

NAVANTIA UNMANNED SURFACE VEHICLE **NAVANNED**

MISSIONS

- Surveillance: security and environmental
- Dissuasion: interjection, routes, etc
- **Rescue:** shipwrecks, ship out of control, illegal immigration, etc
- Disasters: firefighting, spills, toxic clouds, etc
- **Support:** escort, guard ship, transport, etc

FUNCTIONS

- **Remote control** from command and control (C2) centre: course, speed and sensors.
- **Automatic control:** autonomous navigation by way-points, or "Click & Go"; and automatic mooring / un-mooring.
- **"Return Home"** mode by operator command, or due to loss of signal, starts automatic return home by quickest route.
- Manned mode activated by hardware key.

SENSORS

- Radar: provides surface targets to the C2 system
- Sonar: provides underwater targets to the C2 system
- Electro-Optical system: provides infra-red and TV images to the C2 system
- LIDAR: provides positional awareness for unmanned control and collision avoidance
- Driving aid system camera: provides the C2 system with a pilot's view
- **Stereoscope vision cameras:** port, starboard and aft vision cameras provide a 3D view and real distance data
- **360° vision security camera:** provides security around the vehicle
- **Inertial navigation:** provides positioning information and navigation control
- Dual antenna GPS: provides vehicle position information
- AIS receptor
- Echo sounder provides water depth and vehicle speed
- Meteorological station
- · Fluorimeter: provides information on spills





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PLATFORM CHARACTERISTICS

- · Cabin apt for both unmanned and manned operations
- · Aluminium structure resistant to high temperatures
- · Unsinkable
- · Self-draining deck by gravity
- · Self-protection against the environment
- \cdot Flexible length and beam
- Flexible propulsion and range
- · Adaptable capacity to carry troops or passengers

WEAPON AND DEVICES ADAPTABILITY

- Remote controlled flare launcher
- Remote controlled water colouring launcher
- · Remote controlled life raft launcher
- Towing hook, rated at 1.5 t
- Mooring system, allows autonomous mooring and unmooring
- Remote controlled water cannon, flow rate controlled remotely

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- Remote controlled sonic cannon
- \cdot 12.7 mm remote controlled weapon station
- · Remote controlled torpedo launcher
- Remote controlled depth charge launcher

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