

# HUGIN® AUV



KONGSBERG



## KONGSBERG AUTONOMOUS UNDERWATER VEHICLES

### HUGIN® AUV System

#### FEATURES

- Class-leading navigation performance.
- Advanced payload systems with in-mission processing.
- More commercial surveys completed than any other AUV system.

HUGIN® is the most successful commercial Autonomous Underwater Vehicle (AUV) available. It combines IHO quality positioning with the highest resolution sensors on the market. HUGIN collects data from many different sensors concurrently, providing a comprehensive geophysical dataset from a single mission. HUGIN is equipped with swappable batteries and removable data storage enabling continuous operations.

The HUGIN AUV System is a multi-role vehicle capable of collecting high resolution data for commercial, scientific and defense applications. It is the most flexible AUV available on the market, capable of carrying a wide array of sensors, including synthetic aperture sonars, multi-beam echo sounders, cameras, lasers, sub-bottom profilers and environmental/scientific sensors. Since the introduction in the 1990s, HUGIN AUVs have completed more commercial surveys than any other AUV and continues to deliver World leading performance.

HUGIN also processes data in-mission, providing an autonomous pipe tracking capability, terrain navigation and target recognition. This makes the HUGIN the most flexible and productive platform for everything from geophysical surveys to mine countermeasures

#### HUGIN® AUV key performance parameters

- World class navigation performance, IHO compliant.
- Proven track record.
- HISAS 1032 interferometric synthetic aperture sonar.
- EM 2040 multi-frequency multibeam echo sounder.
- Hot-swappable lithium polymer batteries and data storage.
- Advanced autonomy with in-mission data processing.
- Autonomous position aiding through terrain navigation and single-transponder positioning.

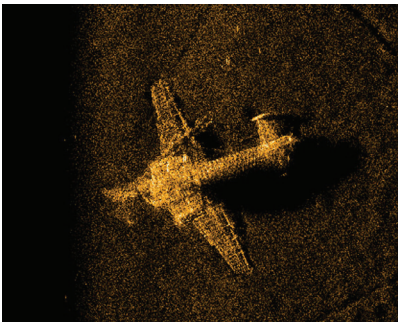


## Product Evolution

HUGIN has been continuously evolving since development began in 1991. From the first commercial survey in 1997, KONGSBERG and our partners at the Norwegian Defense Research Establishment (FFI) have been at the forefront of underwater robotic technology. HUGIN continues to deliver World-class performance and new capabilities and features are added through software updates and vehicle upgrades.

## Deployability

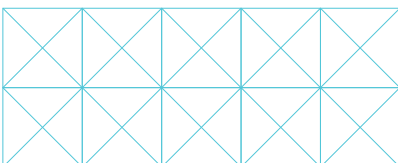
HUGIN can be deployed from dedicated vessels, vessels of opportunity or from shore. The complete HUGIN system including operator consoles, launch and recovery system and the AUV itself can be delivered in DNV-certified offshore containers. The containers allows for transport by sea, air and land and mobilization is easy with only an external power connection required. Various container sizes are available to meet the customer needs.



## TECHNICAL HIGHLIGHTS

Depth rating	3000, 4500 and 6000 metre water depth.
Speed range	2-6 kt (3000/4500), 2-5 kt (6000).
Endurance	24-72 hours depending payload configurations.
Navigation	KONGSBERG Sunstone inertial navigation system with DVL, GPS, USBL. Terrain-referenced navigation and single transponder navigation options.
Communication	cNODE acoustic 2-way underwater communication and positing through KONGSBERG HiPAP. UHF, Wi-Fi and Iridium surface communication.
Payload sensors	<ul style="list-style-type: none"> <li>• KONGSBERG HISAS 1032 Synthetic Aperture Sonar</li> <li>• KONGSBERG EM2040 multibeam echo sounder</li> <li>• EdgeTech dual/triple frequency side-scan sonars</li> <li>• EdgeTech sub-bottom profilers</li> <li>• Acoustic Doppler Current Profiling</li> <li>• CTD sensor</li> <li>• Digital still image colour camera</li> <li>• Laser profiler</li> <li>• Magnetometer</li> <li>• Environmental sensors</li> </ul>

*Specifications are subject to change without notice.*



Kongsberg Maritime  
P.O.Box 483, NO-3601  
Kongsberg, Norway

Switchboard: +47 815 73 700  
Global support 24/7: +47 33 03 24 07  
E-mail sales: km.sales@km.kongsberg.com  
E-mail support: km.support@km.kongsberg.com

01.Marine Robots-2 of 2-03.09.21