

SECURE NETWORKED COMMUNICATIONS



GA-EMS' Optical Communication Terminals (OCTs) and Optical Ground Stations (OGSs) are scalable and adaptable to enable robust, multi-domain communications between space, air, land, and sea, across a variety of space orbits.

OCT | Optical Communication Terminal

- Compliant with SDA v3.1 OCT standard
- 70 mm aperture for 5500+ km link range
- Up to 10 W 1530-1565 nm transmit fiber laser
- Wide field-of-view (WFOV) camera for robust Pointing, Acquisition, and Tracking (PAT)
- Hemispherical field-of-regard with low Size, Weight, and Power (SWaP)
- Software defined modem



Enhanced Protocols and Ranges

- Higher data rates and alternate coherent communication protocols
- Scaled OCT apertures available – 70 mm & 135 mm
- Burst-mode capability (SDA v4.0)
- Hardening for bLEO orbits and higher availability
- Fiber-coupled receiver with low noise amplification
- Designed for agnostic modem/ data interface

OGS | Optical Ground Station

- Compliant with SDA v3.1 OCT standard
- 10 W 1530-1565 nm transmit fiber laser
- 70 cm aperture supports bLEO link ranges
- Option for enhanced protocols and data rates
- Adaptive optics for atmospheric turbulence mitigation supports advanced communication protocols
- Transportable trailer mount available
- Field experience since 2014

