CUBESAT TM/TC ANTENNA

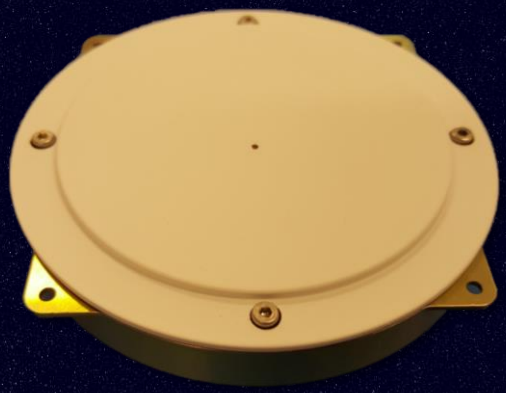
S-band
Omnidirectional coverage
Compact size
Tx and Rx

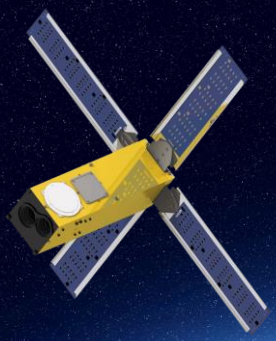
ANYWAVES© S-band Antenna is a high quality and compact antenna (<1U). Perfectly suited to Nanosats, this S-band antenna is optimized for platforms' Telemetry and Telecommand (generic Tx/Rx antenna).

ANYWAVES© S-band antenna has a hemispherical radiation pattern with superior gain and axial ratio at low elevation angles (Half Power Beam Width >90°). This design guarantees the best availability for your TM/TC links.

Materials and processes used for assembly have space heritage (CNESAdvance label). The antenna radome protects from radiations and Electro-Static Discharges for polar orbits missions.

cnesadvance





Benefits

- ✓ **Telemetry** and payload downlink and **Telecommand** uplink
- ✓ Highest availability on the market
- ✓ Easily mounted (1 antenna for Tx and Rx, size <1U)
- ✓ Space quality at affordable price
- ✓ Quick delivery

Fly Heritage in Q4 2019 on Eyesat 3U satellite (JANUS project)

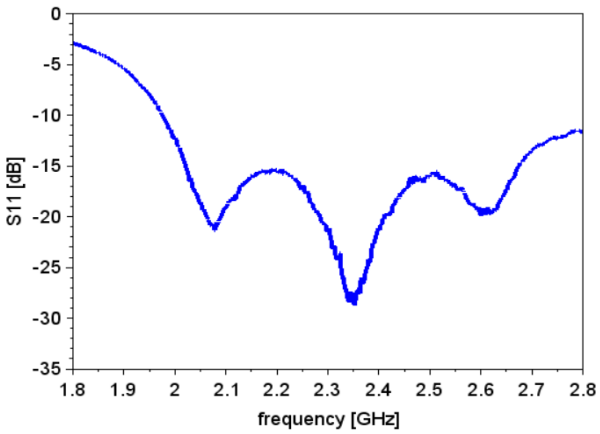
CUBESAT TM/TC ANTENNA

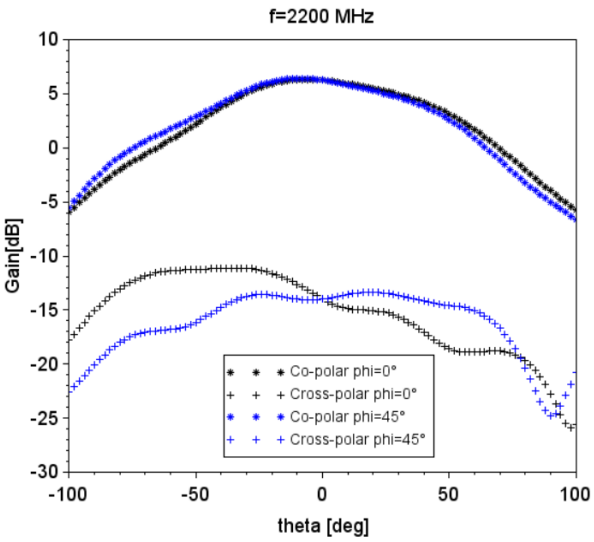
S-band
Omnidirectional coverage
Compact size
Tx and Rx

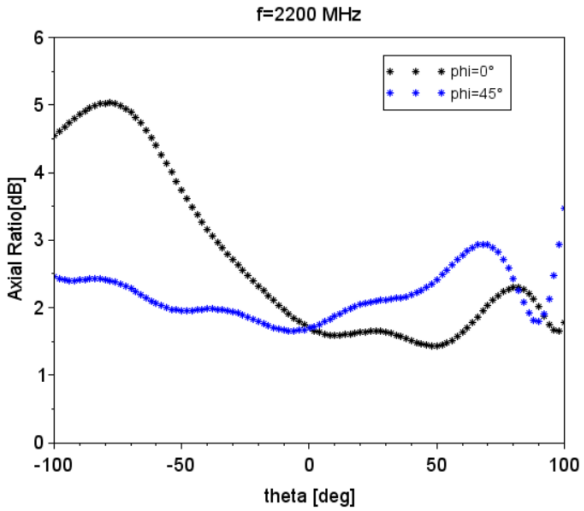
Typical Performance (@2,2 GHz)	
Frequency band	From 2.025 GHz to 2.29 GHz
Bandwidth	> 265 MHz
Polarization	Left or Right Hand Circular Polarization
Return loss	< -15 dB (all frequency band)
Half Power Beam Width	~ 90° (all planes)
Efficiency	> 92%
Gain	Gain at boresight > 6,5 dBi Gain at +/-30° > 4.8 dBi Gain at +/-60° > 0.5 dBi
Axial Ratio	< 3 dB from 0° to +/- 30° < 5 dB from 0° to +/-60° < 8 dB from 0° to +/- 90°

Physical Characteristics	
Dimensions	Surface : 79.8 mm * 79.8 mm Height : 12,1 mm (w/o connector) External Height : 4 mm
Mass	123 g (including radome and connector)
RF Power	More than 3W
Temperatures	-120°C / + 120°C
Radiation	VESPEL Radome
Electro Static Discharge	ESD free; an anti-ESD paint is applied on the radome.
Connector	Coaxial SMA female (50 Ohms)
Mechanical interface	4*M3 screws

Measured Performance







Model references : S-band-TMTC-RHCP-17v2 or S-band-TMTC-LHCP-17v2