

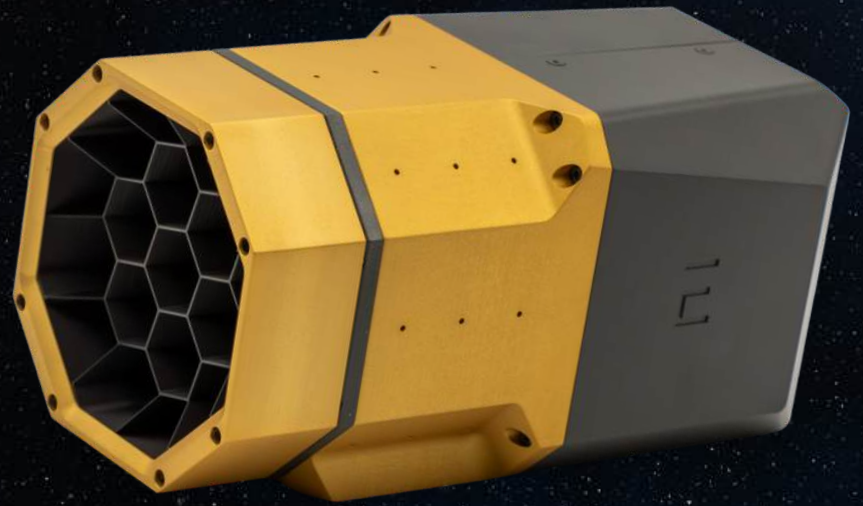
Eoptic DeepScan™

Imaging Payload for Space Domain Awareness

Physics-driven multimodal imaging technology via space-proven optics, sensors, and integrated AI

Imaging intelligence & high-data resolution

DeepScan™ counts photons — collecting maximum information with minimum light



Real-time behavioral analysis

Detection and tracking for persistent awareness

Physics-informed onboard analytics

Characterization of mass, materials, temperature

Multi-mission architecture

Single vendor, single unit

Camera, optics, compute in single package

Components have proven space heritage/High TRL, low risk

EOPIC
Space Systems

SmallSat payload solutions for Responsive Space

We see objects sooner and can characterize them faster.

Eoptic DeepScan™ extends imaging intelligence deep into space. Driven by physics, DeepScan™ technology doesn't just capture imagery, but counts the photons — enabling the maximum information to be collected with minimum light.

Eoptic's U.S.-manufactured imaging payloads deliver real-time behavior awareness for speedy and accurate RSO detection, tracking, and characterization. The modular architecture is a single package with camera, optics, and onboard processing.

The components include space-qualified sensors, monolithic telescope, and integrated AI, which provide aggressive TRL advancement with low mitigated risk.

This full optical insight into RSO behavior enables the precise characterization of size, shape, orientation, materials, temperature, and even fuel type and thruster plumes — penetrating the clutter and informing as to collision risk and ownership.

Powered by Cambrian® Technology Stack

Eoptic's Cambrian® technology combines multi-modal imaging with real-time vision processing — fusing data information and enhancing the ability of autonomous systems to identify and characterize.

Multi-Modal Sensor Systems

Rugged, athermal

Multispectral and polarimetric

Low SWaP

AI/ML sensor processor

Real-time Imaging Science

Segmentation and classification

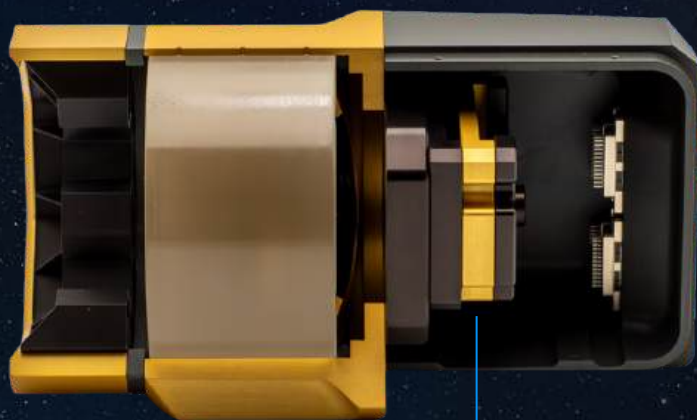
Multimodal sensor fusion

Behavior analytics

Modular Payload Architecture

Optics

Athermal
Lower SWaP
Pre-aligned
Shelf-stable



Sensor Management Unit

Edge compute for
physics-informed AI analytics

UV-VIS-NIR-SWIR Sensor

Available Sensor Configurations

Wavelength	Teledyne Space Grade Sensor	Resolution	Purpose
UV	CIS120	2K x 2K	Plume detection, propulsion event forensics
VIS-NIR	CIS120/CIS220	2K x 2K	Object ID, photometric characterization
SWIR	Scion SR	1280 x 1024	Thermal contrast, material classification

System Specifications

Parameter	Value
Form Factor	Optimized for 6U and 12U CubeSats
Dimensions	100 x 100 x 195mm (Single Sensor Payload)
Monolithic Telescope	Patented design 85mm Aperture 306 to 650mm FL
Sensor Management Unit (SMU)	Integrated CPU and GPU
Mass	3kg (Single Sensor Payload)
Power	13W (Single Sensor with SMU)
Data Interface	Ethernet

EOP TIC

Space Systems



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