





#### BENEFITS:

This USV is developed for autonomous and remote operated surveillance and reconnaissance missions, with able space for instalment of various equipment. The USV is offered with the possibility to mount armour panels for protection for added durability. This truly offshore capable vessels shallow draft allows for coastal and river operations, and the proven seakeeping capabilities ensures secure operations at open seas as well.

Benefits by being significantly lighter than market average are lower fuel consumption and lighter lifting equipment on launch site or mother vessel. Streamlined hull and superstructure supporting the great and proven sailing capabilities. The high and stable superstructure provides a good platform for Line-of-Sight sensors. Furthermore, the amble installation space adds protection for equipment and a clutter free deck. The hull integrated sonar makes the USV able to investigate and detect below the surface. Combined a strong platform for surveillance and reconnaissance missions.

#### **OPERATIONAL FEATURES:**

Speed max.: 18 kt Speed (cruise): 8 kt Shallow draft of 0,8 meters

#### DESCRIPTION:

The boat has been built to meet the requirements from the competent authorities and operators demands.

## HULL, DECK AND SUPERSTRUCTURE:

The boat is made of a combination of glass- and carbon fibre as sandwich construction with PVC as core material in selected areas. This core material act as a natural buoyancy reserve material, due to its lightweight and zero waterabsorption. Moreover, the sandwich construction minimizes the needs of internal stiffeners, increasing the usable internal space and offers a natural insulation capability. The sandwich construction also functions in effect as a double skin hull. The Hull is prepared with recess for multibeam sonar.

#### FENDER:

The fender is built from a hard rubber holed D profile fender. The fender is bolted to the hull and protects the hull all around.

### DECK:

Central placed mast for optimum position of observation module.

Deck is self-bailing.

4 mooring bites.

Recces on aft deck for protection of air intake.

Large deck hatches allowing fast replacement of main components.

Small and lockable inspection hatches.

## SUPERSTRUCTURE:

The superstructure is designed to handle adverse weather and provide a high and stable platform for enhanced line of sight equipment, such as cameras, radars etc. Furthermore, ensuring able installation space for various equipment inside, minimizing clutter top side.

## TECHNICAL:

# ENGINES, PROPULSION, STEERING etc.

2 x Inboard diesel engines for redundancy.

Autonomous and remote operations

Propellers protected against debris and grounding. Complete propulsion and steering system integrated into hull for added protection.

### TANKS:

Independent diesel tanks with hatch and filling protection.

### **ELECTRICAL SYSTEM & LIGHTING:**

All electrical wiring in marine cable.

Shore power with control lamp, marked fuses, earth connection.

Isolation transformer with earth plate for protection of galvanic corrosion.

24-volt electrical system.

Main switches with separate battery systems for start, navigation and consumption.

Battery charger with indicator.

Navigational lights.

Floodlights on the deck by request

Searchlight on request.

## NAVIGATION & ELECTRONIC EQUIPMENT:

Fluxgate/Gyro/satellite compass

High-definition radar

Multibeam sonar

Visual observation module, with range finder and thermal camera.

Data transfer module

Satellite communication

Radio wave remote control

Other passive/active sensors and equipment can be fitted on request.

Complete engine instruments supplied by enginemanufacturer.

Control panel for all lighting and other electrical equipment.

## SECURITY EQUIPMENT:

Bilge pumps

Fire extinguisher in engine room

Fire extinguisher in technical compartment

Further equipment can be fitted on request