

Advanced ground station for your emerging space solutions

DUOL

LEO tracking

High precision

Ka/Ku-band ready

No keyholes

Carbon fibre dish

Extremely low-loss radome

Ultra wide-band radome

Full hemispherical coverage

Fully automated

Published API



STREAM represents the next generation of LEO tracking ground stations by capitalizing on key innovations, such as:

- New thin membrane radome material with less than 0.2 dB of loss at all frequencies up to 40GHz without tuning.
- New three axis geometry having full hemispherical coverage without keyholes.
- New high precision single motor drive system for each axis that minimizes cost and complexity while maximizing accuracy.
- Use of carbon fibre material for lighter, stiffer components and precise operation.
- Modular, state-of-the-art design for both hardware and software.
- Maximum use of COTS components for easy and cost effective maintainability.
- Rapid on site installation including optional portable and mobile versions.

Optimized for NewSpace applications

- Broadband and multiband communications for frequencies up to 40 GHz
- High precision tracking to enable the acquisition of narrow RF beam signals resulting from high frequencies, large apertures and antenna efficiencies
- Monopulse, auto tracking feed
- Easy setup and rapid response time for tracking very low and decaying orbits
- High operational performance with precision, accuracy and repeatability
- Satellite data processing and mission control can be performed at the ground station
- Optimized for total integration and networking of ground stations
- High reliability and maximum availability
- Extremely low total life cycle costs enabled by high MTBF and low MTTR
- Modular hardware and software design
- Very low complexity

All met through the use of:

- Web based command and control interface designed using web-sockets and similar protocols
- High use of COTS equipment and open source software
- Very high level of hardware integration greatly reducing part count and interconnections
- Optimized CNC precision production techniques

Dish diameter: 3.7 – 10 m

Bands: S & X up to Ka/Ku

Radome loss: < 0.2 dB (up to 40 GHz)

Pointing accuracy: < 0.01 degree

Max. wind: 250 km/h (operational)

Power (antenna): < 1kW

Axial velocity:

Typical: 0.6 deg/s Max: 3.6 deg/s

Axial acceleration:

Typical: 0.05 deg/s^2 Max: 3 deg/s^2





Space-SI
Askerceva 12
1000 Ljubljana, Slovenia
+386 1 2000 442
info@space.si