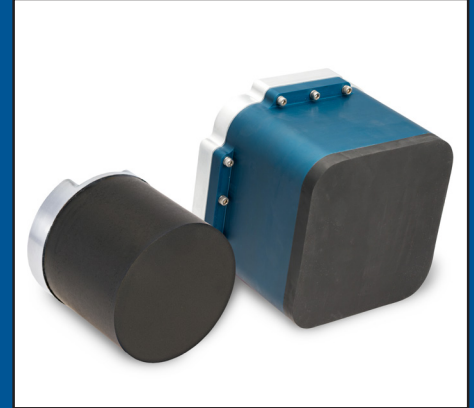


# ACOMMs Transmitters

## Long Range High Bit Rate

MSI's family of scalable, high bandwidth transducers are designed for today's highly demanding ACOMMs requirements.

MSI offers a number of standard products that are designed to meet many of the current applications. Alternatively, they can be used for the initial development of your system as we customize the product for your end application. MSI's ACOMMs product line is fully scalable and can meet your desired frequencies, bandwidths and beamwidths.



## Standard Models

Specifications			
Part #	VLF-D	LF-D	HF-D
Bandwidth (-3 dB)	10 - 22 kHz (81%)	35 - 80 kHz (85%)	65 - 135 kHz (78%)
TVR	136 dB	135 dB	141 dB
Broadband Source Level (max)	191 dB	193 dB	196 dB
Beamwidth <sup>1</sup>	60°	30°	30°
Duty Cycle	100%	100%	100%
Depth <sup>2</sup>	6000 m	6000 m	6000 m

<sup>1</sup> Beamwidth at center frequency

<sup>2</sup> -D signifies 6000 m version. 1000 m version, not shown, has higher performance. Please inquire for options.

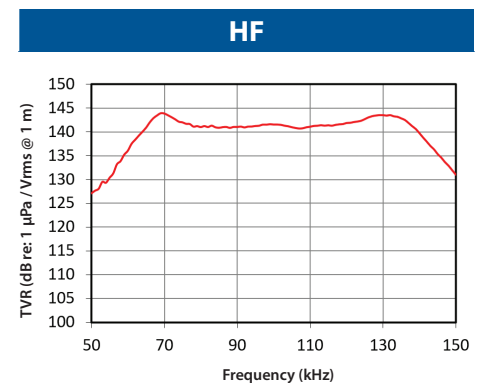
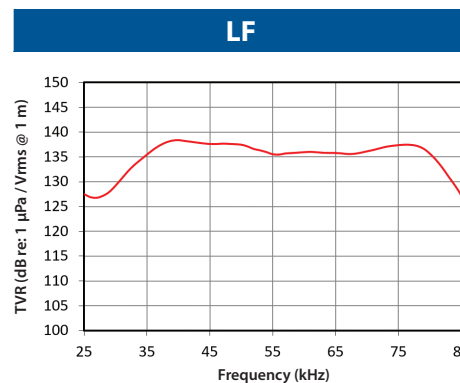
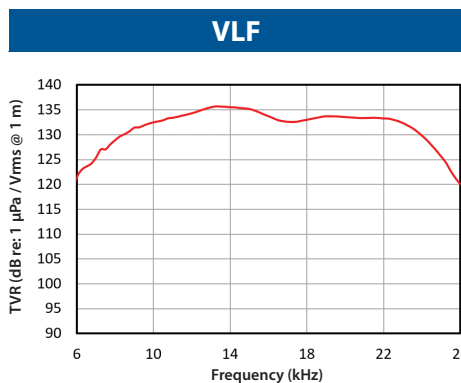
Note: All specifications nominal

### 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 978.486.0404**

Email: [sales@msitransducers.com](mailto:sales@msitransducers.com)



