**HNR Hydrophones**

The HNR Series needle hydrophones are excellent sensors for laboratory use in high intensity ultrasonic field mapping, with pinpoint access and good spatial resolution. Due to their high sensitivity these hydrophones are commonly operated without amplification.

**Features**

- Small size
- High sensitivity
- Rugged
- Low cost

**Technical Specifications**

<table>
<thead>
<tr>
<th></th>
<th>HNR-0500</th>
<th>HNR-1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency range (±6dB)</td>
<td>0.25 - 10 MHz</td>
<td></td>
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<tr>
<td>* EOC Nominal Sensitivity [dB re 1V/μPa]</td>
<td>-258</td>
<td>-248</td>
</tr>
<tr>
<td>* EOC Nominal Sensitivity [nV/Pa]</td>
<td>126</td>
<td>398</td>
</tr>
<tr>
<td>Acceptance angle (-6dB at 5 MHz)</td>
<td>30°</td>
<td>15°</td>
</tr>
<tr>
<td>Capacitance</td>
<td>200 pF</td>
<td></td>
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<tr>
<td>Max. Operating Temperature</td>
<td>50°C</td>
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</tbody>
</table>

* 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 Sensitivity Plot]

Note that intrinsic to this design is a resonance (notch) at 2 MHz typical, whose amplitude may vary.

Typical Directivity Plot

![Typical Directivity Plot]

At 5 MHz

Relative Amplitude

Mechanical Specifications

![Mechanical Specifications Diagram]