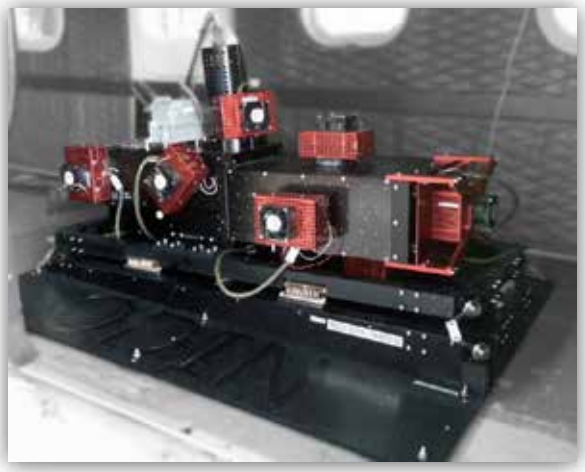
ODIN-1024

ODIN-1024 is a **next generation** state-of the-art airborne hyperspectral imager, covering the spectral range from **400 to 2500 nm**.



Perfect co-registration between 1024 spatial pixels for VNIR and SWIR is achieved by employing a novel **common fore-optics** design.

In addition to the **extreme resolution**, the unique design provides high sensitivity and low noise, low spatial and spectral misregistration (smile and keystone).

In addition to its supreme data quality, HySpex ODIN-1024 includes **real-time data processing** functionalities such as **real-time georeferencing** of acquired images. It also features built-in **on-board calibration** system to monitor the stability of the instrument.

False color VNIR and SWIR representation of flight line acquired during ODIN test flight.

Main specifications

Spectral range	0.4 - 1.0 µm | 0.95 - 2.5 µm
Spatial pixels	1024
Spectral channels	427
Spectral sampling (VNIR | SWIR)	3.0 nm | 6.1 nm
FOV	15°
Pixel FOV across/along	0.25/.025 mrad
Bit resolution	16 bit
Noise floor (VNIR | SWIR)	2.4 e^- | 150 e^-
Dynamic range (VNIR | SWIR)	37000 | 7500
Peak SNR (at full resolution)	>500 | >1300
Max speed	180 fps | 450 fps
Power consumption	60 W
Dimensions (l–w–h)	113.4 – 42.3 – 72.6 cm
Weight	90 kg

(VNIR | SWIR)