

The shallow water inspection vehicle with outstanding current handling capability

The Cougar-XT Compact, depth rated to 300m, is the shallow water version of the Cougar-XT. An extremely powerful vehicle, the Cougar-XT Compact is ideal for inspection applications where strong tidal currents are experienced.

The smaller chassis significantly reduces drag, which, in combination with a high-performance thruster arrangement and a small diameter tether, offers unrivalled performance for its size and class.



Outstanding Performance

Shallow water inspection vehicle with proven handling capabilities in strong currents and in tight spaces.

Compact

Low profile and lightweight designed to reduce drag and minimise the effect of current.

Wide choice of tooling

Selection of tooling options designed for easy integration and to deliver results for any shallow water project.

World leader in electric underwater robotics



System Overview

- Surface Power Supply Unit and Surface Control Unit supplied as free standing units or fitted inside an air conditioned control container. An additional tooling power supply option is available.
- Surface Equipment includes Hand Control Unit, keyboard and two colour monitors.
 Additional hand control units are included with ROVs fitted with a manipulator system.
- Cabin Junction Box for connections between the surface and subsea.
- Fibre Optic MUX with Video, Serial Data and Ethernet interfaces. Additional MUX options available.
- Operated as a free-swimming ROV for depths up to 300m.
- ROV rated to 1500m fitted with four horizontal thrusters and two vertical thrusters supplied with 500 Volts DC. The ROV pod provides interfaces for Thrusters, LED lights, multiple cameras, a depth sensor and a solid state compass, supporting vehicle auto heading and auto depth. Auto altitude is available as an option when an altimeter is fitted.
- Deployment options include an electric winch for free swimming ROV configuration.





Technical Specifications

General		Video and Electrical Interfaces	
System Power Requirements	3-phase, 380-480 VAC 50/60Hz 60 kVA Typical Full System including Tether Winch, Cabin and LARS	Data Link	Single Mode Fibre with CWDM Spare Fibre within ROV JB for Survey/Video
Depth Rating	300m	Video Camera	-3x SD (Composite)
Dimensions (LxWxH) Standard Launch	1300mm x 900mm x 784mm Approximately 270 kg	Interfaces	CAM 1 & 2 share a live feed via Video Relay in EPOD CAM 3 is permanently live and
Weight	Approximately 270 kg		includes Tri State Zoom/Focus interface
Payload (Base / Std)	Approx. 60kg (bare ROV)	Sensor Interfaces	Depth, Compass and Altimeter (compass sensor is in an external pod)
Mechanical			CP Probe (Contact and Proximity Modes Supported)
Safe Working Load	457kg @ Sea State 6		Sonar, 24VDC, Twisted Pair comms
Through Frame Lift	187kg @ Sea State 6		1x Aux, 24VDC, RS232 & Twisted Pair comms
Performance			1x Aux, 24VDC, RS232 & Aux Tilt Drive
Forward Speed	3.5 knots		1x Aux, High Capacity 24VDC, RS232 & 1GB Ethernet
Thrust Forward	170 kgf		1x Aux, High Capacity 24VDC, RS232
Thrust Lateral	120 kgf	Light Interfaces	2x 1110VAC Interfaces supporting Saab Seaeye LED Lamps: each supports 2x Lamps via Y-Leads
Thrust Vertical	110 kgf		
Standard Instruments		Surface Equipmen	t
Tilt	24VDC, PWM Control, Pressure Compensated	Standard Surface Control Equipment	PDU with:
Lighting	4x 110VAC LED Lamps, Dimmable Daylight White 3520 Lumens		- Split DC for redundancy
Depth Sensor	300 Bar, +/-0.01% FS accuracy		- Built in proprietary Overlay)
AHRS	Magneto-resistive		- Control PCBs for ROV/TMS
	Heading: 1.0° Typical		Hand Controller, Keyboard,
	Pitch/Roll 0.4° Typical		Telemetry Monitor
			2x Monitors
Hydraulic Tooling		Power Supply Unit	S
Optional Hydrolek Gauntlet Plus 4 Function Manip skid (see Options Section)		ROV PSU	1x ROVPSU @: 500-600Vdc 35A, 240/440Vac each
Optional Skid based Wa Section)	ter Jetting System (see Options	Optional Tooling PSU	9kW 440-720Vac OUTPUT (see Options)



Options, Tools and Accessories

Mux Upgrade: Adds a 2nd Mux to the ROV EPOD, providing: 2nd GB Ethernet Aux with a high capacity 24VDC.
2x SD Composite Video Interfaces
Serial Data Channels to each Camera

interface.



Cleaning brush incorporating a heavy duty brush and SM4 thruster motor fitted (typically Manip mounted).



High resolution SD composite cameras, colour and monochrome / low light, fixed and zoom / focus



Additional three phase power supply unit used to power tooling options



High Definition (HD) camera for vehicle.



Cathode Potential Probe with either contact or proximity probe options available



Multi Beam Imaging Sonar and surface equipment options



Ultrasonic thickness system available to determine the level of corrosion present in a structure.



Scanning Sonar and surface equipment options



Battery-operated Xenon emergency strobe used to locate the ROV.



Altimeter for measuring the height of the vehicle above the sea floor Auto Altitude option available



Acoustic tracking system to calculate the position of vehicle fitted with an acoustic beacon.



Four-function Skid Mounted 250VDC manipulator system



Control cabin options include video recording units, video matrix switcher, communication systems, and high-back pilot seat.



Water Jet System using a high power water pump.



Deployment Systems and Control Cabins



Electric Tether Winch with variable speed and direction controls.



Running Lock Latch system used for launch and recovery to reduce the strain on the umbilical. Includes a latch release line to free the vehicle from the lock latch.



Safe Area Control Cabin (16 ft) fitted with electric power distribution panels, lighting, and air conditioning. A Zone II upgrade option is available.



Safe Area 20ft split Control Cabin with a Pilot Control section and a separate high voltage PSU section. Fitted with electric power distribution panels, lighting, air conditioning, heating and 19 inch racks. An optional installed escape hatch is available as is a Zone II upgrade.