


VOYIS 

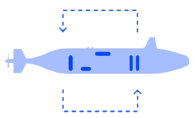
DATA SHEETS & PRODUCT INFORMATION

Insight Underwater Laser Scanners

Capture **Incredibly Detailed** 3D Data

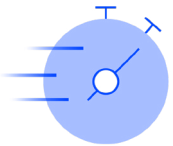
Voyis' Insight Underwater Laser Scanners capture 3D data with submillimeter accuracy to help you see the depths, just like we see the surface. Assets in remote subsea environments can be modelled from a dynamic subsea vehicle or static installation, with all data processed in real-time so that results are immediately available for review.

Benefits & Features



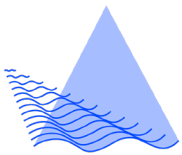
Vehicle Integration

Proven and reliable integration options for subsea vehicles using an easy-to-use software API interface



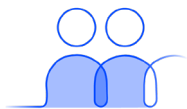
Real-Time Data

3D data is processed onboard the sensor to deliver real-time actionable data for machine learning



Dynamic Scanning

Proven integration with common navigational sensors enables scanning from moving subsea vehicles



Customer Support

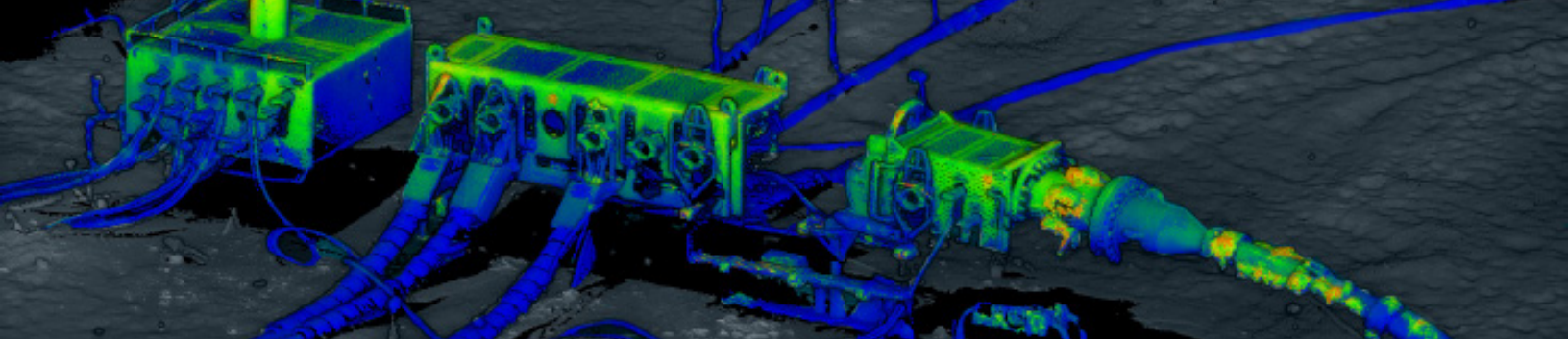
Our team partners with you to find the best solution for your project



Get the Best Data Possible

Sensors that push the limits to deliver the highest resolution, accuracy, and range at any vehicle speed





Find The **Right Product** For Your Project

Each Insight laser scanner produces high-resolution laser data but there are a few options to best suit your project/deployment.



Insight Nano (formely ULS-100/200)

Compact size for 3D modelling small spaces & short to mid-range targets. Simplified static scanning with embedded actuator.

Depth rating: 1000m

Scan range: 0.13m - 1m & 0.4m - 2.5m (XR)

Points per line: 2064

[View All Details](#)



Insight Micro

(formerly ULS-500 Micro)

A long-range laser scanner but in a smaller package making it suitable for small vehicles.

Depth rating: 1000m & 4000m

Scan range: 1.2m - 7m

Points per line: 2464

[View All Details](#)



Insight Pro

(formerly ULS-500 PRO)

Our longest-range scanner providing the highest quality data possible from larger vehicles.

