

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 2,000kg fully fuelled, no payload

Machinery and Propulsion

Electrical power (DC)	1x 24V DC house battery bank 1x 12V DC engine start battery External shore power connector for shore supply charging
Speed Range	3 knots minimum speed 5-7 knots cruising speed 10 knots top speed
Endurance	~4 days @ 7 knots ~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) 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 Tuneable RF channel bandwidths of 1.25 MHz to 10 MHz ~5km range with remote station antenna height of 3.5m Range can be increased with remote station antenna height >3.5m
Alternate communications	4G LTE cellular data connection Wi-Fi

