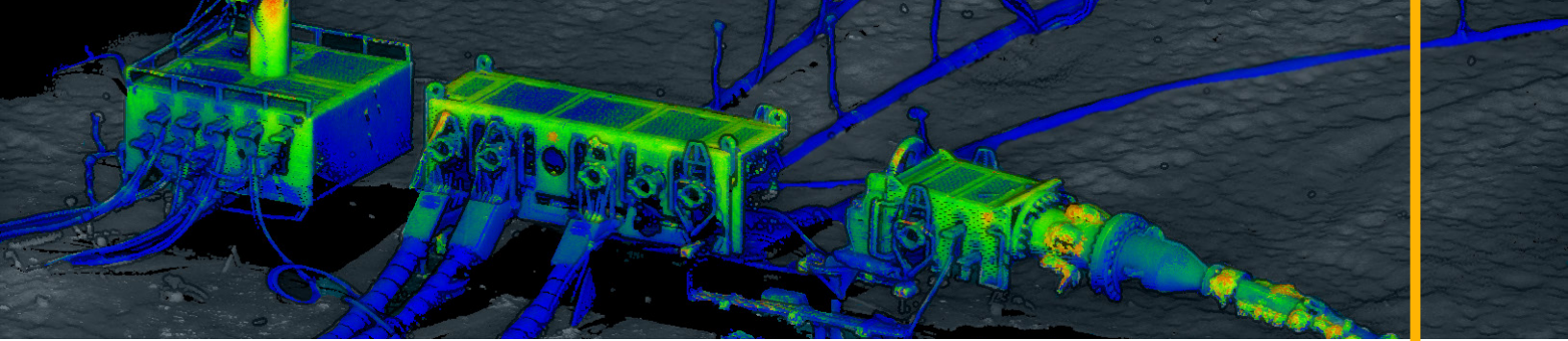


VOYIS 

DATA SHEETS & PRODUCT INFORMATION

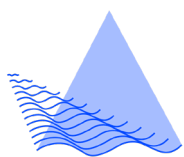
# Perception ROV Skids



## Upgrade Your ROV Survey Capabilities

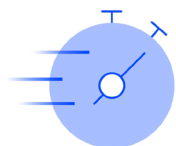
Equip your ROV with high-resolution imaging and laser scanner capabilities to produce wide area subsea digital twins. With solutions for both inspection and work class ROVs, you'll be able to easily upgrade your survey and inspection capabilities.

### Benefits & Features



#### Simplified Digital Twins

With the pre-integrated Perception Skid you can perform wide-area 3D surveys



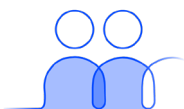
#### Real-Time Data Processing

Instantaneous results delivers data without lengthy processing times



#### Reliable 3D Surveys & Inspections

The skids have a pre-calibrated navigational system with a laser scanner to consistently deliver robust data



#### Customer Support

Our team partners with you to find the best solution for your project



#### Efficient Workflow

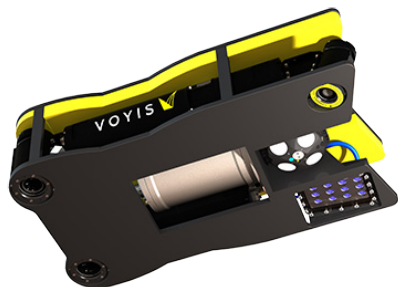
Adding EIVA survey software to the package enables an optimized workflow





## Find The **Right Product** For Your Project

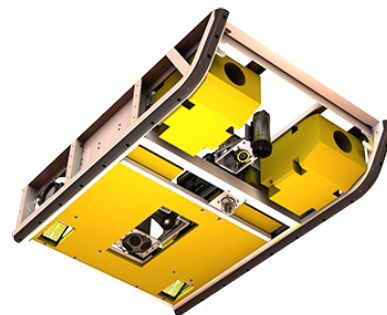
Each Perception skid comes with a powerful imaging and laser system pre-calibrated to a survey grade navigational system. Read below to find out which model best suits your vehicle.



### Perception

Our complete dynamic underwater laser & stills imaging survey package for small ROVs that drastically simplifies integration.

[View All Details](#)



### Perception XL

Our Perception XL ROV Skid designed for large Work-class ROVs enables simple and reliable 3D inspections.

[View All Details](#)

## Case Studies

Click on a case study to read how some of our customers have used Voyis products.