Depth rating: 4000m & 6000m

Scan range: 1.5m - 15m

Points per line: 2048

[View All Details](#)





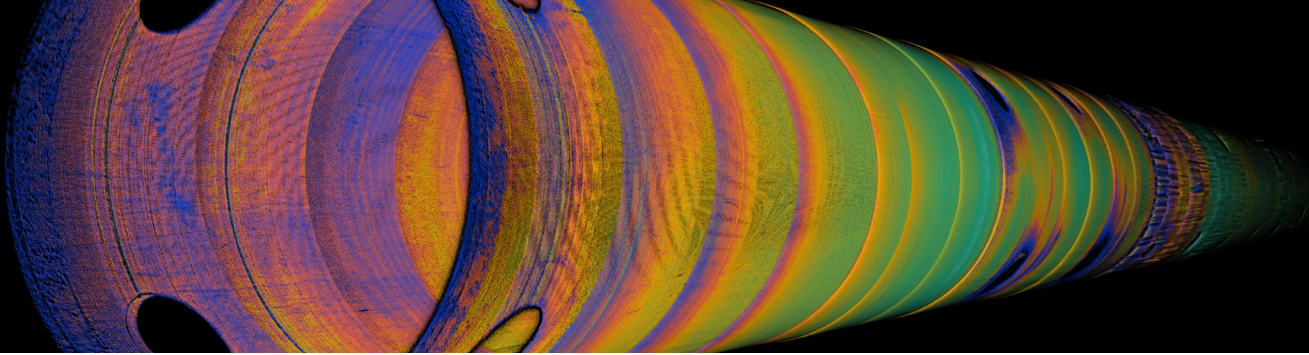
COMPACT LASER SCANNERS

Insight Nano

The Insight Nano is a compact laser scanner designed for straightforward 3D modelling. The integrated actuator and simple user interface enable non-intrusive qualitative inspection without any external aiding sensors.





The system is capable of integration with a variety of deployment vehicles, including small ROVs and pipe crawlers, to deliver high resolution data in confined spaces like pipes, tunnels, and flume tanks.

This new generation Nano is available with time synchronization, dynamic scanning, and high-speed scanning options.




At A Glance

An overview of the main benefits to using an Insight Nano for your project.

-  3D modelling in confined spaces, in air or water
-  Sub-millimeter resolution
-  Accurate measurements without external sensors
-  High-speed rotational or dynamic scanning

Specifications

Integration drawings available - [contact sales](#)

Feature	Nano - Short Range	Nano XR - Medium Range
Scan Range *	0.13m - 1.0m	0.4m - 2.5m
Points Per Line **	2064 data points 50° (water) 70° (air) Angle of View	
X Resolution (Along laser line)	0.1mm @ 0.13m 0.3mm @ 0.5m 0.5mm @ 1.0m	0.2mm @ 0.4m 0.7mm @ 1.5m 1.0mm @ 2.5m
Y Resolution (Profile to profile)	0.05mm @ 0.13m 0.1mm @ 0.5m 0.2mm @ 1.0m	0.1mm @ 0.4m 0.3mm @ 1.5m 0.5mm @ 2.5m
Z Resolution (Depth Resolution)	0.05mm @ 0.13m 0.1mm @ 0.5m 0.4mm @ 1.0m	0.05mm @ 0.4m 0.5mm @ 1.5m 1.2mm @ 2.5m
Profile Rate	35 Hz Range limiting option for higher captured rates	
Laser 	Max output: <15mW Pulse duration: 1mSec to CW Wavelength: 450nm or 520nm	WARNING - LASER RADIATION AVOID DIRECT EYE EXPOSURE Class 3R Laser Product
Power Consumption	25W, 24V	
Data Interface	Ethernet, TCP/IP Communication	
Depth Rating	1000m	
Data Storage	Topside or Network Storage	
Data Acquisition	ViewLS Software C++ API Factory Calibrated Acquisition Modes: Precision Scanning, High-speed Scanning & Dynamic Scanning	
Export Data Formats	.XYZ (CSV), LAS Publishing	
3rd Party Integration	EIVA NaviSuite, QPS QINSy, HYPACK HYSWEEP, 4D NAV	

* Range measured from Scanner Origin, defined as the center of rotation

** Angle of view is measured at center of Scan Range





VOYIS

Illuminate The Unknown

For More Information Contact sales@voyis.com

www.voyis.com

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