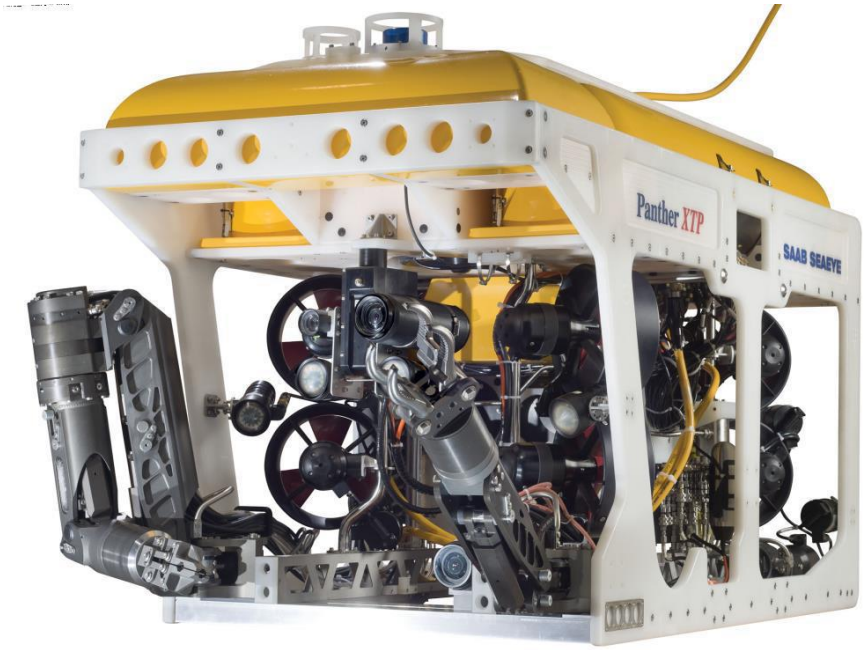
Seaeye Panther–XT Plus

The High Current Shallow Water Survey and Light Work Vehicle

The Panther-XT Plus is a 1000m rated vehicle fitted with ten 500 Volt DC thrusters - eight horizontal and two vertical - with the option of a third vertical thruster, providing the Panther-XT Plus with exceptional handling and speeds of up to 3.5 knots.

The high-powered Panther-XT Plus can accommodate two Schilling Orion manipulators plus a wide range of sensors and heavy duty tooling skids, making it ideal for tasks that include drill support, pipeline survey, IRM, and salvage.

The system is available as a free swimmer or in conjunction with a Tether Management System (TMS) and an A-Frame Launch and Recovery system (LARS). Surface equipment is available as either free-standing units or integrated into a control cabin.



Performance

With ten powerful thrusters and a high payload, the Panther-XT Plus has exceptional handling and a speed of 3.5 knots while still maintaining a small footprint.

Versatile

Designed to carry a range of survey and heavy duty tooling options, which are fitted within the vehicle.

Industry Proven

Renowned for an excellent record as a light work and survey vehicle working in shallow water high current conditions.

Seaeye Panther–XT Plus

System Overview

- Two Surface Power Supply Units and a Surface Control Unit supplied as free standing units or fitted inside an air conditioned control container.
- 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 1000m.
- ROV rated to 1000m fitted with eight horizontal thrusters and two vertical thrusters supplied with 500 Volts DC. ROV is fitted with two electronics pods; a main and an auxiliary. The main pod provides interfaces for Thrusters, LED lights, multiple cameras, a depth sensor and a solid state compass (located inside the main electronics pod), 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.

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Technical Specifications

General	
System Power Requirements	3-phase, 380-480 VAC 50/60Hz 131 kVA Typical Full System including TMS, Cabin and LARS
Depth Rating	1000m
Dimensions (LxWxH)	2140mm x 1060mm x 1217mm
Standard Launch Weight	Approximately 800 kg
Payload (Base / Std)	Approx. 150kg (bare ROV)

Mechanical	
Safe Working Load	1000kg @ Sea State 6
Through Frame Lift	200kg @ Sea State 6

Performance	
Forward Speed	3.5 knots
Thrust Forward	340 kgf
Thrust Lateral	170 kgf
Thrust Vertical	105 kgf

Standard Instruments	
Tilt	24VDC, 35NM Torque
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 Pitch/Roll 0.4° Typical

Hydraulic Tooling
DC SM7 based HPU included with Manipulator Options, 175Bar, 6 L/min (Schilling / Hydrolek – see Options Section)
Optional Auxiliary 3 Phase 660VAC Tooling HPU: 140 Bar, 10.9 L/min (see Options Section)

Video and Electrical Interfaces	
Data Link	Single Mode Fibre with CWDM Spare Fibre within ROV JB for Survey/Video
Main Pod Video Camera Interfaces	4x SD (Composite) 3x Fixed Focus 1x Tri State Zoom/Focus interface
Main Pod Sensor Interfaces	Depth, Compass and Altimeter (compass sensor is internal to Main EPOD) CP Probe (Contact and Proximity Modes Supported) Sonar, 24VDC, Twisted Pair comms 1x Aux, 24VDC, Twisted Pair comms 1x Aux, 110VAC, RS232 comms
Main Pod Light Interfaces	4x 110VAC Interfaces supporting Saab Seaeye LED Lamps
Aux Pod Video Camera Interfaces	2x SD (Composite) Fixed Focus
Aux Pod Sensor Interfaces	3x Aux, 24VDC, RS232 comms 3x Aux, High Capacity 24VDC, RS232 comms 1x Aux with High Capacity 24VDC 1GB Ethernet comms
Aux Pod Light Interfaces	2x 110VAC Interfaces supporting Saab Seaeye LED Lamps

Surface Equipment	
Standard Surface Control Equipment	PDU with: - Split DC for redundancy - Built in proprietary Overlay) - Control PCBs for ROV/TMS
	Hand Controller, Keyboard,
	Video Monitors (x2), Telemetry Monitor

Power Supply Units	
ROV PSU	2x ROVPSUs @: 500-600Vdc 35A, 240/440Vac each
Tooling PSU	9kW 440-720Vac OUTPUT

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Options, Tools and Accessories

AUX Pod Upgrade: Upgrades Aux Pod to add 2x GB Ethernet Auxiliary Interfaces with high capacity 24/48VDC supplies.

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

High Definition (HD) camera for vehicle.

Multi Beam Imaging Sonar and surface equipment options

Scanning Sonar and surface equipment options

Altimeter for measuring the height of the vehicle above the sea floor

Auto Altitude option available

Schilling Orion 7P and 4R manipulator arm options with hydraulic system including SM7HPU, valve pack, and pressure compensator

Additional 4kW HPU and control valve used for hydraulic tooling options.

Rotary Cutter used for cutting through hoses and cables up to 4 inches thick.

38mm Anvil Cutter for cutting wire rope and similar cables (requires hydraulic supply)

Holmatro ICU10A30R 144mm Jaw Cutter C/W manip Handle

Water Jet System using a high power water pump.

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

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

Cathode Potential Probe with either contact or proximity probe options available

Pipeline survey wheeled skid with either three or four function camera boom arms. Also camera and LED light options available.

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

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 high-back pilot seat.

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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 vehicle 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: Push/Pull System to aid removal of the ROV from the TMS, Tarp, 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 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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