**Spool and Hub Metrologies with Dynamic Laser Scanning**  
DOP 2023

**Overview**

Customer: DOP Subsea  
Industry: Offshore Energy  
Vehicle Used: VooT 300  
Voyis Products Used: Perception XL

**Summary:** In December 2023 at The Underwater Centre in Port of London, London, DOP Subsea (DOP) arranged a demonstration of dynamic underwater laser scanning as a replacement for traditional overhead techniques. The data discussed 'Voyis' underwater laser scanning, the Insight Pro, and SonarView for navigation system, SP001, VooT 300, and 360-degree, hemispheric, hemispheric camera for VooT and provider of SonarView rental equipment, provided services and project/technical support.

[View more](#)

**The Project**

Traditional metrology measurements using Long Range (LR) sonar and photogrammetry demand significant vessel and ROV time. LR, requires physical interaction with the vessel assets and photogrammetry is unable to provide real time results. The goal of the demo was to quantify the operational time reduction and accuracy of dynamic laser scanning for vessel metrology.

**AUV-Based Pipeline Surveying**

**Overview**

Customer: Oceanwing  
Industry: Offshore Energy  
Vehicle Used: LongRange-AUV  
Voyis Products Used: Perception XL

**Summary:** Oceanwing and Voyis, through this project, were able to deploy a custom AUV based on existing sensor using Voyis' Insight Pro and SonarView for navigation system to inspect pipeline nearby the existing energy site. Oceanwing

**The Project**

In 2024, the team at Oceanwing, known for their innovative approach to surveying, was faced with a difficult task: to develop a way to reduce pipeline survey costs while increasing the quality of the data collected. The team engaged with a single point manufacturer for their first autonomous underwater vehicle (AUV). With the ability to host a three-laser and two sonar payloads of sensors, they provided a compact platform from which multiple sensors could be managed in a number of the time compared to conventional methods. However, their vehicle's sensor payloads were not designed for high-precision work like pipeline surveying and inspection.

Oceanwing approached Voyis in an effort to solve their laser challenge. Through substantial trials of collaboration and teamwork, Voyis and Oceanwing were able to develop an optimal solution for autonomous pipeline inspection.

On average, flight times of 2 to 3.5 hours and 2 to 3-ton payloads for their pipeline surveys, a typical survey included 20 to 30 passes over existing data along the entire line of the pipe, with two subsequent

**Empire Heritage & Hempton Marine Habitat Inspections**  
LUTHE UNIVERSITY

**Overview**

Customer: Luthe University  
Industry: Research  
Vehicle Used: VooT 300  
Voyis Products Used: Perception XL, Insight Pro, SonarView

**Summary:** This project is part of a multi-year programme to understand the physical and biological processes affecting the coastal environment and the marine habitats. The off-shore management, conservation, and sustainable development of the marine resources, including the importance of the wide variety of habitats.

