

FACT SHEET

UNCREWED SURFACE VESSEL (USV) SERVICES

Optimal for shallow water operations

Efficient and precise data acquisition, environmental monitoring, and surveillance to support safe port, waterways and coastal project development and operation



Subsea surveys provide information about underwater terrain and potential hazards. Armed with this information, port authorities, cable and pipeline project owners, and port asset owners are better equipped to plan for offshore projects, ensuring accurate infrastructure design and safe asset installation while reducing the risk of project delays and potential environmental damage.

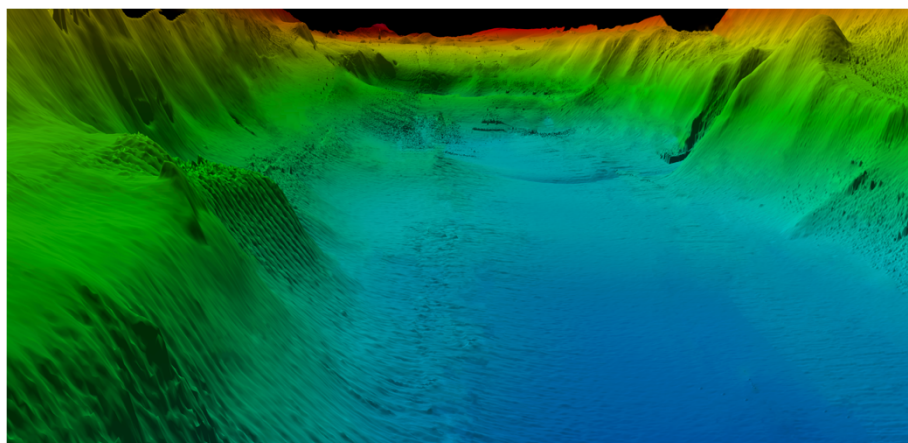
The Xplorer 1 Uncrewed Surface Vessel (USV) is designed for efficient and precise data acquisition, environmental monitoring, and surveillance in sheltered, coastal and shallow areas. Its modular catamaran design and advanced, yet highly user-friendly navigation and control system offers seamless integration with leading survey sensors, enabling easy access to high quality ocean data.

The vessel is equipped with various payloads for survey grade, precise and effective data acquisition. Offering functionalities of both remote operations and autonomous navigation, the vessel's Vehicle Control System (VCS) ensures easy access to various survey sites.

- 360° camera and innovative LiDAR vision based autonomous obstacle avoidance system
- RX/TX AIS transceiver
- system survey grade 1cm accurate RTK precision positioning
- Ultra-high resolution 2048 beams curved multibeam sonar Norbit i80S with pitch roll and yaw stabilization
- 300m depth range

Whether you need cooling water canal surveys, port asset integrity management, or jetty survey and integrity inspection, the Xplorer 1 vessel, operated by our trained and experienced personnel of DroneQ Robotics' Advanced Unmanned Robotics Services, AURS, is designed to efficiently capture the detailed underwater data you need to support your marine projects worldwide.

- Bathymetric Survey: hydrographic survey of ports, rivers and coastal waters for mapping the depths and shapes of the underwater terrain
- Inspection: integrity inspection of the port infrastructure and detection of debris; anomalies and scour around quays, cables, pipelines and submerged structures, sewerage outfalls
- LiDAR: terrestrial mapping of surface structures, fully integrated with the high resolution bathymetric multibeam system with 300k data points per second
- 3D Mapping: 3D imaging of the bottom and infrastructure



3D Bathymetric Surveying using sonar data

FOR MORE INFORMATION

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 droneq.nl/usv-services