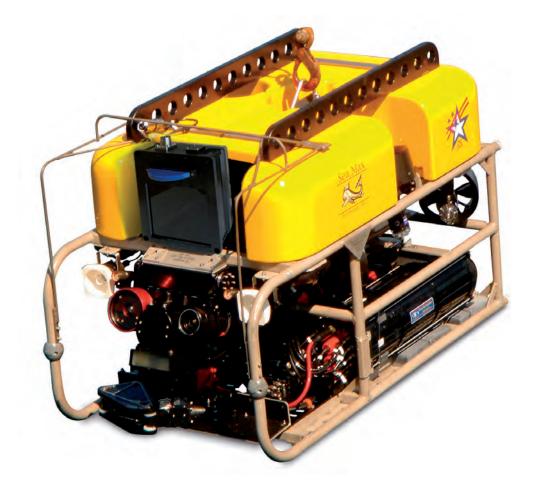




Real-Time Sonar Solutions



Benefits

Full real-time 3D

2D plan, 2D profile and 3D available from one single sensor

Simple vehicle integration

Affordable

Expert 24x7 Technical Support

Applications

Vehicle navigation and obstacle avoidance

Inspection, repair and maintenance (IRM)

Relative positioning applications e.g. touchdown monitoring, trenching, J-Tube cable installations

Diver monitoring

Vehicle based subsea construction monitoring, decommissioning and salvage operations

Versatile, affordable, real-time 3D vehicle sonar for visualisation, navigation and profiling

Dimension® is a revolutionary new sonar for ROV and AUV operations. Based on patented Echoscope® Technology and world-leading software, Dimension provides unparalleled visualisation for subsea vehicle applications. Designed for a wide range of ROVs and AUVs, Dimension is a unique, true, real-time 3D sonar that will transform underwater operations.

Available as a range of Dimension hardware with a choice of Vantage™ top-end software editions, Dimension will enhance the subsea work scene for faster, more accurate and safer ROV operations. With the combination of real-time 2D plan and 2D profile views, ROV pilots can immediately adapt to Dimension, whilst the addition of the unique interactive 3D view provides the perfect transition between sonar and camera.

Features

Dimension Sonar

- Instantaneous high definition real-time 3D sonar
- 3D scene completely updated at up to 20Hz
- Long range, wide field of view, up to 90° by 30°
- Single and multi-frequency sonar options available
- Integrated Heading, Pitch and Roll sensor
- Sonar housing up to 3,000m depth rating

VIM

- VIM (Vehicle Integration Module) bottle for simple deployment
- Single 10Mb Ethernet surface interface

Vantage[™] Software

- Vantage[™] Software for control, acquisition and easy to interpret imagery
- Real-time independent views (Interactive 3D, 2D Plan and 2D Profile)
- Live broadcast to multiple end users
- Accurate 3D measurements on all data, including 2D plan view







Dimension Technical Specifications

Performance (by Model)	Dimension-70	Dimension-90	Dimension-90+
Frequency	300kHz	240kHz	240-325kHz
Angular coverage*	70° x 24°	90° x 30°	software selectable
Beam spacing	0.54° x 0.37°	0.70° x 0.46°	software selectable
*Angular coverage is approximate and	subject to sound velocity changes.		
Performance (all Models)			
Number of beams	8,192 (128 x 64)		

 Maximum range*
 >120m (394ft)

 Minimum range
 1m (3ft)

 Range resolution
 3cm (1.2")

 Update rate (ping rate)
 Up to 20Hz

*Actual range is dependent on pulse length, target size and target strength.

Integrated Heading, Pitch & Roll Sensor

Dhysical		
Heading (Static accuracy)	< 1°	
Pitch / Roll (Static accuracy)	< 0.5°	

ricading (Otatic accuracy)	× 1	
Physical		
Dimensions (h x w x d)*	365mm x 285mm x 160mm	
*Excluding connectors	(14.3" x 11.2" x 6.3")	
Weight in air	20 kg (44 lb)	
Weight in water	10 kg (22 lb)	
Power consumption	50-75W (24Vdc)	

Depth rating	300m (984ft) standard
	3,000m (9,842ft) available to order

Vehicle Interface Module (VIM)		
Dimension sonar connection	Single connector for power, data and control	
Power input	24 – 30Vdc	
VIM Dimensions (diam x length)* *Excluding connectors	Standard Plastic 300m – 135mm x 235mm (5.24" x 9.25"), 6.7kg (add 48mm for connector height) Special Titanium 3,000m – 144mm x 235mm (5.67" x 9.25"), 10.5kg (add 48mm for connector height)	

Ethernet (10/100) (Standard)
VDSL over COAX, VDSL over TP



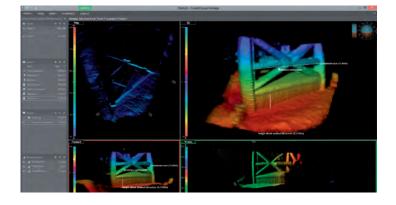


Image courtesy of Lockheed Martin Corporation

VIM to ROV umbilical

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