^\circ$)
Efficiency	> 70%
Realized Gain @ 8.2 GHz	15.5 dBi
Axial Ratio @ 8.2 GHz	< 2 dB from 0° to $\pm 10^\circ$ (all planes)

Physical Characteristics

Envelope Size (Without Connector)	L 100 x W 100 x H 16 mm ³ Protruding Height: 6.5 mm
Mass (With Connector)	70 g $\pm$ 7 g
Connector	Coaxial SMA female (50 Ω)
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