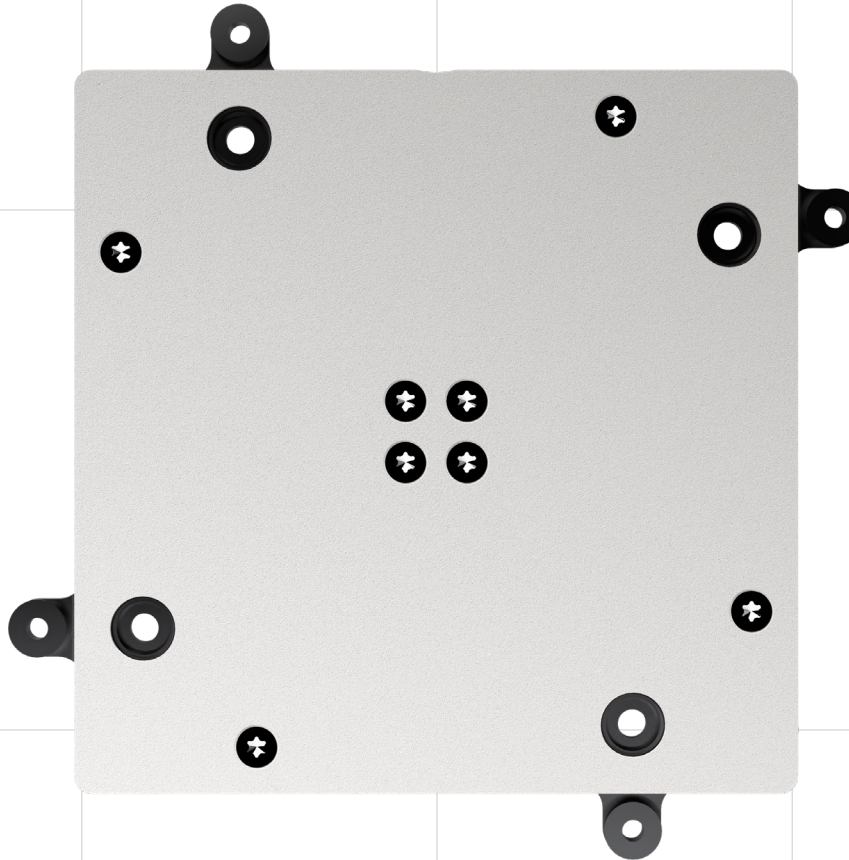


Wide Beam X-Band Antenna



Anywaves' Wide Beam X-Band antenna is a compact, ultra-thin solution for payload telemetry, offering reliable hemispherical coverage for robust mission data downlink.

Designed for LEO satellites with broad visibility needs, it fits easily into nanosat platforms thanks to its sub-1U form factor. Its circular polarization ensures stable performance across a wide angular range. A protective radome enhances resilience to harsh thermal and ESD conditions.

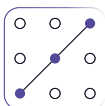
NB : compatible with Anywaves Test Hat for X-Bands Antennas.

Tx

HPBW > 85°

Ultra Low Profile

Size < 1U



Benefits



Wide Coverage 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

Wide Beam X-Band Antenna



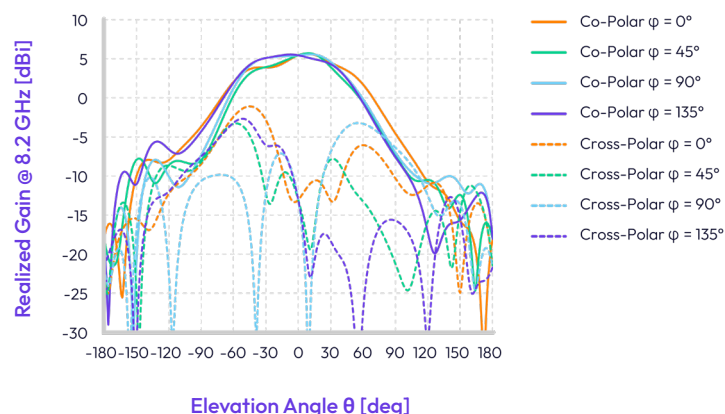
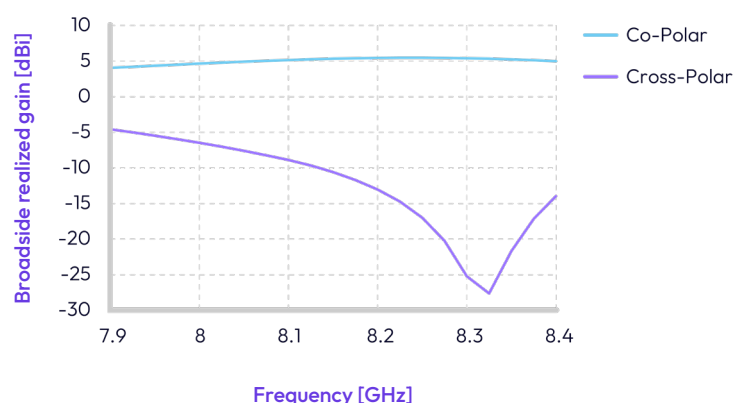
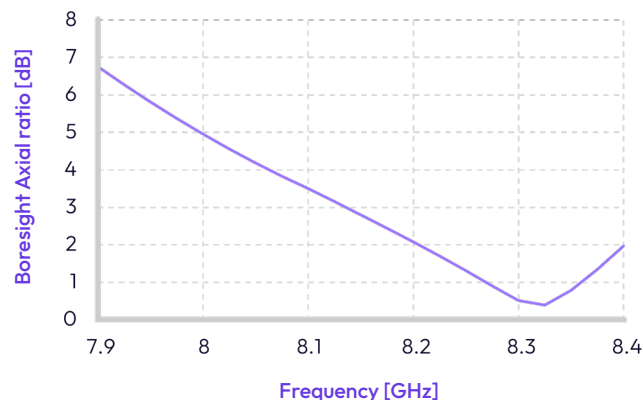
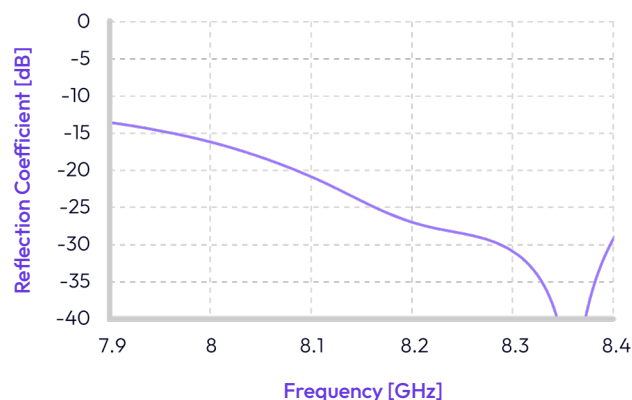
Tx

HPBW > 85°

Ultra Low Profile

Size < 1U

Typical Measured Performance



Typical Measured Performance

Frequency Band	From 8.025 to 8.4 GHz
Bandwidth	375 MHz
Polarization	Right or Left Hand Circular Polarization
Reflection Coefficient	< -15 dB
HPBW @8.2 GHz	~86° (-47°/+39° in all planes)
Realized Gain @8.2 GHz	Gain @ boresight > 5.0 dBi Gain @ $\pm 30^\circ$ > 4.0 dBi Gain @ $\pm 60^\circ$ > -1.0 dBi

Physical Characteristics

Envelope Size (Without Connector)	L 100 x W 100 x H 6.5 mm ³ Height with connector: 16.2 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