

Underwater 3D Laser Imaging

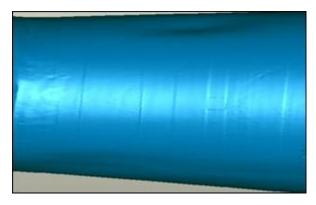


Features:

- Rapid high resolution 3D imaging of subsea objects.
- Compact and light weight unit suitable for use on eyeball ROVs, AUVs.
- Scanning data can be configured in formats suitable for export into a variety of 3D CAD software.
- Engineered to highest health and safety standard.

Smart Light Devices is the world leader in developing underwater 3D Laser Imaging for the oil and gas and nuclear industries. The 3DL3 underwater 3D laser imaging system is latest three dimensional scanning product from Smart Light Devices. The system provides an unrivalled combination of speed, accuracy, flexibility and field-of-view to rapidly capture both large and small objects. The system may be used for both linear and rotational scanning of any subsea object, regardless of shape or materials. The system is housed in a compact, light weight, and robust housing with a depth rating of 4000m, making it highly suited for use on eyeball ROVs and AUVs.

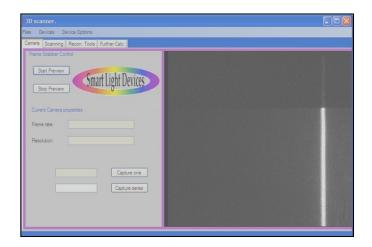
In operation the system can be readily use to capture the dimensional data of any physical object, structure or scene and convert the data accurately into a three dimensional computer model. A surface resolutions of 25 micrometers is obtainable using the system.







User friendly software which generates 3D image clouds or solid surfaces compatible with most CAD formats is provided with the system. In addition to the shape measurements, Smart Light Devices has integrated a number of calculation features such as, centre line, ovality, surface roughness measurements and many other features into the data processing package.



Technical Specification:

Scanning distance	50-2000 mm Customisable
Data resolution	25 μm; 1 mm for fast preview scan
Max. Scanning speed	30 sample lines per second
Dimension (mm)	L(220), W(43) H(169) (Other sizes please call)
Weight	856g in air, 635g in water
Software	User friendly software
Materials	Titanium & Aluminium
Laser power	<5mW (Option 500mW) Laser class II
Beam Diameter (at exit)	0.5 mm
Laser wavelength	Green 532 nm (Option: Blue 473 nm)
Power supply voltage	DC 24V
Power consumption	< 4W
Water depth rating (m)	4000 m
Operating temperature	-10°C ~ +50°C
Connectors type	WETCON MCBH4M, MCBH3M