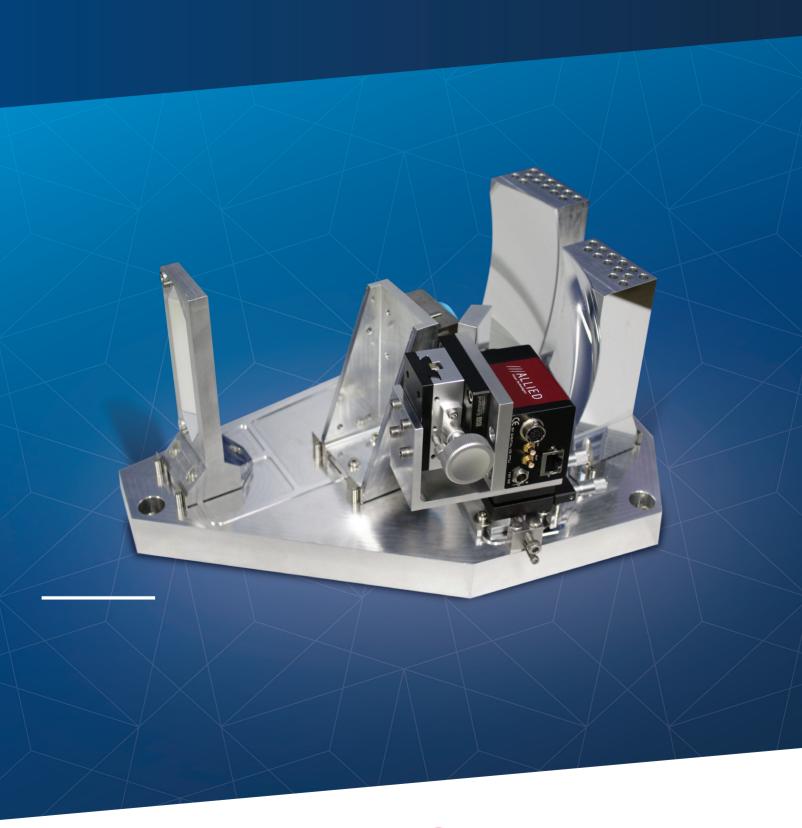
ELOIS COMPACT HYPERSPECTRAL IMAGER

FOR PRECISION EARTH OBSERVATION IN THE VISIBLE AND SHORT WAVE INFRARED





ELOIS

INNOVATIVE SPECTRO-IMAGER FOR MICROSATELLITES



ELOIS ("Enhanced Light Offner Imaging Spectrometer") is the first compact spaceborne instrument providing high quality hyperspectral images with excellent radiometric performance in the VNIR and SWIR range. The imager relies on a cutting-edge grating-based spectrometer which achieves 10 nm spectral resolution or better with fast optical throughput. This highly innovative instrument delivers detailed and accurate information that enables to make valuable scientific, business, governmental or defense decisions for land, coastal and maritime management on local and global scale.

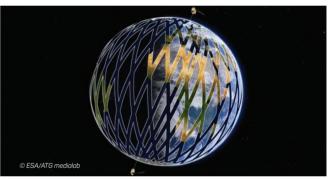


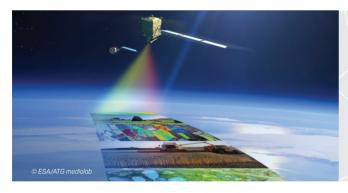
EXCLUSIVE FREE FORM TECHNOLOGY

AMOS developed an exclusive cost-effective approach for manufacturing multi blazed free form gratings by Single Point Diamond Turning (SPDT). Such gratings enable compact and fully corrected instruments, with significant advantages in terms of optical performance, mass, volume and cost.

CONSTELLATIONS

The ELOIS Hyperspectral instrument offers global, regular and in-depth remote sensing analyses of land and coastal areas all over the Earth. A single ELOIS operated on board a microsatellite will provide a weekly revisit of your place of interest. A daily monitoring is then accessible with a small constellation of 5 to 6 satellites.





APPLICATIONS

- Agriculture and forestry
- Environment and water monitoring
- Natural resources management
- Land survey and disaster management
- Coastal monitoring
- Mining and oil exploration activities
- Business intelligence
- Defense
- And much more

INSTRUMENT SPECIFICATIONS

Reference orbit 640 km

Spectral range 400 to 2450 nm

Spectral bands Up to 210

Spectral resolution < 2.5/10 nm

SNR Up to 400

GSD 35m / 70 m Swath 70 km

Mass 40 kg

Volume 680 x 600 x 500 mm