

## Dual Frequency CHIRP Side Scan Sonar System



*The Falmouth Scientific HMS-624 Side Scan Sonar System utilizes advanced technology to provide superior imaging capabilities for deep and shallow water applications.*

*The Tow Fish electronics incorporate FSI's CHIRPceiver™ 24-bit CHIRP signal processing along with dual simultaneous 100/400 KHz operation which results in very high resolution side scan data at towing depths up to 1,000 meters.*

*The Topside Power/Data Multiplexer Interface is packaged in a IP66 splashproof enclosure and provides a 4Mb/s DSL connection for the Tow Fish, and a standard Ethernet connection for the data processor interface.*

*The HMS-624 uses a flexible control interface connected via Ethernet that allows the user to set operating parameters such as CHIRP/CW modes, pulse length, range, and gain.*

*The system is compatible with third-party Software packages such as OIC GeoDAS, Triton ISIS, and others.*

### FEATURES/BENEFITS

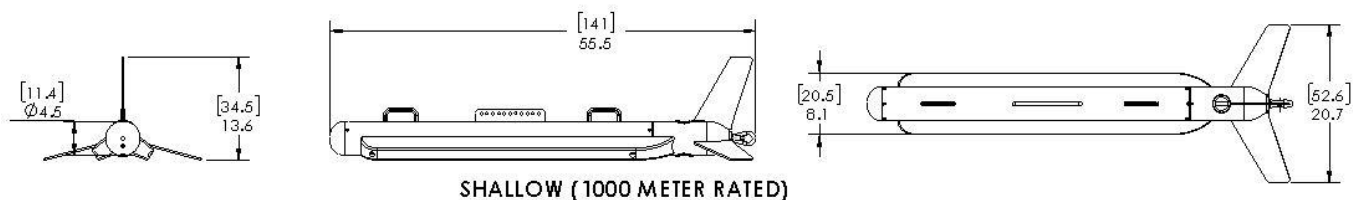
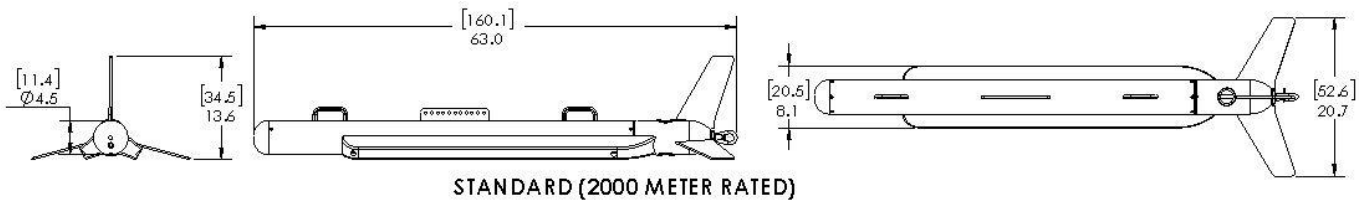
- *Dual Simultaneous 100/400 KHz Frequency*
- *Industry Standard Ethernet Interface for Data, Control, and Processing*
- *DSL Over Coax Tow Vehicle Data Interface*
- *Compatible with Standard Survey software*
- *CHIRP and CW modes*
- *Lightweight Aluminum Tow Fish*
- *Heading, Pitch, & Roll Sensors (Depth Optional)*
- *Two Serial Input Ports to Enable integration of a Magnetometer or other external sensors*

# SPECIFICATIONS

System Operating Specifications		
Operation Frequency	100 KHz, 400 KHz simultaneous; other frequencies available by request	
Signal Type	Chirp or CW User selectable	
Operating Range	100 KHz – 600 meters per side	
	400 KHz – 200 meters per side	
Horizontal Beam Width	100 KHz – 1.0 degrees - 400 KHz – 0.3 degrees	
Vertical Beam Width	60 degrees	
Depression Angle	Fixed 30 degrees tilted down	
Resolution Across Track	100 KHz – 8cm - 400 KHz – 2cm	
Standard Sensor	Heading, Pitch, Roll	
Optional Sensor	Depth	
Serial Inputs for External Sensors	Two serial inputs for external sensors such as a Magnetometer, CTD, etc.; 12 or 24 VDC Sensor Power	
Tow Vehicle Mechanical Specifications	STANDARD	SHALLOW
Material	316 Stainless Steel	ANODIZED AND POWDER COATED 6061 ALUMINUM
Diameter	11.4 cm (4.5 inches)	11.4 cm (4.5 inches)
Length	160.1 cm (63 inches)	141.0 cm (55.5 inches)
Weight in air/saltwater	~ 55 Kg/41 Kg (120 lbs/90 lbs)	~ 25 Kg/19 Kg (55 lbs/42 lbs)
Operating Depth	2,000 meters	1,000 meters
Topside Power/Data Multiplexer Interface Specifications		
Enclosure type	2U 19" rack mount	
Power Input	115/230 VAC, 50/60 Hz	
Tow vehicle power supply rating	300 VDC @ 2 AMPS	
Tow vehicle data interface	DSL, up to 4 Mb/s	
Sonar Processor data interface	Ethernet	
Tow Cable Type	Coaxial	
Tow Cable Lengths	Up to 6,000 meters, depending on cable diameter	

Specifications subject to change without notice

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