

High-Gain **X-Band** Payload Telemetry Antenna

Tx

G > 16 dBi

Very low profile

Size < 1U



Benefits

- **High data rate** for payload data downlink
- Radome protection against harsh environment : temperatures & ESD
- **Acceptance Tests** (RF, Mechanical, Thermal) included:
 - Return loss
 - Z-axis random vibration
 - Thermal cycling
- ITAR Free

ANYWAVES, the only pure European space antenna equipment manufacturer, provides high-performance and high-quality antennas for satellite constellations.

Perfectly suited to LEO platforms, ANYWAVES High-Gain X-Band antenna provides high-gain within a compact size and with a high quality circular polarization. It guarantees a very high data rate for the payload telemetry links.

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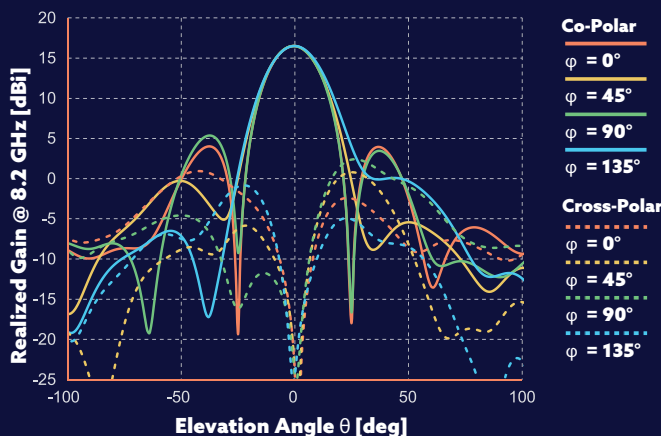
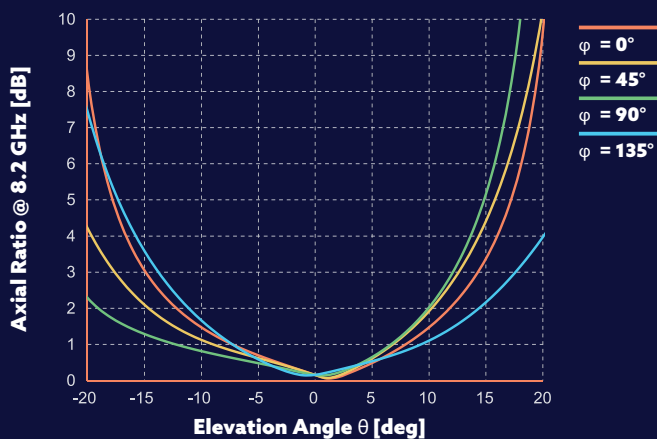
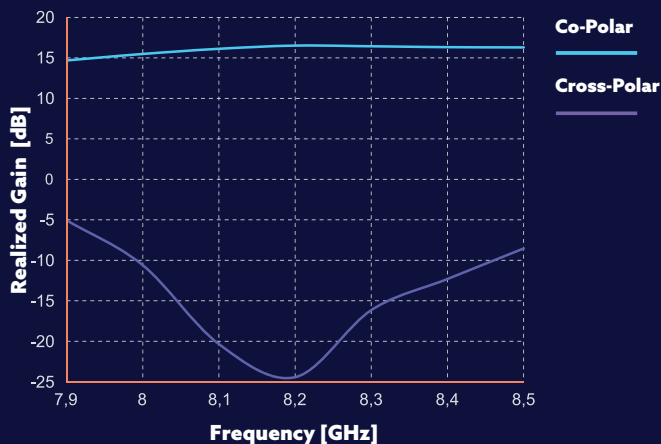
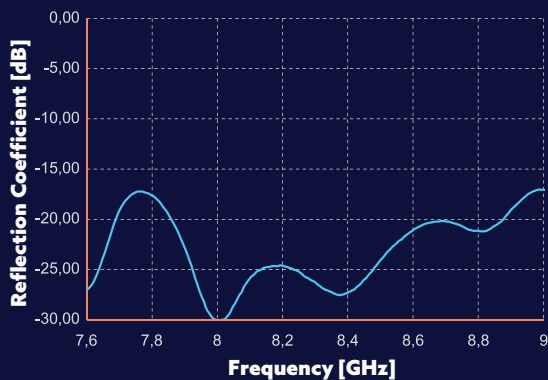
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Typical Measured Performance



Typical performance

Frequency band	From 7.9 GHz to 8.5 GHz
Bandwidth	600 MHz
Polarization	Left or Right Hand Circular Polarization
Reflection coefficient	< -18 dB (all frequency band)
Half Power Beam Width	~ 20° ($\pm 10^\circ$)
Efficiency	> 94%
Gain @ 8.2 GHz	16.5 dBi
Axial Ratio @ 8.2 GHz	< 2 dB from 0° to $\pm 10^\circ$ (all planes)

Physical characteristics

Envelope size without connector	L 82.6 x W 82.6 x H 5.3 mm ³
Mass with connector	60 \pm 2 g
Protective Radome	PEEK coated with SG121FD white paint (on Flight Models only) resistant to thermal and radiation environment and preventing from electrostatic discharges.
Connector	Coaxial SMP male (50 Ω)
Mechanical interface	4 x M2.5 (unthreaded hole)
Acceptance Tests	Performed on Flight Models only