

# WORK CLASS ROV

# **SEAEYE LEOPARD 1706**

The Seaeye Leopard is engineered to provide a robust electric work class ROV within a compact frame. Based on the successful Panther XT-Plus model, the Seaeye Leopard delivers impressive thrust, payload, tooling power, and depth rating improvements while maintaining a similar deck size.

Featuring Seaeye's iCON intelligent control system, this 2,000-meter-capable work ROV boasts enhanced user interface, streamlined network architecture, excellent maneuverability, and power, along with advanced autopilots for pitch and roll stabilization. It incorporates built-in diagnostics, redundancy measures, and remote internet access for upgrades and technical assistance.

With capacity for two Schilling Orion heavy-duty manipulators and a variety of work class sensors and interchangeable tools, the Seaeye Leopard is well-suited for tasks such as drill support, pipeline inspection, exploration, salvage operations, cleaning, and deep-water IRM.



# **HIGHLIGHTS**

- Operational depth of 2,000 m.
- Capable of working in currents up to 3 Knots.
- System includes LARS with caged type 8 TMS (tether length of 200 m).
- Pay load capacity of 205 kg
- Single Mode fibre optic system (Gb Ethernet, 8 channel CWDM, 8 x composite video, 16 x RS232/485/422 data channels). iCON,
- SAAB's intelligent control and power distribution system.
- Station keeping, cruise, transit and standoff control.
- Full set of optional survey and tooling skids.
- Variety of tooling options.
- Small footprint, enabling operations to be conducted from small vessels of opportunity, fixed or floating platforms.





All specifications presented within this document are subject to change without notice.

## **VEHICLE SPECIFICATIONS**

2,000 m Depth Rating: Length: 2.150 m Width: 1.160 m Height: 1.174 m Launch Weight: <1,200 Kg Forward Speed: >3 knots Forward Thrust: 500 kgf Lateral Thrust: 377 kgf Vertical Thrust: 225 kgf Payload: 205 kgf Through-frame lift: 1,000 kg

#### **Propulsion:**

11 vectored SM9 500v brushless DC Thrusters

#### **Auto-Functions:**

**Heading Control** Depth Control Pitch and roll Control

Altitude Control

The system also has station keeping, cruise, transit and standoff control.

#### Umblical/Main Lift

Umbilical Length: 2,000 m Umbilical O/D: 29 mm

#### TMS (Seaeye Type 8)

Length: 1.792 m Width: 1.491 m Height (to lift eye): 2.75 mm Weight(in air): 1.2 Tons Depth Rating: 2.000 m Tether Length: 200 m Tether OD: 22<sub>mm</sub>

**Power Requirements:** 380-440V, 3Ф, 50/60 Hz, 250 kVA

# SYSTEM DIMENSIONS AND WEIGHTS

# **LARS** with Winch:

Length: 8 m Width: 2.75 m Height(to lift eye): 2.25 m Weight: 25 Tons A-Frame Outreach: 2.5 m

# Control Cabin - DNV 2.7-1 offshore container, A60 rated:

Length: 6.1 m Width: 2.6 m Height(to lift eye): 2.6 m Weight: 7 Tons

#### Workshop/Stores Cabin - DNV 2.7-1 offshore container, A60 rated:

Length: 6.1 m Width: 2.6 m Height(to lift eye): 2.6 m Weight: 9 Tons

# Power Cabin - DNV 2.7-1 offshore container, A60 rated:

6.1 m Length: Width: 2.6 m Height(to lift eye): 2.6 m Weight: 9 Tons

# **EQUIPMENT FITTED AS STANDARD**

# **Control System:**

The Leopard operates on SAAB Seaeye's distributed intelligence control system, iCON.

## Man Machine Interface (MMI):

The Leopard 1706 MMI comprises 6 main elements:

- Surface Power Supply Remote Control Interface
- TMS Control Interface
- TMS Foot Switches
- Flight Screens
- Two Touch Screens
- Hand Controller

#### Chassis:

The extremely rugged polypropylene and stainless steel chassis. Materials and design are balanced to create an incredibly lightweight chassis, maximising strength and stiffness to support a 1Te through frame lift capability for tooling skids and rigid mountings for manipulators, TDUs, tools and sensors.

#### **Vehicle HPU:**

1 x 4.5 kW brushless DC 'clean' HPU for manipulators 3-phase 15kW (20HP) 'dirty pack' HPU providing 30 l/min @ 210 Bar, mounted on removable tray with dedicated compensator and

#### **Manipulators:**

1 x Schilling Orion 7P with 3.8" Gripper. 1 x Schilling Orion 4R with 7.8" Gripper.

#### Pan & Tilt:

1 x High torque, oil filled, pan & tilt platform. The unit can accept two cameras and lights.

1 x +/-90 degree camera tilt platform which accepts one camera and light.

## Camera:

1 x Seaeye Black and White Camera 1 x Kongsberg Colour Zoom Camera.

## **Digital Video Recording System:**

Digital video recording system (4 channel simultaneous recording), with video overlay for all channels.

# **Imaging Sonars:**

1 x Tritech Super Seaking DST avoidance sonar

# **Depth Sensor:**

1 x Electronic sensor accurate to +/- 0.1% FSD

## Lighting:

The Leopard is fitted with six long-life LED lights (on four individually controlled channels).

#### **Emergency Systems:**

1 x Strobe Light

# **OPTIONAL EQUIPMENT**

# **Sensors/Equipment:**

· Tritech Profilers

· Multibeam Echo Sounder

2D Real Time Sonar

CP / UT Probes

Doppler Velocity Log (DVL)

Underwater AHRS

Wire Rope Cutter

Soft Line Cutter

Nut Splitter

Subsea Cleaning Tool

# **Optional Skids:**

- Wheeled skid with boom arms (c/w cameras/lights)
- Water Jetting/ dredging skid
- Buoyancy skid







