

## C-Worker 5 Uncrewed Surface Vessel

The C-Worker 5 is an autonomous vehicle designed to support hydrographic survey work and to increase survey coverage in limited timeframes. A proven offshore survey "force-multiplier", the vehicle will operate from the Glomar Supporter mothership, in supervised autonomy mode.

With the ability to operate for up to 8 days at a survey speed of around 5 knots, the C-Worker 5 has a fixed payload location for accurate offset measurement. A 12U 19" rack unit is fitted inside a watertight forward compartment for the housing of sensor control equipment.



### The ideal solution to increase survey coverage in limited timeframes

- Proven offshore survey "force multiplier" with capacity to operate up to 7 days at a survey speed of around 7 knots
- Fixed payload location for accurate offset measurement
- Proven to perform hydrographic operations as well as a crewed survey vessel, with substantially lower fuel consumption
- Shallow draught and excellent manoeuvrability, enabling operations in areas that large vessels cannot reach
- Docking system for LARS from the Glomar Supporter mothership
- Advanced autonomy - pre-programmed missions can be set up, executed and monitored using graphical user interface

For more information, [contact sales@rovco.com](mailto:sales@rovco.com)

# SPECIFICATIONS

Details believed to be correct without guarantees.  
Specifications are subject to changes.



## General

|              |   |
|--------------|---|
| Construction | Aluminium hull and structure                  |
| Sea State    | Operations in up to and including sea state 3 |

## Dimensions

|         |  |
|---------|--|
| Length  | 5,5m   |
| Beam    | 1,8m   |
| Height  | 3,2m mast fully raised, including antenna                          |
| Draught | 0,85m  |
| Weight  | 1,250kg lightship, no payload<br>2,000kg fully fuelled, no payload |

## Machinery and Propulsion

|                       |  |
|-----------------------|--|
| Electrical power (DC) | 1x 24V DC house battery bank<br>1x 12V DC engine start battery<br>External shore power connector for shore supply charging |
| Speed Range           | 3 knots minimum speed<br>5-7 knots cruising speed<br>10 knots top speed  |
| Endurance             | ~4 days @ 7 knots<br>~8 days @ 5 knots   |
| Propulsion            | 57hp inboard diesel engine and sail drive  |

## Navigation Aids

- Solid-state compass
- Speed sensor
- Airmar depth transducer
- Class B AIS transponder
- Tri-colour navigation lights, all-round white mast head light
- Horn
- Halo 20+ radar (optional)

## Vehicle Capacities

|                          |   |
|--------------------------|---|
| Fuel capacity            | 770 litres (diesel)   |
| Payload capacity         | ~40kg wetside payload capacity (MBES, ADCP, SBP, CTD etc.) with sensors mounted on a fixed through-hull housing. Potential for deck-mounted and/or towed payloads. Payload control equipment is located on-board in a 12U 19" rack unit, housed in a watertight compartment 24V DC 150A 1kW power |
| Launch and recovery      | Four integrated lift points for overhead lift via slings and shackles Docking system (optional)   |
| Standard vehicle control | Mission planning (lines, waypoints, station keeping, geofencing)<br>Direct remote control via a hand-held control unit  |
| Optional vehicle control | Autonomous route planning with collision avoidance system   |

## Survey Equipment

- R2sonic 2024 MBES
- Applanix PosMV Oceanmaster
- Sonardyne MiniRanger 2 USBL
- EdgeTech 4205 Tri-Frequency SSS (230/540/850 kHz)

## Vehicle Cameras/Data Interfaces

|                             |  |
|-----------------------------|--|
| Cameras                     | 360-degree camera box featuring four daylight cameras (forward/aft/port/starboard) and one forward-facing thermal (IR) camera  |
| Primary communications link | 5W COFDM IP mesh radio<br>Tuneable RF channel bandwidths of 1.25 MHz to 10 MHz<br>~5km range with remote station antenna height of 3.5m<br>Range can be increased with remote station antenna height >3.5m |
| Alternate communications    | 4G LTE cellular data connection Wi-Fi  |

