FSI AT-650S-AUV ULF Underwater Transducer

Ultra-rugged, High-Power, Low-Frequency

The FSI AT-650S-AUV is a very rugged, high power, underwater projector designed for low frequency wide bandwidth applications. These applications can be marine sub-bottom profilers, echo-sounders, communications and others. The transducer is designed to operate in the 200Hz to +2kHz frequency range. The transducer is suitable for operation in a variety of array configurations to support shallow water sub-bottom profiling and other acoustic applications. This single transducer can support up to 2000V RMS drive levels at a 30% duty cycle, though this will be cavitation limited depending on the depth of operation.

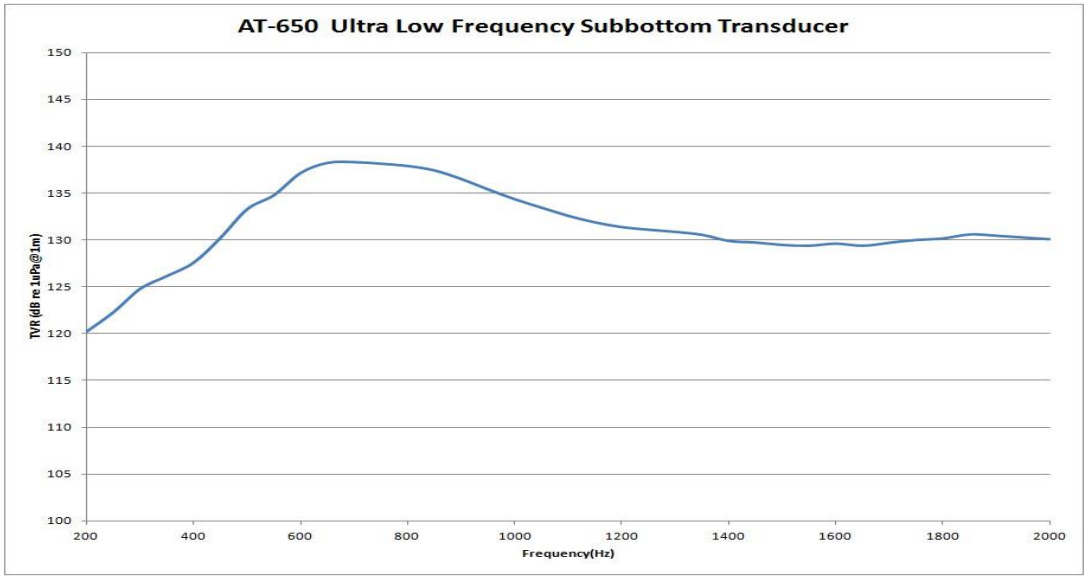
The FSI AT- 650S-AUV transducer is a high efficiency piston loaded flextensional design. The transducers can be arranged in multi-element arrays to support a wide variety of beam patterns and source levels to suit most survey applications.

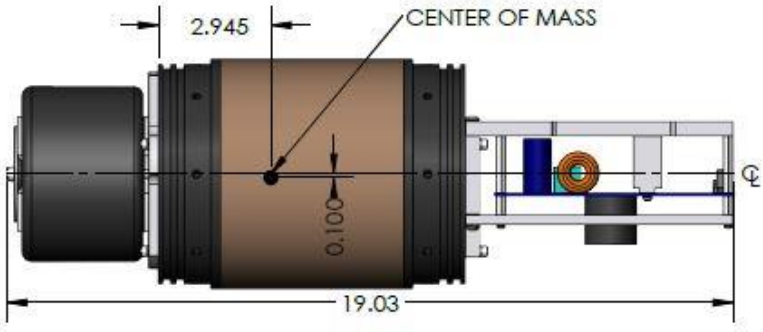
The Falmouth Scientific AT-650S-AUV Low Frequency TRIOID Projector can also be integrated with an Ultra High-Definition Audio Class D Amplifier with a Toroidal Matching Transformer providing a high-power low frequency broadband sound source with line level inputs. The transducer with amplifier operates at 48VDC at full power to 24VDC at reduced power levels.

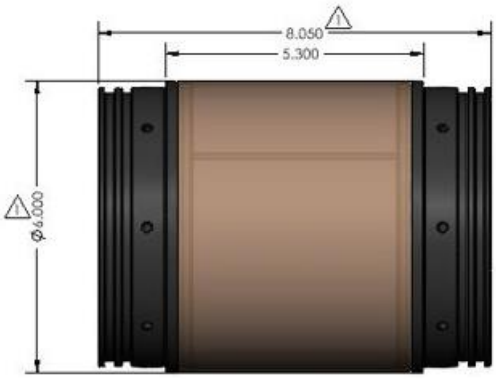
CHARACTERISTICS

Operating Frequency Range	150Hz – 2500Hz
Resonant Frequency	800Hz
Estimated SL at Resonance @ 1000Vrms Drive (5V/mil)	195dB Re 1uPa @ 1meter
Max Drive Voltage	2,000Vrms
Operating Depth	200 meters/328ft
Weight in air	13.24lbs/6.016kg

Power Rating	3000 Watts 30% duty cycle,
Transmitting Response per Volt	138 dB re 1uPa/1V@1m @650Hz
Nominal Impedance	1200 ohms @ 650Hz
Directivity	Omni
Maximum Operating Depth	200m







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Specification Subject to Change Without Notice

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