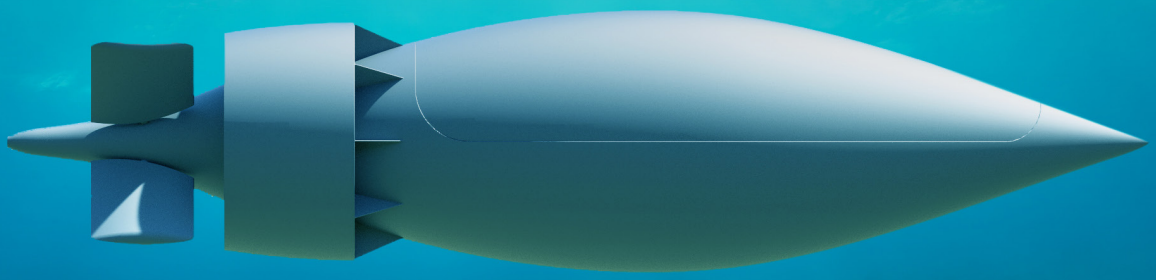
GREYSHARK

autonomous underwater vehicle



long-range high-speed vehicle
for surveillance, monitoring, and
protection of critical infrastructure

The GreyShark is a fast long-range AUV designed for a wide range of applications. The vehicle carries state-of-the-art sensors in a streamlined hull with a modern propulsion system. Latest technologies enable completely autonomous missions.

The GreyShark is equipped with a range of active and passive sensors and various communication interfaces, enabling versatile use according to the current mission requirements.

ACTIVE

Multibeam sonar, side-scan sonar, synthetic aperture sonar, LIDAR, USBL, DVL, FOG-INS

PASSIVE

Anti-jam GNSS, electromagnetic sensor array, AI-enabled camera

COMMUNICATION

Underwater acoustic modem, Streamcaster, Iridium satellite communication

With sensor fusion, data from the sensors in use is evaluated by a self-learning algorithm, enabling the GreyShark to detect, track, and analyze object behavior. Additionally, changes to objects or their topology can be detected and evaluated.

The GreyShark offers centrally or decentrally organized swarm capabilities. Thus, a group of GreySharks can be controlled by a pre-defined or randomly assigned master, self-organize, or be under a mothership control. Information can be encrypted and exchanged between individual units within the swarm.

Each GreyShark can be integrated into standard situational awareness systems.

The standard cruising speed of the vehicle is 10 knots with an operational range of at least 1000 nautical miles. With a highly accurate navigation system, it is possible to cover the entire operational range when submerged.

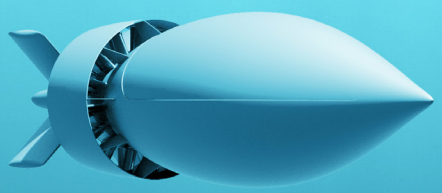
A comprehensive system for transport, deployment, refueling, maintenance and operation is offered along with the vehicle.

PRECISE NAVIGATION

LOW NOISE LEVEL

VARIOUS COMMUNICATION OPTIONS

AUTONOMOUS



LONG RANGE

STREAMLINED SHAPE

ACTIVE & PASSIVE SENSORS

SWARM CAPABILITIES

UP TO 30 DAYS OF MISSION TIME

TECHNICAL SPECIFICATIONS

Depth: 650 m (4000 m - Phase 2)

Range: 1100 NM

Speed: 10 knots

Weight: approximately 2-2.5 t

Length: approximately 6.5 m

Operating temperature:
-3°C to +45°C

Storage temperature:
-30°C to +75°C

Interoperability

Object recognition and object-specific behavior

Collision avoidance

Swarm capabilities

Situational protocols

LONG-RANGE SURVEILLANCE

- in predefined areas
- in predefined scenarios
- as a lookout
- as a light source

UNDERWATER WARFARE

- search and identification of sensors
- search and identification of effectors
- monitoring known objects
- detecting changes in objects or structures

PROTECTION OF CRITICAL INFRASTRUCTURE

- underwater structures
- pipelines
- cables
- harbours

CUSTOM PAYLOAD

- transporting custom sensor payloads

OBJECT TRACKING AND MARKING

- active or passive object tracking
- marking of objects
- collecting information, such as behavioral patterns

TRAINING TARGET SIMULATIONS

- simulation of various targets through signature adjustments