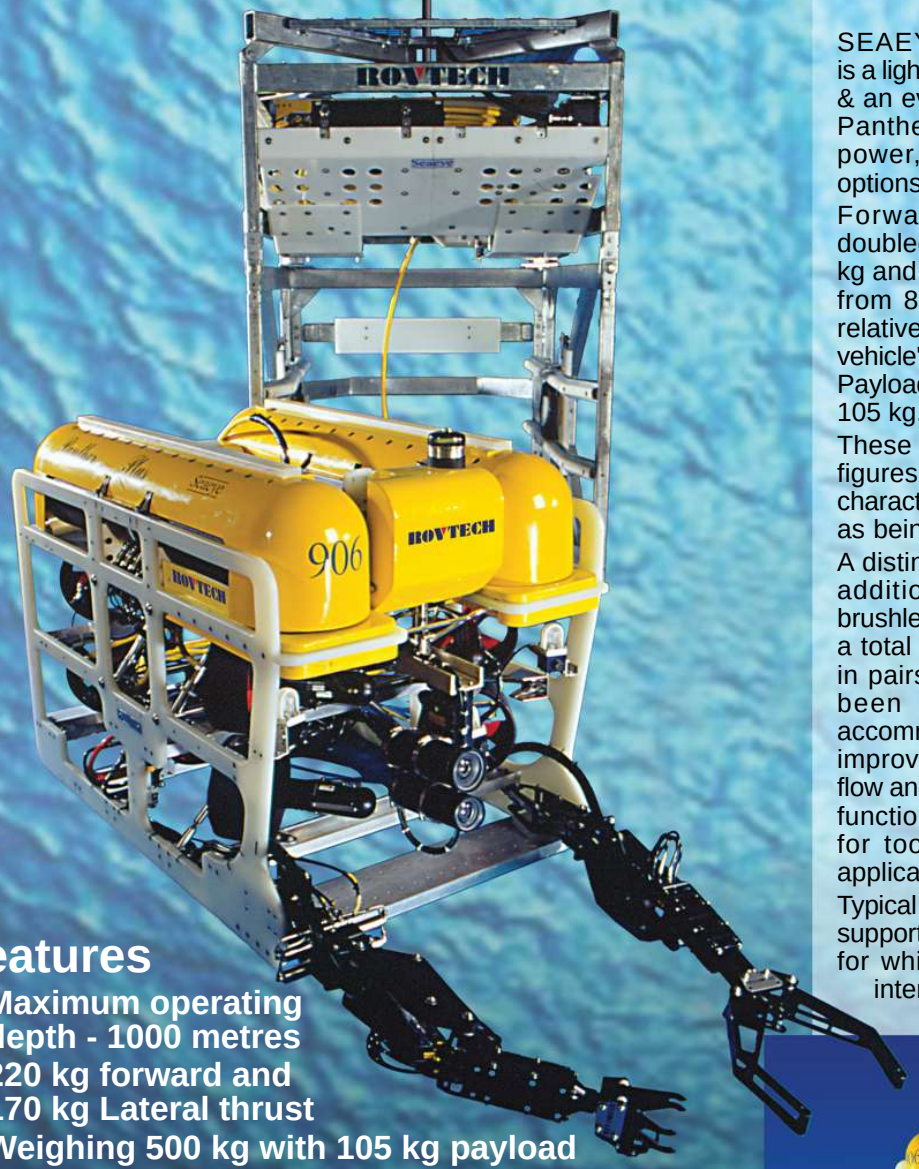
Seaeye Panther Plus



SEAEYE PANTHER PLUS is a light weight work class ROV & an evolution of the Seaeye Panther to provide greater power, payload & interface options.

Forward thrust has been doubled to an impressive 220 kg and lateral thrust increased from 85 kg to 170 kg with a relatively small increase of the vehicle's in air weight to 500 kg. Payload has been increased to 105 kg.

These improved performance figures translate into handling characteristics that pilots report as being 'simply spectacular' .

A distinguishing feature is the additional 4 vectored SM5 brushless DC thrusters making a total of 8 vectored thrusters in pairs. The ROV frame has been slightly enlarged to accommodate these thrusters, improve through frame water flow and provide space for a 12 function hydraulic valve pack for tooling and manipulator applications.

Typical applications include drill support and survey operations, for which the vehicle is fully interfaced.

