

Precision laser beam steering system, accelerating LCT deployments.

LASER COMMS

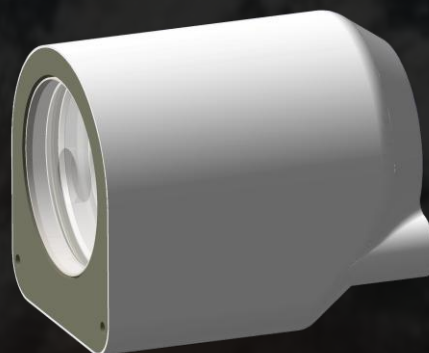
DATA CENTERS

ORBITAL DEFENSE

THE FUTURE OF SPACE DEPENDS ON LASER LINKS

SPS offers better beam steering across key performance and procurement metrics.

An alternative to sensitive, expensive FSMs.



LESS EXPENSIVE

10% of the cost of GEO pointing systems,
33% of the cost of LEO pointing systems

RAPID INTEGRATION

Uses COTS parts with simple calibration for rapid integration onto new platforms

HIGH RELIABILITY

Less drift over time, less sensitive to launch loads,
less sensitive to spacecraft jitter, longer lifetime

BETTER PERFORMANCE

Enables laser links in GEO. Ultra-high precision.
Uses lenses (instead of mirrors) for fewer losses.

Applicable Orbits	LEO/MEO/GEO
Calculated Precision	0.231 μ m
Target Range*	36,000 km
Operational Accuracy	TBD (with testing)
Azimuth/Elevation	$\pm 2^\circ$ - $\pm 50^\circ$
Slew Rate	120°/s* - 1200°/s
Power Consumption*	2.4 W Peak/Motor (9.6 W total)
Volume*	250 mm x 190 mm x 210 mm
Mass*	10.5 kg
Laser Supported*	1550 nm, 5W, 135 mm aperture
Estimated Lifetime	>10 years

*current design; not a design limitation