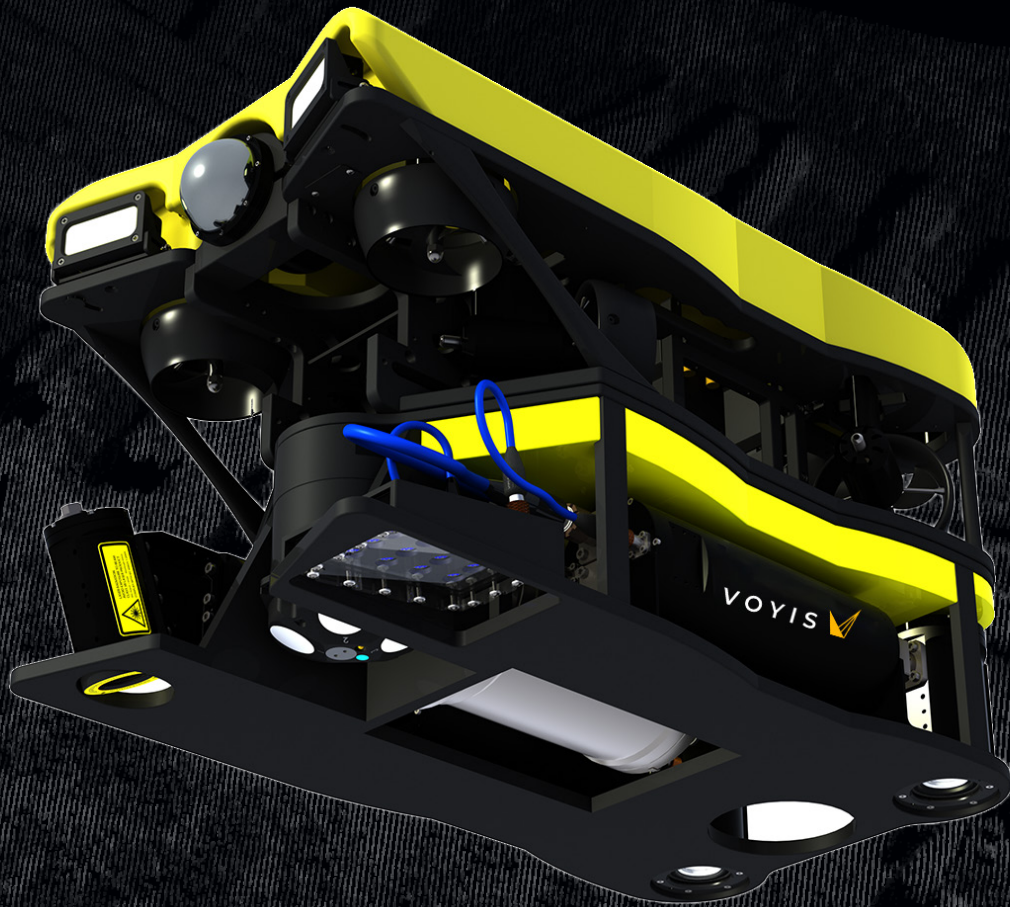
**The Project**

The overall scientific aim of this research is to explore how sea, wind and tides change and physical changes of the seabed at a range of scales for the characterisation of habitats and other associated factors of interest to an understanding of high conservation and natural resource value. A laser survey provided a higher order of magnitude of data resolution and detail than other traditional survey methods that have been conducted at this area.

This Specialist Marine Research Equipment and Small Information award (SI-MRI Agreement No. 802/2022) is funded with the support of the Marine Research and Habitat under The Marine Research Programme 2014-2020 by the Government of Scotland. This research results are carried out with the support of





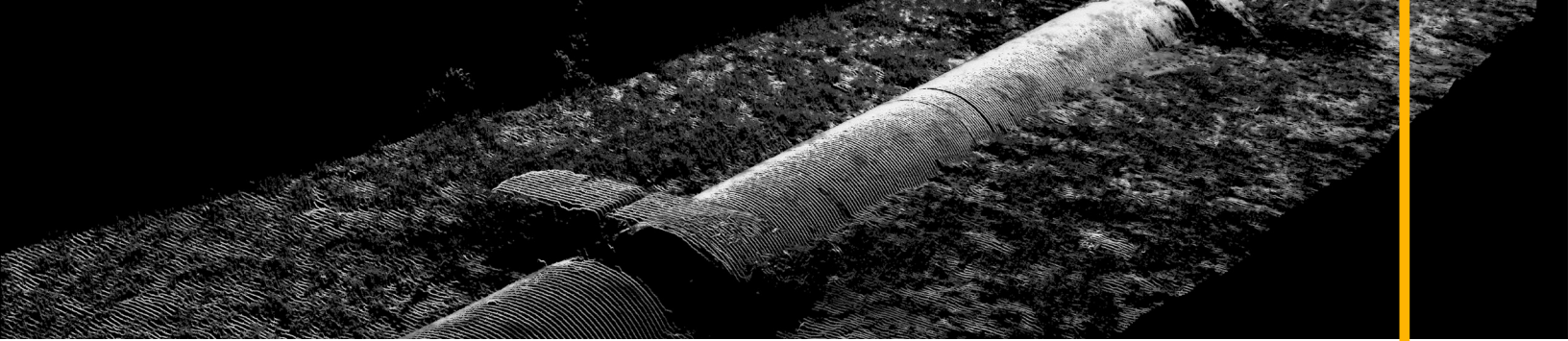


ROV SKID

# Perception

Outfit your small ROV with high-resolution laser and stills survey capabilities.





## At A Glance

An overview of the main benefits to using the Perception for your project.

- 🕒 Survey-grade navigational solution included
- 🌊 Neutrally buoyant and balanced
- 🔍 Designed for standard inspection class ROVs
- 🕒 Combined stills & laser data in real-time

## Overview

The Perception inspection-class skid is the first survey-grade 3D inspection solution for small ROVs to deliver high-accuracy inspection and image mapping in a module add-on package.

In a collaboration with navigation providers, the skid comes pre-integrated with all the required positioning sensors in a naturally buoyant solution that doesn't impact vehicle dynamics.

