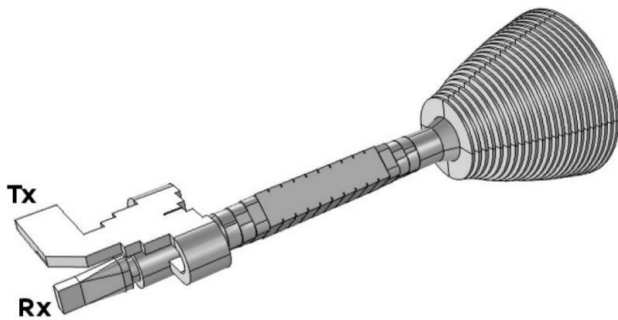


CubeSat Dual-band Horn Antenna



The TXMission™ Dual-band Horn Antenna provides multi-carrier operation at extended Ka-band frequencies.

The antenna is designed to fit, along with our Ka-band Transceiver, in a 2U CubeSat chassis.



Electrical and RF Specification

Parameters	Frequency (GHz)					
	17.3	19.65	22.2	27.0	29.0	31.0
Directivity (dB)	18.3	19.2	19.6	22.1	22.5	22.6
Gain (dB)	17	18	18	21	21	21
Axial Ratio (dB)	1.8	1.2	1.7	0.9	0.6	1.8
Polarization Losses (dB)	<0.1			<0.1		
Input Matching (dB)	>15			>15		

SPECIFICATIONS

- Dual band, directional horn antenna
- High gain & low cross-polarization
- Transmit: 17.3 to 22.0GHz
- Receive: 27.0 to 31.0GHz
- Low side lobes, input matched
- Simultaneous transmit & receive
- For 2U CubeSats & larger
- Space qualified
- Length: 192.14mm
- Diameter: 86.4mm
- Mass: 1.5kg
- Case material: AL 7075-T6
- Metal surface treatment: Alodine 1200S or Hard • Gold on request
- Tx interface: waveguide WR42
- Rx interface: waveguide WR28
- Operating temperature: -20°C to +70°C (non-operating: -30°C to +80°C)
- Applications: high-throughput telecoms, earth observation & other CubeSat applications

