

µLCT™ Laser Communication Terminals

OVERVIEW

Voyager Space offers a μLCT^m LasercomTerminal for civil, commercial and defense applications. Our system blends the best of traditional rad-hard-by-design products with fully qualified terrestrial technologies to produce leading-edge performance. The μLCT can be used as an OISL (Optical Inter-Satellite Link), a spacecraft to ground link, or a spacecraft to UAV link.

- High Throughput Connectivity to 400+ Gbps
- Low Probability of Intercept and Detect
- Resilient, Anti-Jam Alternative to RF
- Configurable for GEO, MEO, LEO and Ground

KEY FEATURES

- Provides full duplex GEO-to-GEO crosslinks at 80,000 km.
- Baseline: 10 cm Optics
- Single Aperture Optical Head Assembly
 - Scalable implementation to support much larger systems
- Typical Field of Regard: +/- 90° azimuth;
 +/- 30° elevation
- Integrated or stand-alone Beam Control System based on optical head
- Reusable SDA-compatible PAT algorithms and process
- Flexible Mini Bench Design

Accommodation for Single Mode Fiber or detector

Support for 1550 nm and/or 1064 nm

- Software Defined Modem hosts modulations:
 - 2.5 and 10 Gbps OOK or DPSK
 - 100 Gbps QPSK
 - 16QAM
 - Multi Channel using DWDM



APPLICATIONS

Ideal for LEO, MEO and GEO Applications

- Securely Move High Volumes Of Data
- Constellation crosslinks
 Efficient data routing
 Requires fewer downlinks
- Single hop data delivery
 Eliminate double hops
- Sovereign landing of information Control where information is brought to Earth
- Space-based data aggregation