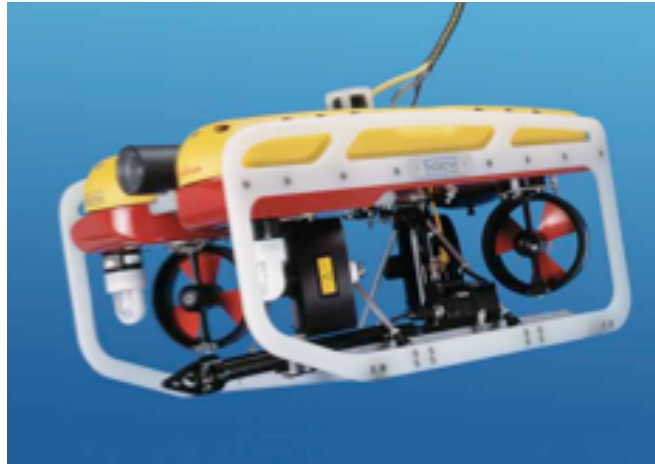




ADVANCED SUBSEA SERVICES

OBSERVATION CLASS ROVS

SEA EYE FALCON SPECIFICATIONS



VEHICLE

Max. Working Depth:	300 msw
Length:	1000 mm
Height:	500 mm
Width:	600 mm
Launch Weight:	50 kg or 62 kg with additional buoyancy Core
Frame:	Composite Materials
Lift Point:	316 SS
Main Construction:	Polypropylene
Buoyancy:	Closed cell foam blocks under a quick release polypropylene shell
Payload:	4 kg or 16 kg with additional buoyancy
Thruster Configuration:	4 x vectored and 1 vertical
Thrust Forward:	50 kgf
Thrust Lateral:	28 kgf
Thrust Vertical:	13 kgf
Forward Speed:	> 3 knots Standard
Colour Camera:	480 TVL, 0.2 LUX (F1.4) Lens: 3.8 mm aspherical
Camera Tilt Mechanism:	$\pm 90^\circ$, accepts 2 cameras
Lighting Specification	2 x 75 watt Tungsten Halogen, remote brilliance control and individually fused
Navigation Auto Heading:	Solid state rate gyro
Auto Depth:	Depth sensor - feet/metres
Depth Sensor Accuracy:	Compass Accuracy: $\pm 2^\circ$ $\pm 0.5\%$ of full scale deflection
Gyro Accuracy:	0.1 $^\circ$ /s
Surface Update Rate:	≥ 40 ms



ADVANCED SUBSEA SERVICES

OBSERVATION CLASS ROVS

SEAEYE FALCON SPECIFICATIONS

Propulsion:

All Seaeeye brushless DC thrusters have drive electronics with velocity feedback for precise and rapid thrust control. A fast PID control system and a solid-state rate gyro for enhanced azimuth stability also prevents overshoot on a change of heading. Seaeeye Falcon's thrusters are magnetically coupled brushless DC units each capable of 13 kgf thrust at 320W or a combined forward thrust of 50 kgf. For an ROV weighing only 50 kilos this represents an impressive 1:1 power to weight ratio.

SURFACE EQUIPMENT

Power Requirements: Single Phase A/C,
Universal Input: 100-270 VAC, 2.5 kw. Compatible with Generators fitted with auto voltage regulation

Surface Unit

The Falcon's power supply unit, processors and video systems are rack mountable and supplied in portable enclosures. The power supply unit provides a galvanically isolated 500VDC output protected by a L.I.M.. All equipment is fitted into a splash proof, portable transit case.

Hand Control Unit

Falcon's Hand Control Unit in a rugged case contains all the vehicle controls.. The controls include:

3 Axis Joystick:	Proportional horizontal control
Rotary:	Vertical control (dive/surface)
Rotary:	Thruster power
Rotary:	Lights intensity
Switches:	Auto functions
Switches:	Vehicle power Auxiliary Functions
Switches:	Manipulator / other options

Video Overlay

The video overlay system displays the following information to the pilot:

- Compass heading and depth
- Camera tilt position
- Auto pilot function status
- Tether turns counter
- Free text using a QWERTY keyboard
- Date and time

Umbilical Cable

Diameter:	11 mm
Breaking strain:	525 kg
Wt. in air:	100 kg/km
Wt. in seawater:	7.3 kg/km
Wt. in fresh water:	Slightly Heavy
Min. bend radius:	150mm (Dynamic)



ADVANCED SUBSEA SERVICES

OBSERVATION CLASS ROVS

SEAEYE FALCON SPECIFICATIONS

Composition:

- 1 x Screened Twisted Pairs for Video
- 1 x Screened Twisted Quad for Telemetry and Sonar
- 2 x Power conductors
- 1 x Insulated ground wire

OPTIONAL EQUIPMENT

- Sector Scanning Sonar
- Navigation & Tracking Systems
- Additional Cameras
- Tooling Skids
- CP Probe Contact or Proximity
- Single & 5 Function Manipulators
- Cleaning Brush Systems
- 5 megapixel still cameras
- SIT low light camera
- Scaling lasers
- Fiber optic tether up to 1km in length
- Digital hard drive recording