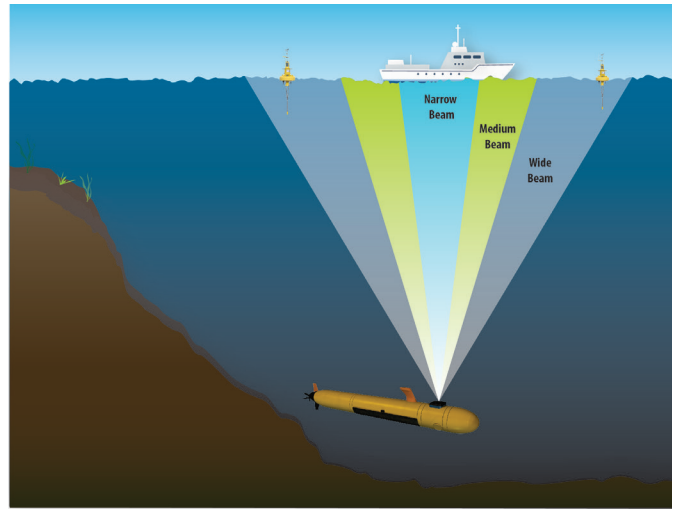
# Variable Aperture Models

Specifications			
Model #	HF-V		
Bandwidth	65 - 138 kHz (72%)		
Aperture Size <sup>2</sup>	1"x1"	3"x3"	5"x5"
TVR	141 dB	159 dB	167 dB
Broadband Source Level (max)	196 dB	207 dB	214 dB
Beamwidth <sup>1</sup>	30°	10°	6°
Duty Cycle	100%	100%	100%
Depth	6000 m	6000 m	6000 m

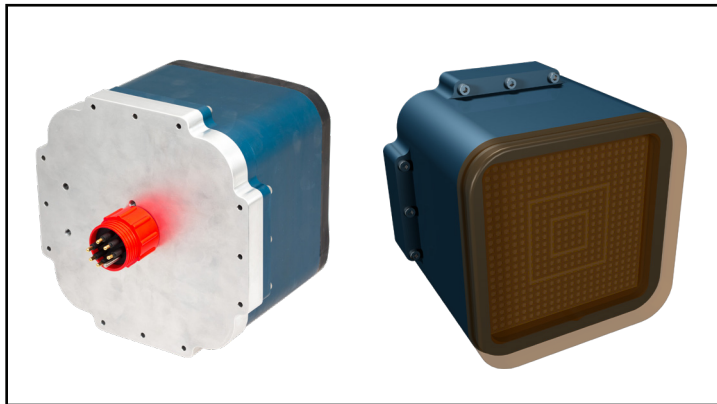
<sup>1</sup> Beamwidth at center frequency

<sup>2</sup> Selectable apertures

Note: All specifications nominal



VLF and LF models also come in Variable Aperture configurations. MSI can tailor all standard products to meet your needs.



## Custom ACOMMs Design Space Examples

Operational Center Frequencies from 5 kHz to 400 kHz

Beamwidths from 15° to 360°

Full Ocean Depth

100% Duty Cycle

Source level up to Cavitation

Custom packaging and connector options

**DESIGN • PROTOTYPE • LOW VOLUME PRODUCTION • HIGH VOLUME PRODUCTION • ACOUSTIC IN-WATER TESTING**

## About MSI

MSI Transducers specializes in custom transducers and arrays for both commercial and defense markets. MSI's broad design and manufacturing capabilities has enabled us to build everything from state-of-the-art synthetic aperture sonars...to low cost commercial arrays. MSI is here to help you turn your idea into a design, or manufacture your build to print product, in piezocomposite, solid ceramic, or any other material to meet your performance needs.

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

MSI's manufacturing capabilities are designed to assure you receive the highest quality products. Our advanced manufacturing and testing capabilities allow us to turn raw materials into finished assemblies that are ready for system integration.

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

543 Great Road • Littleton, MA 01460

Tel: 978.486.0404

Email: [info@msitransducers.com](mailto:info@msitransducers.com)

[www.msitransducers.com](http://www.msitransducers.com)

©MSI Transducers MSI\_COMMS\_FACTSHEET\_rC 03/15/2022

