

SOUNDER USV SYSTEM



KONGSBERG



SOUNDER



The KONGSBERG Sounder USV system is a multi-purpose unmanned surface vehicle system with a unique hull design to ensure high performance for hydroacoustic applications.

The Sounder USV supports quick and easy change of payload and is adaptable for both hull and bow mounted systems. KONGSBERG's K-MATE autonomy engine provides safe navigation and control of the system, capable of direct remote control, supervised or autonomous operation*. A robust and reliable propulsion system and hull design ensures safe sailing for up to 10 days.

KEY FEATURES:

- Unique hull design for optimal performance
- Robust and reliable hull and propulsion system
- Flexible payload capabilities - moonpool, bow and hull mount
- 200+ hours of continuous operation
- Max speed 12 knots
- K-MATE autonomous navigation and control
- Shipped in standard containers
- USV Fleet Management
- Compatible with Vestdavit LARS
- Foldable mast for containerized transport and easy mobilization

Multi-purpose USV Platform

With a spacious moonpool and rack mount, the Sounder USV System is a flexible and adaptive platform for different applications. The onboard power generation provides enough power to operate several payloads at once. The payload is installed in the moonpool, though customisation allows installation in the keel or even bow mounted equipment.

It's all about the data

Throughout the entire design process, focus has been on creating an optimal platform for hydroacoustic payload sensors, and maximum endurance while retaining the ability to transport the vessel in standard shipping containers, allowing for efficient deployment anywhere in the world. The hull shape ensures smooth sailing through the water, eliminating aeration and minimizing drag. A slim bow and the stabilizing fins dampen roll and pitch movement while the three rudders provide exceptional manoeuvrability.

The Sounder USV System is designed to perform for hydro-acoustic applications, from fish finding and fishery research to seabed mapping. With KONGSBERG's range of sonars and echosounders, the Sounder is a versatile platform for many applications; a holistic solution from the world leading manufacturer of professional sonars and autonomous vehicles.

*Our autonomous unmanned systems are designed to be compliant with current legislation with the caveat that we can't predict all scenarios and outcomes. To enable safe operation we recommend real-time supervision of unmanned surface vehicles to promote best-practise and safe operations.



Significant heritage combined with world class innovation

KONGSBERG works in collaboration with Norsafe AS as our hull partner. With Norsafe's 100+ years of experience as a boat builder and KONGSBERG's 30+ years of experience with autonomous underwater vehicles for demanding applications, the Sounder USV System is a reliable platform with innovative solutions designed to do the work, every time.

Fitted with the world leading fishery sonar, the Simrad SX90, along with the ES80, the Sounder USV System provides detection and classification of fish schools from a remote location, at less than \$50 dollars fuel cost a day. [THE FULL PICTURE](#)

Seamless ownership

The Sounder USV System is designed to operate globally, easy to transport and deploy with containerized shipping. Our combined global network of service and support ensures that owning and operating a Sounder USV System is safe and efficient. Our USV fleet management system helps to keep track of system health & performance along with important maintenance tasks.

Applications:

USBL POSITIONING

- AUV USBL position aiding
- Seismic support
- LBL/USBL calibration and position fix

MULTIBEAM ECHO SOUNDER

- Hydrographic surveys
- Harbor surveys
- Search

SCIENTIFIC AND RESEARCH

- Custom payload installation in moon-pool, hull or bow
- CTD measurement with winch

FISHERY

- SX95 fishery sonar for fish finding
- ES80/EK80 echosounder



Technical specifications

Length	8m
Beam	2.2m
Height	2.3/4.4m (mast down/up)
Draft	0.7m
Weight	4,200kg - ready to operate
Propulsion	125hp Steyr diesel engine with fixed pitch propeller
Speed	12 knots (max)
Endurance	10 days @ 4 knots
Payload power	> 4 kW @ 4 knots
Control	K-MATE autonomy engine for direct, supervised and autonomous operation
Communication	Maritime Broadband Radio/Iridium (VSAT optional)

