

UNMANNED SURFACE VESSEL (USV) SWADHEEN

BUILDERS OF 100+ WARSHIPS



As part of 'VISION 2030', GRSE is witnessing a paradigm shift in its R&D effort to develop Unmanned Surface Vessels with the application of Artificial Intelligence and Machine Learning. As a first step, GRSE developed a 5m Autonomous Surface Vessel named as Swadheen a ground up based design for bathymetric surveying, mine-hunting and explosive ordnance disposal.

POTENTIAL ROLES

- Bathymetric Survey
- Mine hunting
- Reconnaissance
- Surveillance/Search/Visual Imagery & Data Capture



PRINCIPAL PARTICULARS

- Length : 5 M
- Design speed : 4 – 6 knots
- Displacement : ~150 Kg
- Sea state : up to 2

KEY FEATURES

- Battery powered: Lithium-ion
- Redundant thruster configuration
- Moonpool for submersible payload
- Onboard computer, IP radio
- Attitude and Heading Reference System (AHRS)
- Automatic Identification System (AIS)
- Built-in power management & diagnostic system
- Provision for 360 deg. view camera, LIDAR sensor
- Modular internal payload mounting