

### 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.



## **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 300m 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	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)	1300mm x 900mm x 784mm	Interfaces	CAM 1 & 2 share a live feed via Video Relay in EPOD
Standard Launch Weight	Approximately 270 kg		CAM 3 is permanently live and 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 comme
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 110 VAC Interfaces supporting Saab Seaeye LED Lamps: each supports 2x Lamps via Y-Leads
Thrust Vertical	110 kgf		

#### Standard Instruments

Tilt	24VDC, PWM Control, Pressure
	Compensated
Lighting	4x 110VAC LED Lamps,
	Dimmable Daylight White 3520
	Lumens
Depth Sensor	300 Bar, +/-0.01% FS accuracy
AHRS	Magneto-resistive
	-
	Heading: 1.0° Typical
	<b>c 1</b>

Pitch/Roll 0.4° Typical

### Hydraulic Tooling

Optional Hydrolek Gauntlet Plus 4 Function Manip skid (see Options Section)

Optional Skid based Water Jetting System (see Options Section)

Surface Equipment				
Standard Surface	PDU with:			
Control Equipment	- Split DC for redundancy			
	- Built in proprietary Overlay)			
	- Control PCBs for ROV/TMS			
	Hand Controller, Keyboard,			
	Telemetry Monitor			
	2x Monitors			
Power Supply Units				
ROV PSU	1x ROVPSU @:			
	500-600Vdc 35A, 240/440Vac each			
Optional Tooling	9kW 440-720Vac OUTPUT			
PSU	(see Options)			

# Seaeye Cougar - XTC



## **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.



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



Cleaning brush incorporating a heavy duty brush and SM7 thruster motor fitted.



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



Four-function Skid Mounted 250VDC manipulator system



Water Jet System using a high power water pump.



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



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

# Seaeye Cougar - XTC



# **Deployment Systems and Control Cabins**



Electric 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.

#### Saab UK - World leader in electric underwater robotics

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