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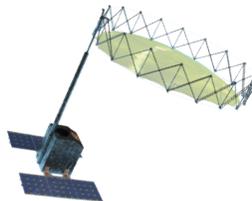
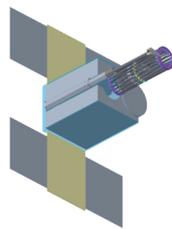
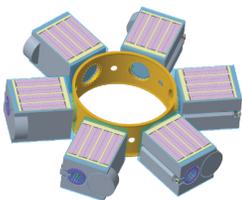
# SMALLSAT PERIMETER TRUSS REFLECTOR

High-gain reflector optimized for small satellite platforms

The Smallsat Perimeter Truss Reflector (SPT) leverages L3Harris’ innovative perimeter truss design yet optimizes its mass to meet tight stowage requirements for smallsat platforms. Offered in diameters up to 4 meters, the high-gain reflector enables low-cost launcher solutions and is compatible with reconfigurable beams and dynamic bandwidth allocation common on modern flexible satellite (flexsat). The SPT boasts surface accuracies and radio frequency (RF) reflectivity for the most challenging Ka-band applications. The reflector is well suited for broadband missions, synthetic aperture radar, radiometry, internet of things and mobile satellite service applications.

The SPT provides the high gain necessary to close very challenging link budgets, reducing the need for high-power amplification of the RF signal and freeing up power for additional transponders or payloads.

## BENEFITS



Small stowed reflector in 12” D X 35” H\* is compatible with most low-cost launch options, including:

- > Evolved Expendable Launch Vehicle Secondary Payload Adapter (ESPA) and ESPA Grande
- > Electron launcher
- > Firefly
- > LauncherOne

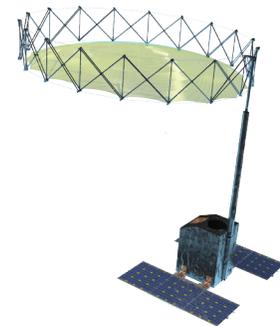
Unit is mechanically optimized for smallsat applications:

- > Boom and reflector are deployed by a single motor, reducing mass and complexity

Unit leverages high-performance mesh, cords and composite structures that:

- > Are accurate enough for high frequency missions (e.g. Ka or V band)
- > Are capable of long focal lengths (f/D >1.0) to minimize scan loss
- > Allow for frequent repoint missions

\*Reflector dimensions vary based on antenna optics and other mission requirements.



## KEY FEATURES

- > Compatible with reconfigurable beams and bandwidth for use on smallsats and modern flexsats
- > Inclusive of integrated telescoping boom for high-accuracy pointing and stiffness
- > Offers enhanced cross pole discrimination over other reflectors
- > Has 50% lower mass than heritage reflector designs
- > Capable of a variety of focal lengths, even long focal lengths (f/D >1.0), which minimize scan loss
- > Allows for frequent repoint missions
- > Optimized for high-production rates, capable of delivering multiple incremental units per month

### Smallsat Perimeter Truss Reflector

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