



E Series Hydrophones High Temperature Down Hole And Deep Sea Hydrophones

KEY FEATURES

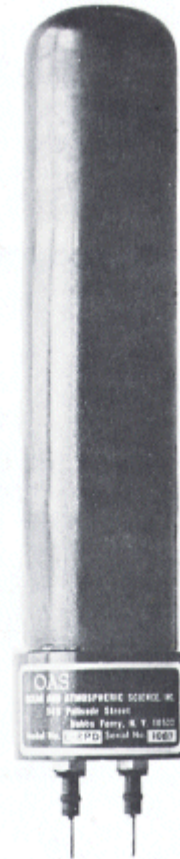
- High Temperature
- Unlimited Depth
- High Capacitance
- High Sensitivity
- Long History of Reliable Performance
- Rugged Construction
- Omnidirectional
- Built-in Preamplifiers available
- Cross Hole Survey Applications

PRODUCT DESCRIPTION

The OAS Series E high pressure hydrophones are ultra sensitive acoustic detectors that can be used at any ocean depth with no danger of damage or degradation of performance. Originally designed for deep water use on the multi-million dollar U.S. Navy sponsored Project Artemis, this type of hydrophone has provided years of trouble-free operation. Its cost is surprisingly low for a high quality hydrophone.

Model	Sensitivity (re 1V/ μ bar)	Capacitance
E-4SD	-82 db	.003 μ fd
E-2SD	-87 db	.012 μ fd
E-2PD	-92 db	.050 μ fd

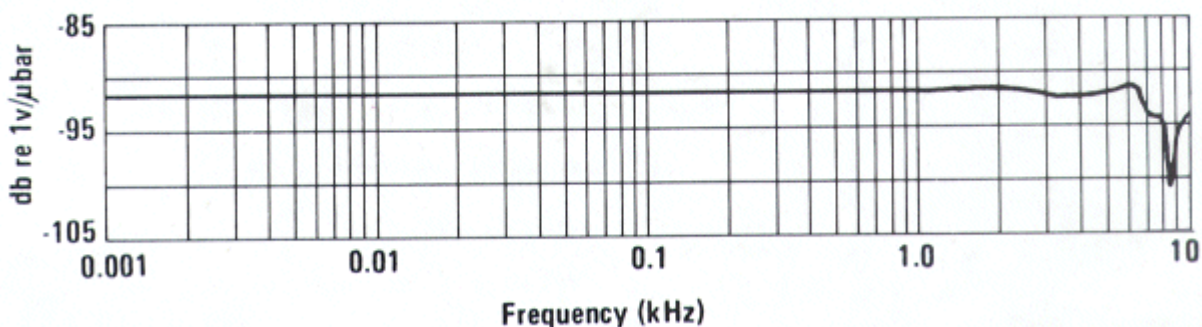
Although the high pressure Series E models are modestly priced, further economy can be achieved using low pressure models available within the same series for applications in depths not exceeding 2000 ft. With the exception of the depth restriction, the low pressure models are identical in performance to the high pressure types.



All models have an open circuit frequency response which is flat to within ± 1 db from 0 to 5kHz. Low noise preamplifiers are available which can be made an integral part of the hydrophone or supplied in a separate high pressure container. As an example, the Model E-4SD can be supplied with an amplifier resulting in an overall sensitivity of $- .40$ db re 1 volt/ μ bar and a self noise level at least 6 db below Sea State "0" ambient noise covering a frequency range from 5 Hz to 5kHz. Mecca No. 2014 connectors are standard on each series E hydrophone. Other type connectors can be supplied on request.

In addition to Series E hydrophones and others in its standard line, OAS will supply custom engi-

OPEN CIRCUIT SENSITIVITY MODEL E-2PD



neered models designed to customer's specifications. OAS can also supply complete underwater acoustic systems as well as scientific and engineering services for all types of oceanography.

Models	E-4SD	E-2SD	E-2PD	E-4S	E-2S	E-2P
Sensitivity (re 1 v/μbar)	-82 db	-87 db	-92 db	-82 db	-87 db	-92 db
Capacitance	.003 μfd	.012 μfd	.05 μfd	.003 μfd	.012 μfd	.05 μfd
Maximum Depth	Unlimited	Unlimited	Unlimited	2000 ft	2000 ft	2000 ft
Diameter	2"	2"	2"	2"	2"	2"
Length	9"	9"	9"	6.5"	6.5"	6.5"
Prices On Request						

SPECIFICATIONS

Frequency Response	Flat (± 1 db) 0-5 kHz; to 25 kHz
Directionality	Omnidirectional (0-5 kHz)
Operating Temperature:	-5° to +135°C or -5° to +225°C
Sensing Element	Lead Zirconate-Titanate
Protective Boot	Butyl 60 Shore A Durometer
Machined Parts	Black Anodized Aluminum (6061-T6)



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