

## ATH-2000 Hydrophone Attenuator

In conjunction with the family of Onda hydrophones, the ATH-2000 increases the preamp large signal handling by 20 dB to accommodate high intensity applications such as HITU. Its in-line "cable-free" configuration allows fully submersible measurements while eliminating the risk of cable resonance and scope impedance mismatches. The ATH-2000 is compatible with all AH-20x0 and AG-20x0 series preamplifiers as well as HN and HGL hydrophones.

### Features

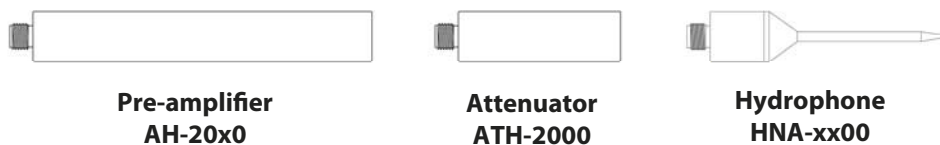
- Extends maximum signal handling by 20 dB
- Fully submersible
- No cable resonance or scope impedance mismatches
- Compatible with all AH-20x0 and AG-20x0 series preamplifiers; -series and HGL-series hydrophones
- ATH-2000 calibration traceable to a national standards laboratory (certificate included)

### Technical Specifications

- Attenuation:  $20 \pm 0.5$  dB at 2 MHz
- Bandwidth: DC to 100 MHz
- Capacitance\*: 6 pF
- Input Impedance\*:  $10 \text{ M}\Omega$
- Output Impedance\*:  $1 \text{ M}\Omega$
- Max Input Signal Level: + 20 dB above preamplifier range
- Gain Uncertainty:  $\pm 0.03$  dB
- Capacitance Uncertainty:  $\pm 2.5\%$

\* Nominal values

### Typical Straight-Line Configuration



NOTE: the ATH-2000 must be configured between the hydrophone and preamplifier



**ATH-2000  
Hydrophone Attenuator**

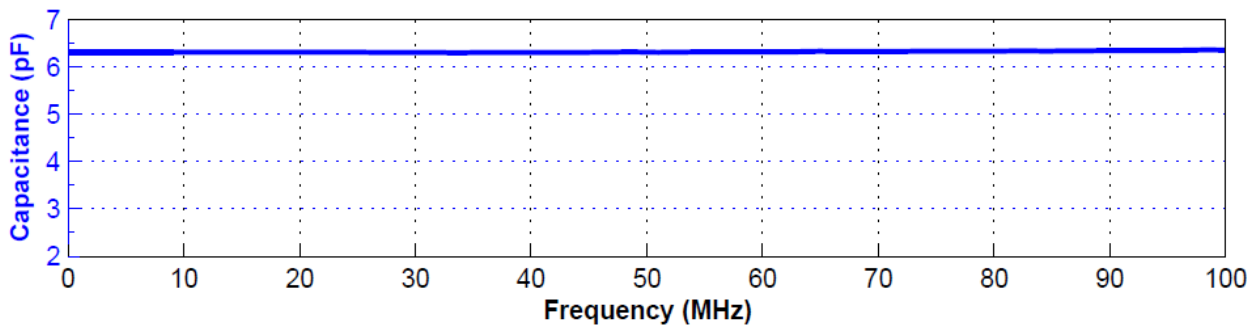
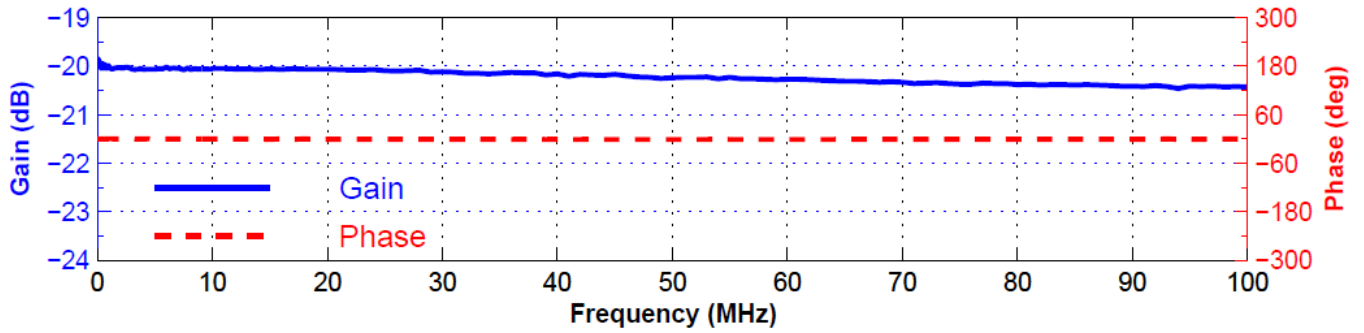


### Right-Angle Configuration

From bottom-right to top-left:

- HNA-0400 Hydrophone
- Right-angle Adapter
- ATH-2000 Attenuator
- AH-20x0 Preamplifier
- SMA Output Cable

## Typical Gain and Capacitance Plots



## Mechanical Specifications

Material: Hermetically sealed stainless steel body.

