ONDA

Putting Confidence in Ultrasound

# HGL Hydrophones

The HGL Series hydrophones were designed to meet or exceed recommendations of section 3.3.2 of the AIUM Acoustic Output Measurement Standard (May 1998). They have an exceptionally flat sensitivity in a small and sturdy package. These hydrophones are excellent in-house standards for ultrasonic acoustic intensity measurements, and for general purpose field mapping.

**HGL Hydrophone**

## Features

- High sensitivity
- Small effective aperture
- Broadband
- Solid construction
- Flawless integration with AH preamplifiers
- Flat (+/-3dB) 250 KHz to >> 20 MHz *

* Use of the AG-20X0 preamplifier is required to maintain +/- 3 dB range from 20 to 40 MHz for the HGL-0085 and HGL-0200. For measurements above 40 MHz, the AH-20X0 preamplifier is advised.

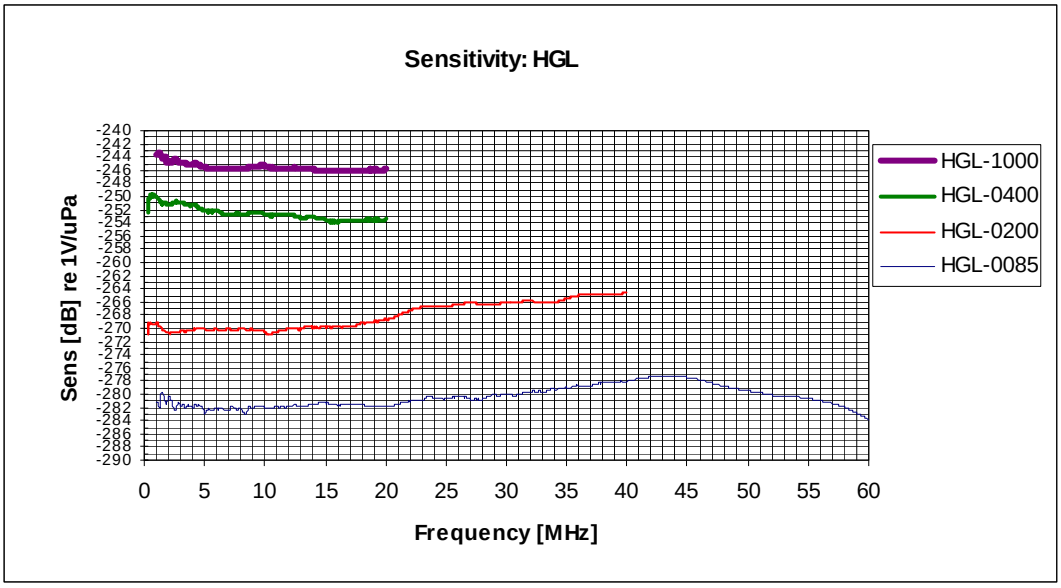
## Technical Specifications

| | HGL-0085 | HGL-0200 | HGL-0400 | HGL-1000 |
|---|---|---|---|---|
| **Frequency range (±3dB)** | 0.25 to 40 MHz | | 0.25 to 20 MHz | |
| **Electrode aperture** | 85 μm | 200 μm | 400 μm | 1000 μm |
| *** EOC Nominal Sensitivity [nV/Pa]** | 8 | 45 | 160 | 510 |
| **Acceptance angle (-6dB at 5 MHz)** | >150° | 100° | 30° | 20° |
| **Capacitance** | 30 pF | | | |
| **Max. Operating Temperature** | 50 °C | | | |

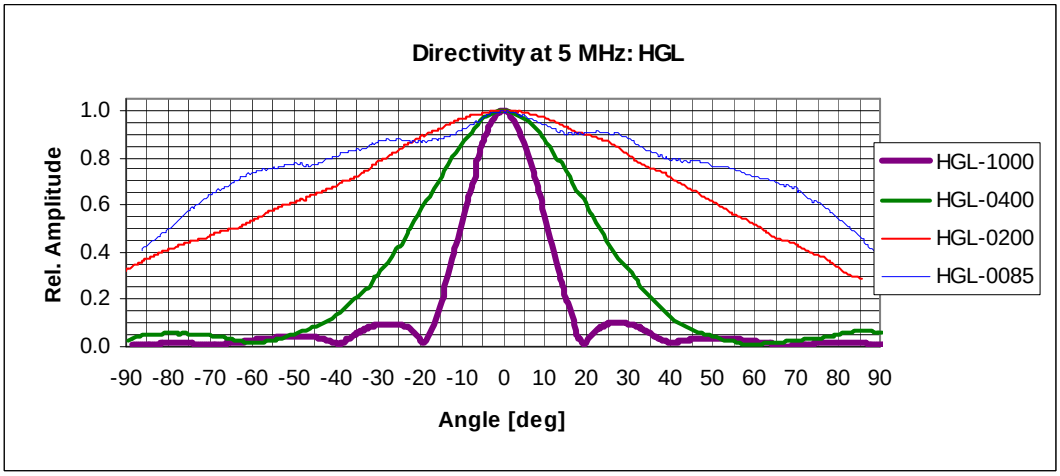
* EOC ("end of cable") is the open-circuit output sensitivity of the hydrophone. Calibration with an amplifier can be determined from the gain and input impedance of the amplifier.

Provided with traceable calibration 1-20 MHz at 50 KHz intervals. For other calibrations available visit our web site.

## Typical Sensitivity Plot




## Typical Directivity Plots




## Mechanical Specifications