

SOP 1U/65

Scanway Optical Payload

Key highlights

The SOP 1U/65 (Scanway Optical Payload) is a nanosatellite-size imager fitted to 1U designed for advanced Earth Observation applications. It is capable of capturing high-resolution imagery in both the visible (RGB) or NIR/PAN spectral bands. Operating from an altitude of 500 km, the SOP 1U/65 delivers a ground sampling distance of near 14 m/pixel, ensuring detailed spatial resolution for a wide range of observational and analytical needs.

Applications

The imager facilitates a wide range of Earth observation applications across various sectors, including:

- Climate Change Studies
- Urban Planning and Development
- Agricultural Optimization
- Forestry Management
- Marine and Water Bodies Monitoring

Customization

Product customization is available, encompassing:

- number of spectral bands - by custom spectral filter application,
- GSD / SWATH - change of camera to a different one / to our custom solution, change of optical system.

Flight heritage

The payload will be launched in the middle of the 2025.

65 mm



SOP 1U/65

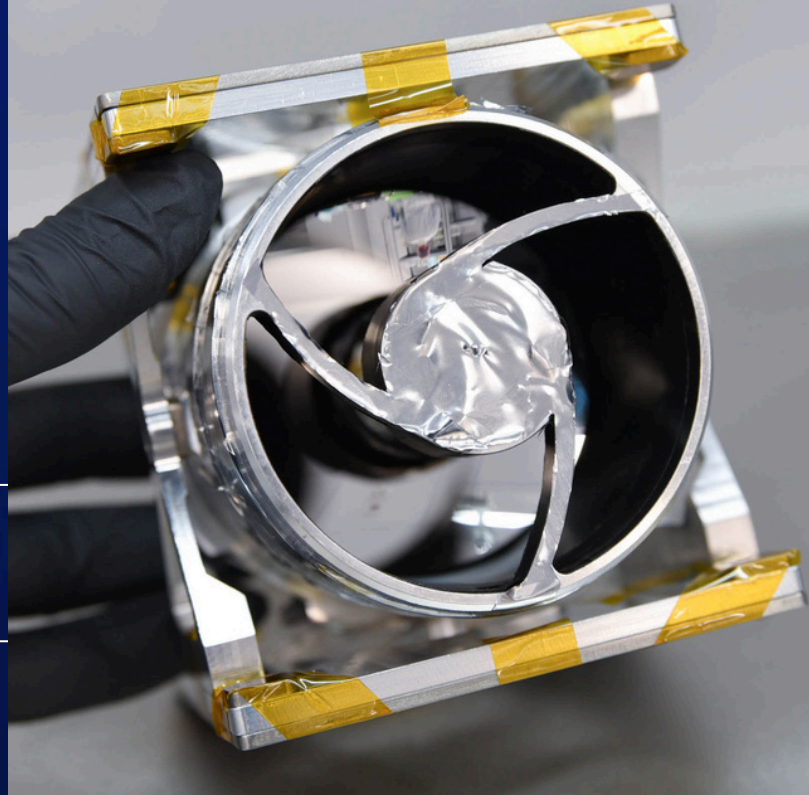
Scanway Optical Payload
for nanosatellite

14 m
GSD

57 x 43 km
Observed area

TRL 9
in 2025

65 mm
Aperture



Technical details for @500 km

Spectral bands	VIS - NIR
Aperture	65 mm
GSD	14 m
IFOV	5.77 "
FOV	6.4 x 4.9 °
Swath X	57 km
Swath Y	43 km
Images resolution	4096 x 3072 pix
Pixel pitch	5.5 um

Focal length	200 mm
Focal ratio	3
Chief ray angle	3.8 °
Mass	0.8 kg
Envelope [mm]*	96 x 90 x 119
Data format	8,10 or 12 bits
Data interfaces	I2C, SPI, LVDS
Required power	5 W
Required voltage	12 V or 5 V

* height, width, length