IMOTUS-S [Underwater Signature Measurement System]

PROVEN, TRUSTED AUTONOMY

cellula.com



IMOTUS-S



The Imotus-S signature measurement system allows vessels to check their acoustic and magnetic underwater signatures quickly and efficiently. The drones operate as a fleet to provide simultaneous measurements without requiring the ship to leave station.

Radio to enable communication to vessel when deployed Digital smart hydrophone and self-compensating magnetometer are used for signature measurements

Imotus-S software builds on Cellula's standard Solus family

Inter-vehicle communication improves speed and quality of survey





DRONE COMMUNICATIONS MAGNETOMETER SCANS



SIGNATURE MEASUREMENT OVERVIEW

- The operator loads a pre-set scan path to the drone fleet and communicates this to the bridge.
- The fleet is deployed using the containerized launch & recovery system.
- The Imotus-S drones autonomously configure themselves into position and submerge.
- The marine vessel completes a number of passes as defined in the scan profile while the drones collect the required data.
- In between vessel passes, drones can send data to host vessel for preliminary analysis
- Upon recovery, the data is downloaded, processed, and analyzed.

AVAILABILITY

The Imotus-S drones can operate in open ocean or littoral waters to complete marine vessel signature measurements without requiring the ship to leave station. On-shore infrastructure or underwater cabled deployments are not required.

INTER-OPERABILITY

The shipborne signature measurement system is designed to be stored, operated, and maintained in a 20' ISO container. No additional modifications to the ship are required, allowing for quick adoption of added functionality.



SECURITY

Signature measurement data is stored in an encrypted format on Imotus-S, only made accessible to the host platform. Detailed reports are provided to the end user to include the acoustic & magnetic measurements and scan profiles.

Specifications

STANAG 1136 compatible data*

Encrypted data storage & transfer

Simultaneous measurements from port, starboard, and under keel

Smart hydrophone **

3-axis self-compensating magnetometer **

* Compliance verification in progress ** Contact Cellula for details

About Us

Cellula Robotics Ltd. is a proudly Canadian, privately owned, world-leading marine technology company focused on revolutionizing underwater security through advanced Autonomous Underwater Vehicle (AUV) systems.

Headquartered in Burnaby, British Columbia with additional offices on the East Coast of Canada and the United States, Cellula employs over 80 dedicated professionals, including highly skilled engineers, designers, and technicians.

Cellula Robotics Ltd. is driven by a mission to redefine the paradigm of underwater security. By harnessing the potential of cutting-edge AUVs, we aim to change the way the world approaches subsea security. Driven by innovation and industry knowledge, we are committed to crafting sustainable solutions for the defense, mineral exploration, and energy sectors. Our hydrogen fuel cell-powered long range AUVs address evolving demands, propelling us towards a greener future.

Our unyielding commitment to quality is evident through our ISO 9001:2015 Quality Management System that not only underscores our dedication to excellence but also reflects our ability to consistently surpass the expectations of our clients.

Contact Us

For inquiries, please contact us:

AddressB109-9000 Bill Fox Way, Burnaby, BC, V5J 5J3, CanadaPhone1-604-540-5530Emailinfo@cellula.com

