• • STREAM

New Ground Station for NewSpace Applications

STREAM represents the next generation in LEO tracking ground stations. It brings new capabilities to the industry by capitalizing on key innovations, such as :

- New 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.





Extremely low-loss radome Full hemispherical coverage Fully automated High precision LEO tracking Easy installation Ultra wide-band radome Ka/Ku-band ready No keyholes Easy to integrate in the network Published API

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

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
- 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

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