

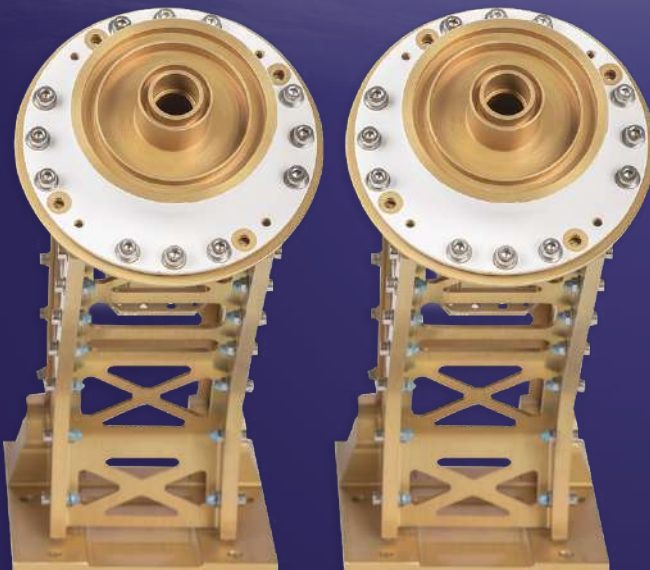
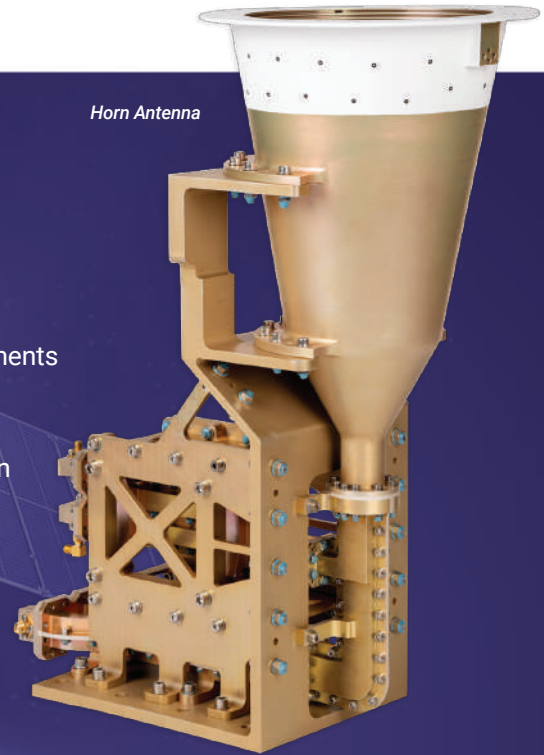
# SemaLink

## SemaLink Ku Band Antenna Family

### FEATURES

- Available for different frequency bands
- Low return loss
- Waveguide/coaxial RF connections
- Bracket design according to pointing and mounting requirements
- Structural mass optimization for optimum solutions
- Thermal design and analyses
- Aluminium 6061-T6 or application specific material selection
- Fully space qualified

