

## The Offshore Inspection Vehicle with Enhanced Interface Capability

Like the smaller Tiger, the Lynx is a leading observation and inspection vehicle used by the oil and gas industry especially for missions in water depths to 1,500m.

The Lynx is fitted with two vertical and four horizontal thrusters making it a very stable platform with exceptional manoeuvrability.

A wide range of tools and sensors are available as well as interchangeable tooling skids, which are powered by a dedicated tooling power supply unit.

The Lynx vehicle is available as a free swimmer or can operate in conjunction with a Type 8 Tether Management System (TMS).



### Trusted

Six thrusters provide a stable platform with an increase in vertical thrust for deep water and platform inspection projects.

### Enhanced Data Transmission

Fibre optic data and video transmission with up to four simultaneous video channels available including an HD camera option.

### Flexible

Tooling options designed to deliver results even for the most challenging of projects.

## 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.
- Available as a free-swimming ROV or in conjunction with a Type 8 Tether Management System (TMS) for depths up to 1500m.
- ROV rated to 1500m fitted with four horizontal thrusters and two vertical thrusters supplied with 250 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 or an A Frame Launch and Recovery System (LARS) for ROVs equipped with a TMS.



## Technical Specifications

General		Video and Electrical Interfaces	
System Power Requirements	3-phase, 380-480 VAC 50/60Hz 95 kVA Typical Full System including TMS, Cabin and LARS	Data Link	Single Mode Fibre with CWDM Spare Fibre within ROV JB for Survey/Video
Depth Rating	1500m	Video Camera Interfaces	-3x SD (Composite)  CAMERA 1 & 2 share a live feed via Video Relay in EPOD CAMERA 3 is permanently live and includes Tri State Zoom/Focus interface
Dimensions (LxWxH)	1230mm x 815mm x 605mm	Sensor Interfaces	Depth, Compass and Altimeter (compass sensor is in an external pod)  CP Probe (Contact and Proximity Modes Supported) Sonar, 24VDC, Twisted Pair comms 1x Aux, 24VDC, RS232 & Twisted Pair comms 1x Aux, 24VDC, RS232 & Aux Tilt Drive 1x Aux, High Capacity 24VDC, RS232 & 1GB Ethernet 1x Aux, High Capacity 24VDC, RS232
Standard Launch Weight	Approximately 200 kg	Light Interfaces	2x 250VDC PWM Interfaces supporting Saab Seaeye LED Lamps: each supports 2x Lamps via Y-Leads
Payload (Base / Std)	Approx. 34kg (bare ROV)		
Mechanical			
Safe Working Load	360kg @ Sea State 6		
Through Frame Lift	160kg @ Sea State 6		
Performance			
Forward Speed	3 knots		
Thrust Forward	66 kgf		
Thrust Lateral	47 kgf		
Thrust Vertical	43 kgf		
Standard Instruments		Surface Equipment	
Tilt	24VDC, PWM Control, Pressure Compensated	Standard Surface Control Equipment	PDU with: - Split DC for redundancy - Built in proprietary Overlay) - Control PCBs for ROV/TMS
Lighting	4x 250VDC PWM LED Lamps, Dimmable Daylight White 3520 Lumens		Hand Controller, Keyboard,
Depth Sensor	300 Bar, +/-0.01% FS accuracy		Telemetry Monitor
AHRS	Magneto-resistive  Heading: 1.0° Typical  Pitch/Roll 0.4° Typical		2x Monitors
Hydraulic Tooling		Power Supply Units	
Optional Hydrolek Gauntlet Plus 4 Function Manip skid (see Options Section)		ROV PSU	9PSU @: 250-350Vdc 35A, 240/440Vac
Optional Skid based Water Jetting System (see Options Section)		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 Winch with variable speed and directional control for free swimming configuration.



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



Tether Management System (TMS) Type 8 allowing for the deployment of the ROV at working depth and also providing protection.

Optional TMS Camera and LED Light.

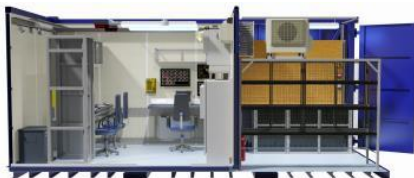


A-Frame Safe Area Launch and Recovery System (LARS) with Lock Latch and Snubber Rotator.

Additional Options include: LED Lamps, Foldable working platform, Telescoping A-Frame, Active Heave, Zone II upgrade.



Safe Area Control Cabin (16 ft) fitted with electric power distribution panels, lighting, air conditioning, and 19 inch racks. A Zone II upgrade option is available.



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