

# **AH-Series Preamplifier**

The AH-2010 and AH-2020 preamplifiers offer a great combination of performance and features. Designed as an electronic and mechanical match for Onda hydrophones, the submersible AH-series preamplifiers have only one coaxial cable going to the oscilloscope. They have a superb frequency response, low noise and high stability, which make it ideal for ultrasonic acoustic intensity measurements.

The AH-2020 preamplifier matches the features of the AH-2010 but adds flexibility by offering a switchable gain setting (0 or 20 dB), selectable at the oscilloscope by either a toggle switch or a TTL signal.

#### **Features**

- Flat frequency response
- Low noise with high dynamic range
- Fully submersible
- Only one cable in the tank
- Waterproof mating to Onda hydrophones
- Compatible with any hydrophone

### **Technical Specifications**

|                               | AH-2010-100                              | AH-2020-100                            |
|-------------------------------|--|--|
| Bandwidth                     | 50 kHz - 100 MHz                         |  |
| Voltage Gain                  | 20 dB                                    | Toggle or TTL switchable<br>0 or 20 dB |
| Input Impedance               | 1 M $\Omega$ in parallel with 6 pF       | 1 M $\Omega$ in parallel with 7 pF     |
| Output Impedance              | 50 Ω                                     |  |
| Max Output into 50 $\Omega$ * | 4 Vpp below 50 MHz<br>1 Vpp above 50 MHz | 1.2 Vpp                                |
| Power Consumption (max)       | 2 W                                      | 2.5 W                                  |
| Noise Level for 100 MHz BW    | 20 dB: 360 μVrms                         | 20 dB: 400 μVrms<br>0 dB: 350 μVrms    |
| Dynamic Range                 | 72 dB                                    | 20 dB: 67 dB<br>0 dB: 68 dB            |
| Calibration                   | Included                                 |  |

<sup>\*</sup> Based on criterion defined by IEC 62127-1

Specifications are subject to change without notice.



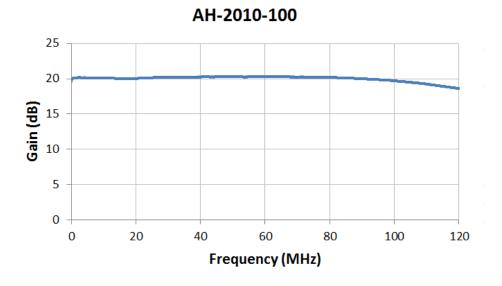
**AH-20x0 Preamplifier** 

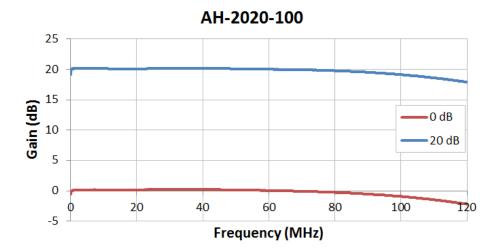


#### **Preamplifier kit includes:**

- Preamplifier
- Power supply
- DC block
- 1m coaxial cable (SMA-BNC)
- 1.5m coaxial cable (BNC-BNC)
- Right angle adapter
- Calibration certificate.

### **Typical Gain Plot**





## **Mechanical Specifications**

Weight: 36 g

Material: Hermetically sealed stainless steel body.

