

HMS-1400 Sidescan Sonar

Portable Sidescan with true 16-bit resolution

The HMS-1400 system combines a portable digital sidescan towfish and sonar interface with true 16-bit processing in a Toughbox workstation with GeoDAS software for high-resolution survey imaging. Easy-to-use and low-cost, the HMS-1400 system provides single- or dual-frequency operation with depth, heading, and attitude sensors. The powerful GeoDAS software offers an extensive suite of capabilities common in more expensive systems, including display of real-time mosaicking of sidescan images on top of nautical chart data for effective image location and mission execution, survey planning and advanced target analysis.



The HMS-1400 Sidescan Sonar System

FEATURES/BENEFITS

- Single- or dual-frequency towed sonar sensor is easily transported, interfaced, and deployed
- True 16-bit processing provides high resolution images of bottom features
- Powered by GeoDAS software by Oceanic Imaging Consultants (OIC):
 - Automatic bottom tracking
 - Automated processing/contrast enhancement
 - Advanced target analysis/databasing
 - Supports common navigation chart formats BSB, DNC, S-57
 - Extensive planning, management, and execution tools
 - Real-time mosaicking with easy export to GIS and Google-Earth
 - Compatible with OIC CleanSweep and HarborScan software packages
 - Ideal for port-security/change-detection work.
 - Optional support for XTF data format

APPLICATIONS

- Harbor security and harbor surveys
- Search and rescue operations
- Small-vessel surveys
- Target detection and hazard surveys
- Inspection surveys
- Rapid environmental assessment surveys



Portable, powerful, and easy to use.



Wreck found in Keehi Boat Harbor, Honolulu Image courtesy of Oceanic Imaging Consultants, Inc. All rights reserved.

Falmouth Scientific, Inc.

www.falmouth.com



SPECIFICATIONS

Instrument

Sonar:	Single- or dual-frequency towfish	
Material:	Stainless Steel (316 SS)	
Size:	930 x ø89 mm (36.6 x ø3.5 in)	
Operating Frequency:	Dual: 100/400, 400/900, 400/1250 kHz Single: 400 or 1250 kHz	
Beam Angle:	0.3 degree horizontal 40 degree vertical	
Depression Angle:	30 degrees down	
Transmission Pulse:	400 KHz 15 μs < 100 μs	1250 KHz 5 μs < 25 μs
Across-track Resolution:	2 cm - 15 cm	.75 cm - 3.75 cm
Max Range:	150 m	37.5 m
Depth Sensor:	0.25% full scale	
Temperature Sensor:	± 0.5 degrees	
Towing Speed:	1 < 8 knots	
Operating Depth:	100 m max.	
Weight in Air:	15 kg (33 lbs)	

Toughbox

- Panasonic Toughbook laptop
- Waterproof ABS case
- Integrated GPS & sonar interface
- 110/220 VAC or 12 VDC power supply
- GeoDAS Sidescan software installed



HMS-1400 sidescan image indicating bridge scour Images courtesy of Oceanic Imaging Consultants, Inc. All rights reserved.



Scuba diver detected with HMS-1400 at 1250 kHz

05 Sept 2013

Falmouth Scientific, Inc.1400 Route 28A, PO Box 315, Cataumet, MA 02534-0315Email: fsi@falmouth.com • Tel: 508-564-7640 • Fax: 508-564-7643 • www.falmouth.com

Specifications Subject to Change without Notice