

Ultra low-noise wide band hydrophone

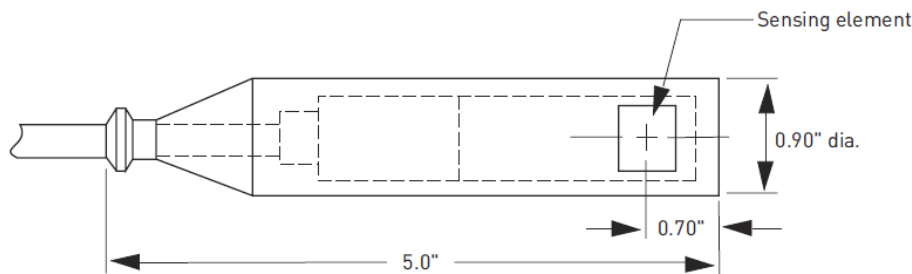
H507A



The H507A wide band (10 Hz to 100 kHz) hydrophone is a very small, high-sensitivity device incorporating an ultra-low noise preamplifier (-166 dB re 1V/√Hz at 10 kHz) and a circuit for the insertion of an electrical calibration signal. In addition, the preamplifier can drive up to 200 meters of cable. The sensor and amplifier are electrostatically shielded and molded in hydrolytically stable, void free polyurethane.

Key features

- Small size
- High sensitivity
- Electrostatically shielded
- Manufactured in an approved ISO 9001 facility



Cable color	Function	Connector pin out
shield	case ground	1
black	signal return, common	2
red	+24 VDC	3
green	calibration input	4
white	signal output	5
yellow	not used, open	6

Note: Due to continuous process improvement, specifications are subject to change without notice.
This document is cleared for public release.

Wilcoxon Sensing Technologies
20511 Seneca Meadows Parkway
Germantown, MD 20876
info@wilcoxon.com

Tel: (301) 330 8811
Fax: (301) 330 8873
www.wilcoxon.com

Wilcoxon Sensing Technologies
An Amphenol Company

Ultra low-noise wide band hydrophone

H507A



SPECIFICATIONS

Sensitivity, referred to input		-188 dB re 1V/ μ Pa
Frequency range, ± 3 dB		10 to 100,000 Hz
Gain¹		10 dB
Patterns:		
	XY plane, nondirectional	± 1 dB to 100 kHz
	XZ or YZ plane, nondirectional	± 1 dB to 10 kHz
	XZ or YZ plane, nondirectional over 270° span (attenuation in direction of cable exit)	± 1.5 dB to 100 kHz
Acceleration sensitivity, re 1 μPa/g, 10 Hz		162 dB
Noise, re 1 μPa/$\sqrt{\text{Hz}}$:	1 kHz	31 dB
	10 kHz	22 dB
	100 kHz	18 dB
Supply voltage		18 - 24 VDC
Bias output voltage, nominal		10 VDC
Supply current		4 - 10 mA
Maximum output		3 V rms
Output impedance		50 Ω
Calibration pad		-14 dB, 40 Ω & 10 Ω , 0.1W, 1 VAC rms max input
Operating depth		500 meters
Maximum depth		1,000 meters
Maximum cable length, operation to 100 kHz		200 meters
Cable^{2,3}		5 ft., 5-conductor, shielded, stripped and tinned
External material		polyurethane

Contact

Wilcoxon Sensing Technologies

20511 Seneca Meadows Parkway
Germantown, MD 20876 USA

Tel: +1 301 330 8811
Fax: +1 301 330 8873

info@wilcoxon.com

www.wilcoxon.com

Notes: ¹ Gain will vary as a function of crystal capacitance.

² Connectors are available with plastic or metal male locking sleeves. Please specify at time of order.

³ Customer-specified length.

Note: Due to continuous process improvement, specifications are subject to change without notice.
This document is cleared for public release.

Wilcoxon Sensing Technologies
20511 Seneca Meadows Parkway
Germantown, MD 20876 USA
info@wilcoxon.com

Tel: (301) 330 8811
Fax: (301) 330 8873
www.wilcoxon.com

Wilcoxon Sensing Technologies
An Amphenol Company