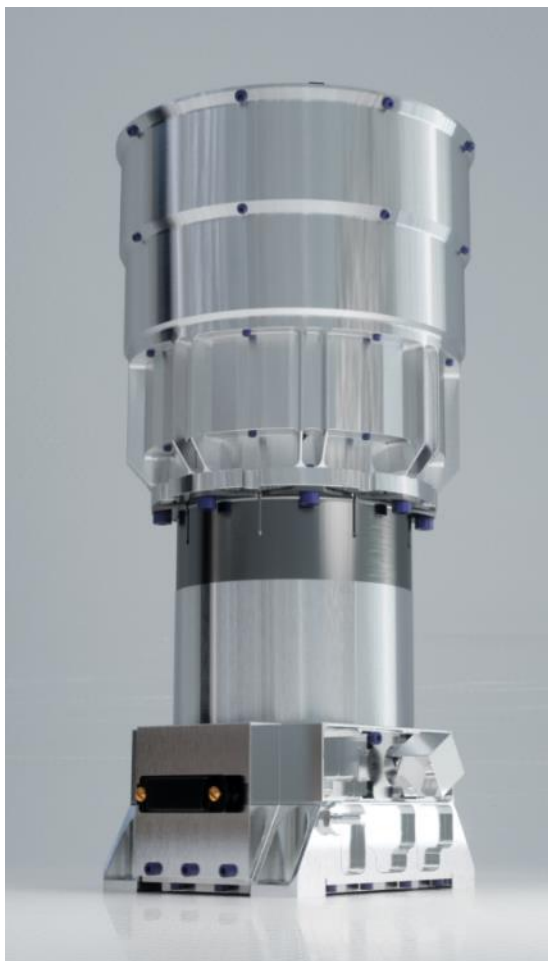


NEW HYDRA ACCESS STAR TRACKER

HYDRA ACCESS: A HIGH-END STAR TRACKER AVAILABLE OFF-THE-SHELF

June 06, 2023 – Sodern is pleased to announce the launch of Hydra Access, the first off-the-shelf, high-end star tracker.

The Hydra Access tracker is the latest addition to the well-known Hydra range of high-end star trackers. Offering exceptional quality and resilience, Hydra trackers have been flown on major institutional and scientific missions for several countries, as well as on telecommunication and observation satellites in all orbits for 12 years.



- **HYDRA ACCESS, A HIGH-END STAR TRACKER AT A COMPETITIVE PRICE**

Hydra Access is a standardized and simplified version of the Hydra-CP high-end star tracker in terms of testing, integration and reviews. In exactly the same way as Hydra-CP, it is composed of an optical head which integrates the image pre-processing.

Hydra Access trackers are mass-produced using new industrial production methods, and are designed, manufactured and tested to improve productivity throughout the manufacturing chain in order to optimize production costs.

This off-the-shelf batch manufacturing process enables Hydra Access to offer a high-end tracker with low lead-time at an affordable price. Hydra Access thus meets the needs of Newspace companies wishing to upgrade their product range with more precise attitude control. It also meets the expectations of traditional players seeking greater profitability for their space programs.

- **NO COMPROMISE ON PERFORMANCE**

Hydra Access benefits from the same technical capabilities and reliability as the Hydra CP high-end trackers, inherited from over fifty years of Sodern experience in developing advanced space equipment.

Hydra Access is designed to meet the most demanding accuracy and robustness requirements. Using the HAS-2 CMOS sensor and proven star detection algorithms, it offers an acquisition time of less than 2 seconds and an attitude retrieval accuracy of approximately 1 arcsec.

In addition, Hydra Access has a thermoelectric sensor cooling system that can be activated on demand, according to the needs of the mission.

Hydra Access also benefits from an embedded star catalog, a library of algorithms and advanced software.

“We designed Hydra Access with the aim of offering a tracker with exceptional and recognized performance, that is immediately available and at a lower price. I am convinced that Hydra Access will become the new standard in the high-end star tracker market, offering an ideal alternative for budget constrained missions”, explains Fabien Robert, Sales & Marketing Director.

Hydra Access is designed with hardened, radiation-resistant lenses and is available with a 26° protective baffle.

• TRL 9 LEVEL VALIDATED

The design of Hydra Access benefits from the in-flight experience of Hydra optical heads, representing over 5 million hours of fault-free operation since 2012. More than 300 Hydra trackers are currently in flight. Hydra Access also offers a lifetime of more than 18 years in geostationary orbit (GEO)*.

Hydra Access is available now, with an estimated starting price of €150,000 (excluding VAT) for an optical head alone.

MAIN CHARACTERISTICS OF HYDRA ACCESS

- High-end tracker
- TRL 9
- Available off-the-shelf
- Optical head integrating image pre-processing
- Embedded star catalog, algorithms inherited from 50 years of Sodern experience
- Centralized version with the ability to connect up to 4 optical heads to the satellite on-board computer
- SpaceWire interface
- Acquisition time of less than 2 seconds
- Accuracy of 1 arcsec
- 26° baffle
- Lifetime over 18 years (GEO)*

Press release

 Hydra Best in class performance, highly modular solution				
<i>Hydra Access</i>	<i>Hydra CP</i>	<i>Hydra baseline</i>	<i>Hydra TC</i>	<i>Hydra M</i>
				
Flight-proven since 2014 (Hydra CP Legacy)	Flight-proven since 2014	Flight-proven since 2012	Flight-proven since 2015	First flight in 2020
LEO & GEO orbits	LEO & GEO orbits	LEO & GEO orbits	LEO & GEO orbits	LEO orbit
The best trade-off between performances and price Available on the shelf	Best high-end centralized processing star tracker	Optimized for Earth-observation & science missions	Optimized for GEO	Optimized for lower power
Up to 4 OH 1.4 kg per OH	Up to 2 OH 1.4 kg per OH	Up to 4 OH & 2 EU 1.4 kg per OH 1.8 kg per EU	Up to 2 OH & 2 EU in one single box 1.4 kg per OH 3.9 kg per EU	Up to 2 OH & 2 EU 1.4 kg per OH 1.35 kg per EU

The Hydra range of star trackers

The best trade-off between performance and price
Available off-the-shelf

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About Sodern

Sodern draws on sixty years of experience in optronics and neutron technology to design innovative and competitive solutions for stakeholders in space, defense, industry and research. As a world leader in star trackers and neutron systems for analyzing and detecting materials, Sodern is internationally recognized for its expertise in very high technology equipment. Sodern is a subsidiary of the European leader in access to space, ArianeGroup, and employs 450+ highly qualified people. Its 2022 turnover exceeds €80M.

* With Peltier activation.

Specifications and information are approximate and subject to change without notice or obligation on the part of the manufacturer.