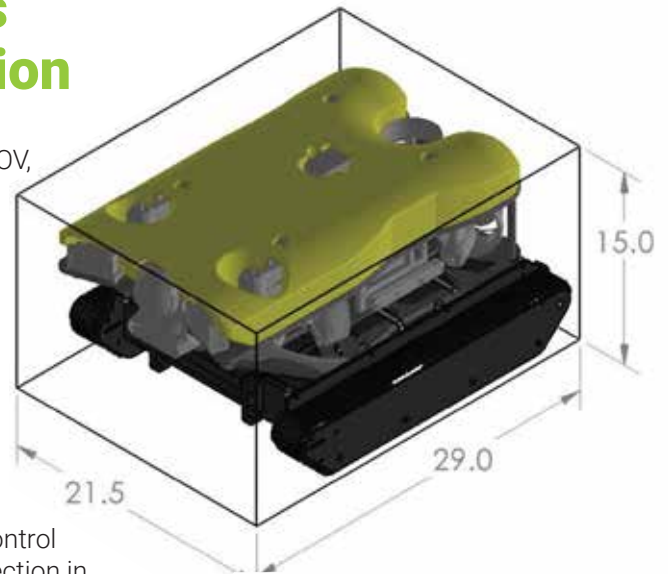


GREENSEA CRAWLER

Easy-to-Operate Crawler Enables Robotic Inspection and Intervention

The Greensea Crawler mounts quickly to the VideoRay MSS Defender ROV, opening up a new realm of capabilities for the ROV. With low pressure suction adhesion and rubber tracks, a Greensea Crawler equipped ROV can safely transit ship hulls, tank walls, or other hard surfaces to perform inspection and intervention tasks. By retaining both free flying and crawling capabilities, as well as a non-magnetic method of attachment, this technology offers greater task flexibility being able to be used on aluminum vessels, concrete walls, or polycarbonate tanks as well as being able to quickly transit between areas of interest. Greensea's proven control technology enables the operator to fly the vehicle into position, and attach to the hull within a matter of seconds.



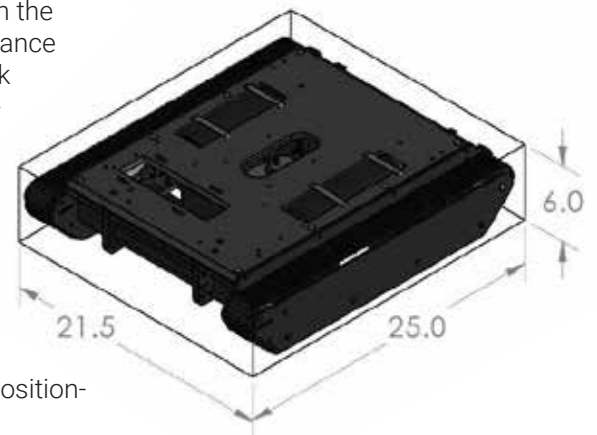
The tracks and adhesion force create a level of stability and precision control not achievable by a vehicle flying in the water column. Underwater Inspection in Lieu of Drydocking (UWILD) inspectors can produce higher quality videos with the benefits of a "fixed" camera position not buffeted by currents. Explosive Ordnance Disposal (EOD) technicians can operate a manipulator for an intervention task with the security of a stable base. Engineers can determine precise measurements from 3-D laser scans with confidence that their sensors didn't move.

New Capabilities Coming Soon

INS: The Greensea Crawler can be upgraded to incorporate a FOG-based inertial navigation system (INS) and advanced control software. By merging the INS and feature-based sonar navigation into the Crawler, Greensea's technology will be able to provide a previously unavailable level of precision positioning and control for an ROV on a ship's hull. Coupling this precision navigation capability with task automation, the system will be able to be quickly programmed to execute automated inspection tasks, freeing the operator from active piloting actions.

3D Scanning Capabilities: Kraken Robotics' SeaVision® can be integrated with the Greensea crawler to provide additional inspection capabilities. SeaVision is a revolutionary new take on subsea 3D laser imaging. Designed to operate in a twin scanning configuration, with an adjustable baseline, SeaVision can generate very high resolution 3D scans in full color.

Contact Kraken Robotics for information and specifications regarding SeaVision or visit: <https://krakenrobotics.com/products/seavision/>



CRAWLER

Specifications

Requires Greensea Professional Workspace

Depth Rating: 30 m

Dimensions: 25 in x 21.5 in x 6 in (635 mm x 546 mm x 152 mm)

Weight (air): 39.6 lb (18 kg)

Buoyancy (salt water): 8 lb (3.2 kg)

Min. Speed: 1.2 in/s (3 cm/s)

Max. Speed: 14 in/s (36 cm/s)

Attractive Force: 25 lb (114 N)

Propulsive Force: 15 lb (120 N) (Dependent on Coating Type and Fouling Level)

Ground Clearance: 0.9 in (23 mm)

Shipping Dimensions: 33.43 in x 28.40 in x 17.65 in

Shipping Weight: 82.5 lb

Navigation Capability: Relies on ROV navigation sensors.

Crawling Surface: Optimized for anti-fouling bottom-paint (copper ablative and self-polishing)

Turn Radius and Maneuverability: 0-radius capable

Operating Temperature: 2° – 25° C (35.6° - 77° F)

Power Requirements: ~400W from VideoRay MSS Defender

Integration to ROV: 4 bolts, 2 electrical connections, and 6 lb ballast

Estimated Life of Tread: 3+ months

Estimated Service Time: One hour every 50 hours

Maximum Current: 1.5 kts (as tested on BRA640)

Contact Information

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