Coda Octopus:3D
Real-Time Sonar Solutions

/Dimension®

Benefits

Safer vehicle navigation

Real-time 3D visualization

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

Simple vehicle integration

Expert 24x7 Technical Support

Applications

Vehicle navigation and obstacle avoidance

Inspection, Maintenance and Repair (IMR)

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 visualization, navigation and profiling

Dimension is a revolutionary new sonar for ROV and AUV operations. Based on the patented Echoscope Technology and industry-leading software, Dimension provides unparalleled visualization 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 enhances the subsea work area 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

- High definition, real-time 3D sonar
- 3D scene updated at up to 20 Hz refresh rate
- Long range, wide field of view, up to 90° by 32°
- Single and multi-frequency sonar options available
- Integrated heading, pitch, roll sensor
- Sonar housing up to 3,000 m depth rating

VIM

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

Vantage Software

- Vantage software for acquisition, control 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
- 3D View ASCII x,y,z export

Coda Octopus
Sound Underwater Intelligence

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Dimension® Technical Specifications

Performance (by Model)	**Dimension®-70**	**Dimension®-90**	**Dimension®-90+**
Frequency	300 kHz	240 kHz	240-325 kHz
Angular coverage*	(66˚ x 26˚)	(90˚ x 32˚)	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.*

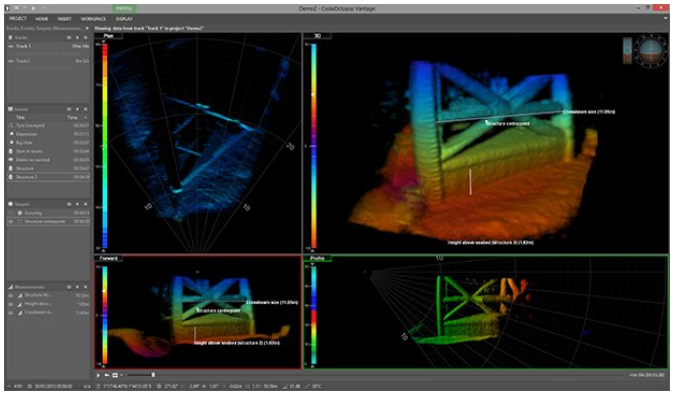
Performance (all Models)	
Number of beams	8,192 (128 x 64)
Maximum range*	>120 m (394 ft)
Minimum range	1 m (3 ft)
Range resolution	3 cm (1.2")
Update rate (ping rate)	Up to 20 Hz

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

Integrated Heading, Pitch & Roll Sensor	
Pitch / Roll (Static accuracy)	< 0.5°
Heading (Static accuracy)	< 1°

Physical	
Dimensions (h x w x d)* **Excluding connectors*	365 mm x 285 mm x 160 mm (14.3" x 11.2" x 6.3")
Weight in air	20 kg (44 lb)
Weight in water	10 kg (22 lb)
Power consumption	50-75 W (24V DC)
Depth rating	300 m (984 ft) standard
	3,000 m (9,842 ft) available to order

Vehicle Interface Module (VIM)	
Dimension® sonar connection	Single connector for power, data and control
Power input	24-30V DC
VIM Dimensions (diam x length)* **Excluding connectors*	Plastic 300 m – 135 mm x 235 mm (5.24" x 9.25"), 6.7 kg (add 48 mm for connector height) Titanium 3,000 m – 144 mm x 235 mm (5.67" x 9.25"), 10.5 kg (add 48 mm for connector height)
VIM to ROV umbilical	Ethernet 10/100 Mbps (Standard) VDSL over TP



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