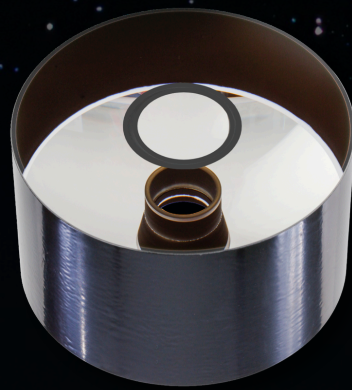


## SDA-85

### Monolithic Optical Telescope

A powerful yet compact 85mm aperture monolithic catadioptric telescope with all optical and mechanical surfaces integrated into a single structure — eliminating metering frameworks and alignment sensitivities



High-resolution optics for small satellites — in UV, Visible, and IR configurations — ready for rapid deployment, providing detailed and time-critical image intelligence

Space Domain Awareness

Responsive Space Solutions

Proliferated ISR

RSO Identification and Tracking

Earth Observation

Rendezvous & Proximity Operations

✓ **Rugged & Stable**  
Maintains focus across temperature changes and offers exceptional resistance to vibration and shock, simplifying integration and ensuring stable, long-term performance

✓ **Long focal length with diffraction-limited image quality**  
Inherently aligned optical surfaces support high focal length to total track-length ratios, while maintaining diffraction-limited image quality and strong radiometric performance

✓ **Excellent SWaP efficiency**  
Architecture delivers a low-mass form factor 3x to 6x shorter than comparable conventional designs

✓ **Flight heritage**  
Three decades of support for NASA, DoD, and commercial missions, plus the SDA-85 has TRL9 qualification with customer selected camera options

USA Manufactured ■ ISO 9001 & ITAR Compliant

Manufacturing optics for space for three decades in Ontario, N.Y.

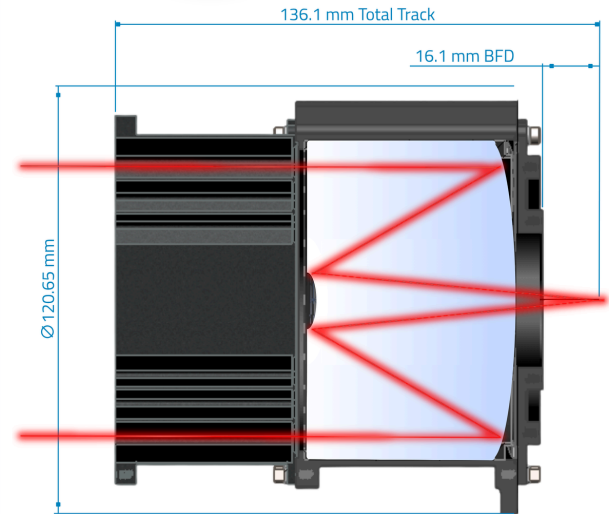
# SDA-85 Monolithic Optical Telescope



## SPECIFICATIONS:

Specification	SDA-85 306VisNIR	SDA-85 650VisNIR
Clear Aperture (mm)	85	85
Effective Focal Length (mm)	306	649
F-number	3.6	7.6
Wavelength (nm)	450-900	450-900
Nyquist Matched IFOV (urad)	3.59	3.57
Image Circle (mm)	16	11
Diagonal Angular FOV (degrees)	2.9	0.93
On-Axis MTF @ 50lp/mm	73%	54%
Full Field MTF @ 50lp/mm	63%	28%
On-Axis MTF @ 100lp/mm	49%	31%
Full Field MTF @ 100lp/mm	26%	6%
Track Length (mm)	136.1	136.7
Back Focus (mm)	16.1	13.7
Weight (kg)	2.04	2.04

\*Licensed from Lawrence Livermore National Laboratory  
US Patent 9,720,223



### SPACE HERITAGE & SCALABLE MANUFACTURING

Starris is supported by three decades of space-qualified innovation from parent company Optimax.

We have extensive manufacturing capabilities for precision optics with scalability — from small-order needs to high-volume small satellite constellations.

Our precision optics have been utilized in dozens of NASA missions, including every Mars Rover, plus DoD and commercial missions.

Inquire for additional details on temperature, shock/vibe, and TVAC qualification