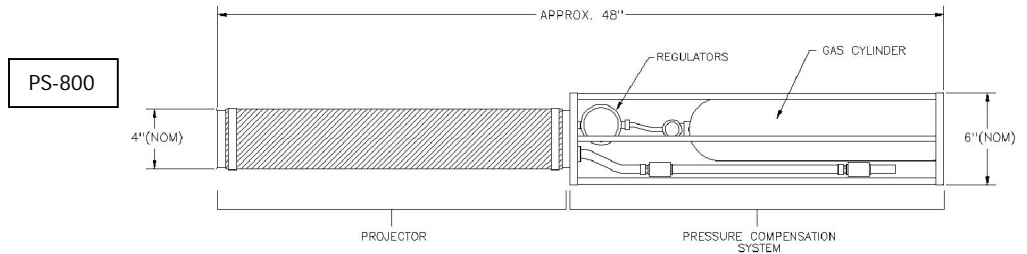


PS SERIES PROJECTORS/SOUND SOURCES



EAI's PS Series Projector/Sound Source represents a breakthrough in compact, reliable, cost-effective low frequency underwater acoustic sources operating in the 300 to 1,000 Hz range. Typical bandwidth is 20%, and source levels on the order of 180 to 190 dB re 1 μ Pa at 1 meter are easily achieved. Operating depth to 500 meters is typical. The PS Series range in diameter from 8" for the 300 Hz units to 4" in diameter for the 1,000 Hz units, and most units can be easily handled and deployed from a small vessel. The projector comprises a number of flexural bar transducer elements in a compact cylindrical array. The PS Series incorporate a reliable, low maintenance pressure compensation system that can be tailored for a wide range of operating depths, and is designed such that the transducer will not be damaged if the operational depth is exceeded, or in the event that the gas reservoir is depleted. EAI can provide complete sound sources incorporating signal generator, power amplifier and battery pack in a pressure-tight housing.

The PS Series have been proven in a number of deployments at sea in towed and moored configurations, and are well suited for tomography applications transmitting spread spectrum signals.



PS Series Projector/Sound Sources Specification			
	PS-300	PS-500	PS-800
Maximum Radiated SPL	183 dB re 1 μ Pa at 1 m at center frequency	185 dB re 1 μ Pa at 1 m at center frequency	190 dB re 1 μ Pa at 1 m at center frequency
Depth Range	100 to 500 m, 1000m optional		10 to 200 m 500 m optional
Center Frequency (Fc)	300 Hz within 5% at 100 meter depth	500 Hz within 5% at 100 meter depth	800 Hz within 5% at 100 meter depth
Depth Influence on Fc	Fc increases 6% as depth ranges from 100 m to 500 m		
Bandpass	+/-10% of center frequency at 3 dB down	+/-12.5% of center frequency at 3 dB down	
Duty Cycle	Rated for continuous transmission		
Electroacoustic efficiency	30% minimum at Fc, through tuning network	40% minimum at Fc, through tuning network	40% minimum at Fc, through tuning network
Tuning Network	External series inductor with damping resistor and transformer providing customer specified drive impedance at Fc.		
Size	8" diameter x 78" length	8" diameter x 74" length	6" diameter x 48" length also available in 4" diameter
Pressure Compensation	Gas system integral to transducer		
Drive Impedance	6 ohms nominal (or to be specified) at center frequency		
Directivity	Omnidirectional within +/- 1 dB		

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Specifications subject to change without notification

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