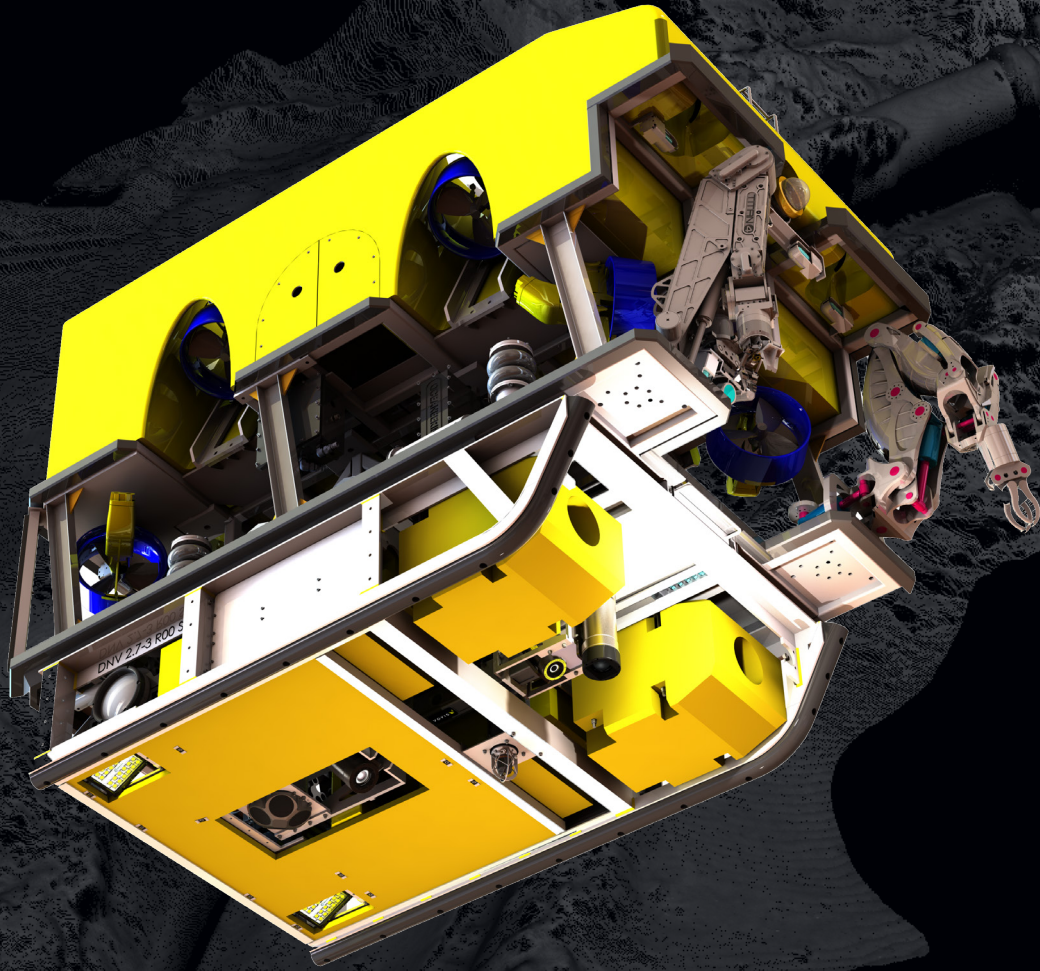
[Contact sales to get the specifications for your specific ROV.](#)



WARNING - LASER RADIATION AVOID  
EXPOSURE TO BEAM - Class 3B Laser Product  
Max output: <75mW  
Pulse duration: 1mSec to CW  
Wavelength: 450nm +/- 10n







ROV SKID

# Perception XL

Outfit your Work-class ROV with high-resolution stills imaging and laser capabilities.





## At A Glance

An overview of the main benefits of using the Perception XL.

- 🔌 Plug & play - all components pre-calibrated
- 📦 Modular skid means easy shipping
- 🔗 Includes SPRINT NAV INS & our Insight Pro
- 👍 Pre-wired for single MUX connection

## Overview

The Perception XL dynamic laser and stills skid is a turn-key survey solution with all the equipment and software, pre-configured and calibrated, to enable plug-and-play high-resolution geo-referenced underwater surveys. The solution can be mobilised quickly with worldwide rental options, and drastically reduces the risks and complexity commonly associated with piecemeal sensor integrations.

The speed and time-to-data of dynamic laser surveying means that 3D true-scale digital twins of entire underwater fields can be created just as quickly as the ROV can traverse it. Laser scanning uniquely delivers real-time data and acquisition reliability even with featureless targets, a guaranteed certainty that is missing with other methods.

[Contact sales to get the specifications for your specific ROV.](#)



WARNING - LASER RADIATION AVOID  
EXPOSURE TO BEAM - Class 3B Laser Product  
Max output: <75mW  
Pulse duration: 1mSec to CW  
Wavelength: 450nm +/- 10n



Enabling every subsea vehicle to see the depths [like we see the surface.](#)



VOYIS 

**Illuminate The Unknown**

For More Information Contact [sales@voyis.com](mailto:sales@voyis.com)

[www.voyis.com](http://www.voyis.com)

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