Horn Antenna



Hemispherical  
Antenna

### HORN ANTENNA

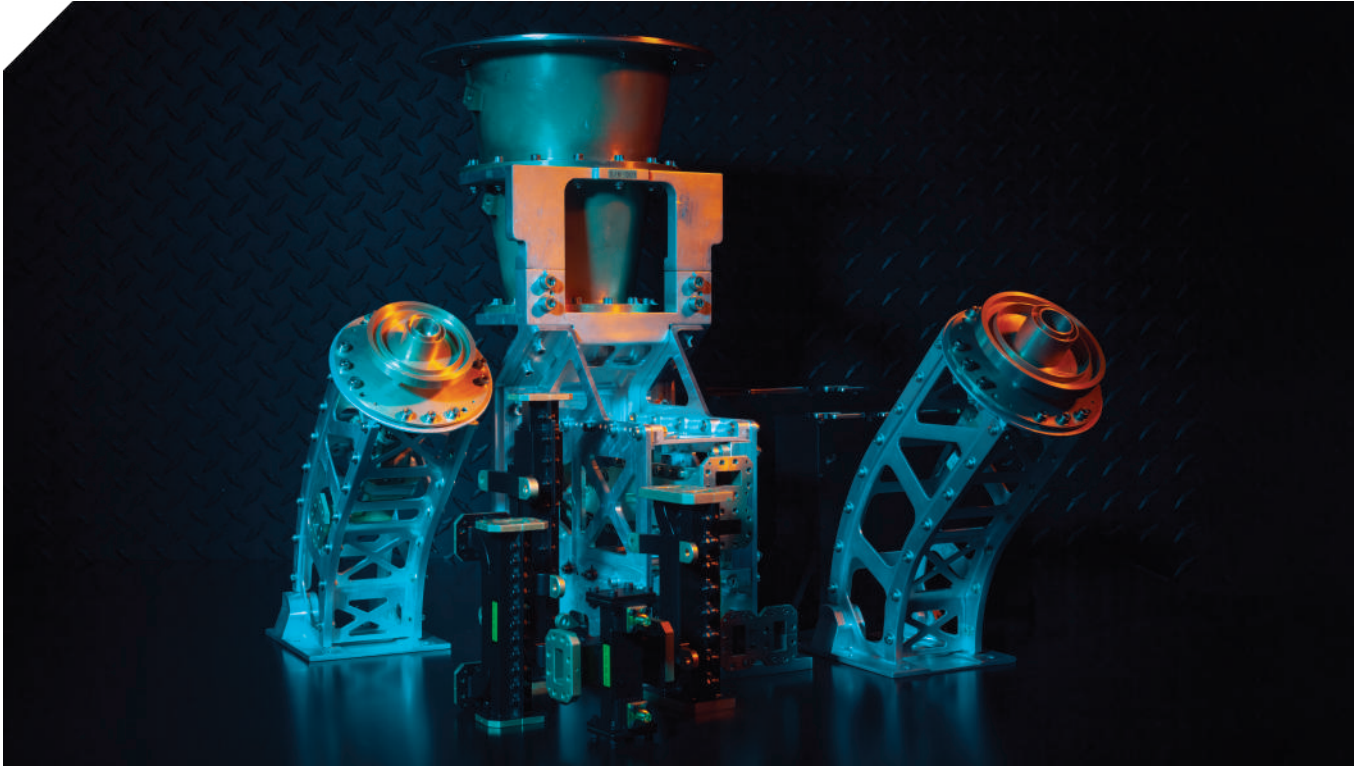
- Receive and transmit high gain antennas for global or regional coverage
- One-piece manufactured corrugated horn antennas
- Linear polarization via in-house designed OMTs

### HEMISPHERICAL ANTENNAS

- Receive and transmit hemispherical antennas for 360° platform coverage
- Circular polarization via integrated septum polarizers

## OVERVIEW

The antennas, designed and qualified for geostationary satellites, are responsible for receiving RF signals sent from ground or transmitting RF signals generated on-board using the transmitters, to ground. Horn antennas and hemispherical antennas are designed, developed and tested by CTech for satellites using state-of-the-art design and manufacturing techniques.



### SPECIFICATIONS

### HORN ANTENNAS

### HEMISPHERICAL ANTENNAS

SPECIFICATIONS	HORN ANTENNAS	HEMISPHERICAL ANTENNAS
Operating Frequency	Program Specific	
Gain	> 21 dBi for telemetry links > 23 dBi for telecommand links	> -2.5 dBi (@65°)
VSWR	1.12:1 (with OMT)	1.119:1
Polarization	Linear (V and/or H) Circular polarization also available	Circular (RHCP/LHCP)
Isolation Between Input Ports	> 30 dB	>25 dB
Cross Polarization	> 30 dB	-
Axial Ratio	-	< 2 dB
Flight Heritage	TÜRKSAT 6A	TÜRKSAT 6A



#### SPACE QUALIFIED

Fully space qualified equipment for geostationary satellites.



#### CUSTOMIZABLE

Designed and optimized according to customer needs.



#### HIGH RELIABILITY

Designed for more than 15 years of lifetime in geostationary orbit with lowest cost possible.



#### LOW MASS

Mechanical design is optimized for mass to meet mission specific requirements.