Side Scan Transducer Products

MSI provides side scan transducers for a number of sonar applications from shallow to deep water applications. MSI currently provides side scan transducers for mine counter measures, port and harbor security, and oceanographic surveying.

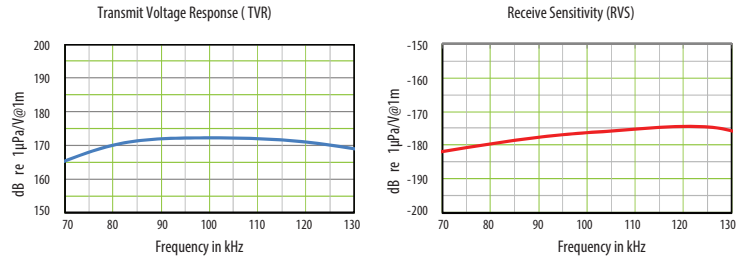
MSI's use of piezocomposite material provides higher bandwidth which allows sonar systems to obtain higher resolution images than systems made with traditional materials. The piezocomposite manufacturing process allows MSI to create large sheets of layered arrays having multiple elements and complex shading.

These benefits coupled with low weight and a low manufacturing cost provides high performance side scan transducers at an exceptional value.

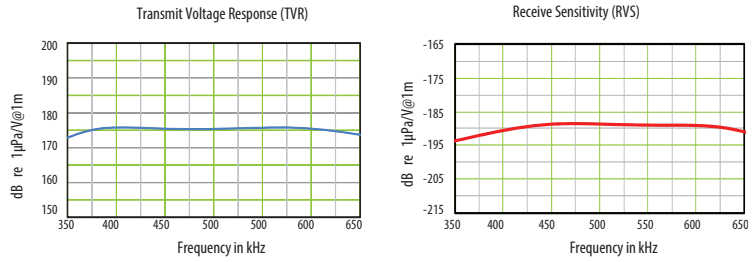
Dual Frequency Side Scan Transducer

Specification		
Frequency	100 kHz	500 kHz
Beam Width (Horizontal)	1.0°	0.5°
Beam Width (Vertical)	40°	40°
TVR (µPa/V@1m)	172 dB	175 dB
Source Level (uPA @ 1m)	226 dB	221 dB
Aperture Size	748 mm x 19 mm	299.7 mm x 3.6 mm

100 kHz Center Frequency



500 kHz Center Frequency



Customized to Meet Your Needs

MSI specializes in custom designed transducers. MSI can design a transducer to fit your specific application requirements.

Call us today at 1-978 486-0404

Email: info@msitransducers.com

Mine Counter Measures • Oceanographic Surveying • Port and Harbor Security • Search and Recovery

Custom Side Scan Transducer Options	
Center Frequency Range	50 kHz –1 MHz (Multiple Frequencies Available)
Beam Width (Horizontal)	0.2° - 2.0°
Beam Width (Vertical)	40°- 60°
Number of Channels	Multiple Vertical and/or Multiple Horizontal
Source Level	Up to Cavitation
Operating Depth	Up to 6000 M
Operating Temperature	-5° C to 35° C (In Water)
Storage Temperature	-40° C to 60° C

MSI Piezocomposite Capabilities

- Wide Bandwidth
- High Source Level
- High Receive Sensitivity
- Excellent Element to Element Uniformity
- Conformability for Curved Arrays
- Complex Shading Patterns
- Multibeam Arrays

MSI Design Capabilities

- 2D and 3D Acoustic modeling tools
- Wide Breadth of Technical Expertise
- Product Definition and Development
- Rapid Prototyping Capabilities
- Ongoing R&D
- Proven Designs

MSI Manufacturing Capabilities

- 20,000 Sq Ft. (2000 Sq M) Facility
- Ceramic powder to in-water testing
- Maximum Quality Control
- Shorter lead-times
- Internal Testing Capabilities

DESIGN • PROTOTYPES • LOW VOLUME PRODUCTION • HIGH VOLUME PRODUCTION • ACOUSTIC IN-WATER TESTING

About MSI

MSI of Littleton, MA, designs and manufactures custom sonar transducers and arrays. MSI's piezocomposite technology offers extremely broad bandwidth, high receive sensitivity, high source levels, conformability for curved arrays, and reduced side lobes. The technology has enabled several of the most advanced sonar systems available today.

MSI has a staff of experienced design engineers ready to help you with your transducer design. Our process of engaging our team early on in the design process allows customers to maximize the capabilities while also minimizing the total cost.

MSI's manufacturing capabilities are designed to assure you receive a high quality product. Our fully integrated manufacturing and testing capabilities allows us to turn raw product into finished assemblies.

Whether you need a custom designed product or just looking for a source to build your existing design, MSI is the right choice.

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MSI TRANSDUCERS