

WOLVERINE OPTICAL GROUND TERMINAL

With over eighteen years of optical communication and space domain awareness expertise, GEOST brings observatory solutions to the global market. Our portfolio includes over a dozen observatories around the globe, many in austere locations, supporting critical space missions.

GEOST provides affordable elegance in design and approach, with cutting-edge capabilities, delivered on budget and on schedule.

Wolverine | Optical Ground Terminals

Building on the flexible architecture of GEOST's Black Heron product, GEOST delivers proven, low-cost autonomous Wolverine OGTs capable of LEO and GEO, SWIR and VIS supported communications. Safety sensors and built-in autonomous tasking allow for reliable operation in diverse environmental conditions around the world.

Leveraging COTS component integration and modular SW interfaces, Wolverine delivers reliable, low-cost and quick-turn solutions. The modular system and COTS solution also support design adaptation, rapid component changeouts and straightforward upgrades. A standard, restful API allows flexible communication across the broader architecture.

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The GEOST OGT fully complies with SDA OCT v3.0 Standards.

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WOLVERINE OPTICAL GROUND TERMINAL

GEOST | Optical Communication Product Line



Black Heron

Commercial Laser Beacon

Quill

Black Heron | Day & Night LEO/GEO Observations

GEOST provides daytime and nighttime LEO RSO observations to the UDL and broader customer base. With best-in-class capability to provide SWIR daytime observations of LEO RSOs, GEOST is leading the way in optical LEO RSO tracking.

Commercial Product | Laser Beacon

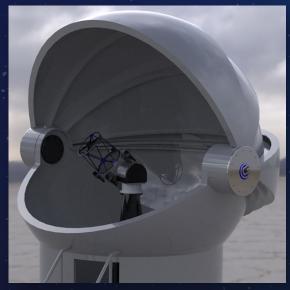
GEOST's commercial laser beacon system supports mobile calibration, testing and checkout of satellite optical communications - capable of full pointing, acquisition and tracking of LEO objects.

Quill | Handheld Laser Communications

Ground and space-based modulated retroreflector for gimbal-less low SWaP optical communication systems. Ground-based version demonstrated at operational ranges, and space-based 2U design for LEO direct-downlink communications to the field.

GEOST OGT Technical Specifications

| Spectral Band | SWIR C-Band (1535nm-1565nm) |
|------------------------|---|
| Channels | Supports 96 channels across 100GHz & 50GHz ITU-T G.694.1 grids |
| Simult. WDM Channels | 4 (hardware configurable) |
| Data Rate | 4 x 2.5Gbps |
| Bit Error Rate | 10^ -12 |
| Mount Performance | 20° / sec slew speed; <10 arcsec open-loop pointing accuracy |
| Horiz. Elevation Limit | 10° |
| Operational Period | 24/7 |
| Peak Power Requirement | <25A/220V |
| Compliance | SDA OCT Standard v3.0 compliant |



Wolverine OGT