Features

- Maximum operating depth - 1000 metres
- 220 kg forward and 170 kg Lateral thrust
- Weighing 500 kg with 105 kg payload
- 10 brushless DC thrusters with velocity feedback for superior control
- Auto heading & depth with auto altitude option
- Two hydraulic manipulator interfaces
- 12 function hydraulic solenoid valve pack
- Seaeye compact pan and tilt unit
- Dual channel, variable intensity, individually fused, 600 watts of lighting
- Interface for survey sensors
- 4 simultaneous video channels & video overlay system

Seaeye

Seaeye Panther Plus

SEAEYE PANTHER PLUS is a very powerful and capable evolution of the established Seaeye Panther and is based on a specification developed with ROVTECH Limited who operate the largest fleet of Seaeye ROVs. This light weight work class ROV is capable of drill support and survey operations for which interfaces are provided. Free swimming operations are possible with up to 300 metres of tether but this ROV is normally deployed using a Seaeye Tether Management System (TMS) to minimise the effect of current on the vehicle's performance. The standard TMS is a garage with a bale arm, level wind and 150 metre tether capacity. A variation of the Seaeye Type 5 winch and slip ring TMS is also available to provide ROV excursions to 200 metres.

Specifications

Maximum working depth:	1000 metres
Length:	1750 mm
Height:	1217 mm
Width:	1060 mm
Thrust Fwd:	220 kg
Thrust Lateral:	170 kg
Thrust Vertical:	75 kg
Launch Weight:	500 kg
Payload:	105 kg

Propulsion

All Seaeye brushless DC thrusters have integrated 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. These essential building blocks enable Seaeye Marine to provide superior control and response from their powerful ROVs and set them apart from the competition.
The Panther Plus thruster configuration is 8 vectored Seaeye SM5 brushless DC thrusters in pairs for horizontal control & 2 vertical units for vertical control.

Chassis

The modular chassis manufactured is in polypropylene that is extremely rugged, totally maintenance free, non corroding and self supporting in seawater. Additional equipment can be bolted directly to chassis members.

Aluminium Pressure Housings

Machined from 6082 marine grade aluminium and hard anodised in black.

Connectors

Seaeye's range of metal shell connectors are generally used throughout.

Buoyancy

The two vehicle electronics pods are fabricated with high grade, carbon fibre composite materials and provide most of the vehicle buoyancy. One pod contains the vehicle electronics leaving the other empty for additional, customised equipment. Water ingress and vacuum alarms are fitted to these pods. Additional buoyancy is provided by shaped syntactic foam blocks.

Control System

16 bit digital system providing easy interfacing to ancillary equipment by the operator. The SEAEYE comprehensive video overlay is fitted as standard providing digital and analogue compass rose, tilt icon, date time group, depth (metric or imperial), CP value, pre-titled and free text pages. Vehicle data may be exported to client's survey or navigation computer systems via the Seaeye telemetry monitor unit, which is supplied as part of the standard spares kit.

Navigation

Sensitive flux-gate compass unit with solid state rate sensor for enhanced azimuth stability.

Accuracy:	± 1°
Resolution:	0.351°
Up-date rate:	125mS

Depth Sensor

Electronic unit in its own separate housing. Accuracy ± 0.1% of full scale deflection.

Auto Pilot

Full automatic pilot is provided for depth and heading.

Pan & Tilt System

A Seaeye Pan & Tilt unit, with positional feedback displayed on the video overlay is fitted as standard.

Lighting

Two separately controlled lighting channels each with variable intensity, individually fused Seaeye 150W lamp units.

Video System

Four simultaneous video channels transmitted via two dual fibre-optic transmitters and two fibre optic cores. Two dual fibre-optic de-multiplexers are situated in the Surface Junction Box (supplied) in the ROV control cabin. Two 15 inch colour monitor are also provided.

Surface Control Unit

Contains all the vehicle surface control electronics, TMS control and surface outlets for ancillary equipment. This unit is 19" rack mountable and is supplied in its own case.

Pilots Hand Control Unit

A small remote hand control unit containing all system controls. Unit is supplied on a 5m lead.

Surface Power Supply Unit

Supplies all power requirements for the vehicle system. Line Insulation Monitors (LIMS) are fitted to both AC and DC power components for system safety and monitoring purposes. Requires 3 phase AC input of between 380vac and 480vac at 20kva.

Tether Management System

The type 3 bale arm TMS illustrated provides up to 150 metres excursion of the ROV. A variant of the Seaeye type 5 winch and slip ring garage TMS is available for excursions up to 200 metres.

Options

- **Specialist configurations to suit client requirements**
- **Technical training programme**
- **Focus/Zoom TV camera interface**
- **SIT and colour cameras**
- **2.5 kw 3 phase AC outlet**
- **Survey Suites**
- **CP probe (Contact or proximity)**
- **Sonar systems**
- **Dual Manipulator system**
- **Tracking systems**
- **Pipe & Cable tracking equipment**
- **Inspection suites**
- **Launch & deployment system (Zoned & un-zoned)**
- **ROV Control cabin (Zoned & un-zoned)**

Note: Specifications may change without prior notice

Seaeye

SEAEYE MARINE LTD.
Seaeye House, Lower Quay Road, Fareham, Hampshire PO16 0RQ, United Kingdom
Tel: +44 (0) 1329 289000 Fax: +44 (0) 1329 289001
Email: rovs@seaeye.com www.seaeye.com