What makes icListen different?

icListen HF replaces preamp, filters, converters and data link with a compact unit that gives trusted sound data in real units.

Hydrophone Sensing Element; ultra low noise and wide dynamic range for high signal quality.

Intelligent Digital Hydrophone processes data before it is transmitted using spectral analysis and correlation models, preconfigured for each application.

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icListen HF
A new way to think about subsea listening

10 Hz to 200 kHz

The icListen Smart Hydrophone is a compact, all-in-one hydrophone instrument. Use it as a digital hydrophone, acoustic data logger, or both at once. Get instantly calibrated waveforms, spectral or event data - in one standard format.

The world's most sensitive broadband digital hydrophone capable of processing data while collecting in real-time, reducing data handling and storage. Collect hard to detect data accurately and cost effectively.

Applications

- Sea Mammal Monitoring
- Ocean Observatory
- Offshore Energy Operations
- Pile Driving
- Ocean Noise Measurement
- Pipeline Leak Detection

- Detect real-time events with confidence using Epoch Mode. Epoch events determine when spectral or WAV file data is stored in memory, or transmitted in real-time.

- Use a browser to view settings, date and change instrument settings.

- Synchronize multiple hydrophones for a high quality multi-channel array avoiding the problem of cross talk.

- Simplifies data processing and project planning.

- Wide dynamic range eliminates gain settings.

- Calibrated hydrophone can be used as an acoustic reference.

- Easy to connect through a network, radio or direct to a PC.

- Uplink over slow radio channels by using spectral data.

- Compact and can be carried in one hand.

- Deploy down to 3500m.

24-bit Smart Hydrophone

Options

Depth: 200m/3500m
Link: Ethernet/Serial
Case: Engineered Plastic/Titanium

LUCY Software

Display real time waveforms or waterfall displays using our PC software LUCY. Lucy is used to setup and test icListen.

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**Instrument Resolution and Sensitivity**

- **Frequency [kHz]**
  - 0.001
  - 0.01
  - 0.1
  - 1
  - 10
  - 100

- **Counts @ 1 mPa**
  - 10
  - 100

- **dBV re µPa**
  - -149
  - -169
  - -189

**Dimensions**
- 4.5cm (dia) x 22cm (length)

**Bandwidth**
- 10 Hz to 200 kHz

**Power**
- 12 - 24 Vdc input
- 2 W with Ethernet link
- 800 mW autonomous mode

**Sample Rate (S/sec)**
- Maximum 512,000

**Synchronization**
- Accuracy 0.25 usec
- Lock Range 1.0 Hz +/- 10ppm
- GPS PPS
- External IEE 1588 Module Optional

**Case Material**
- Engineered Plastic - 200m
- Titanium - 3500m

**Acquire Modes**
- Record: Waveform / FFT / Epoch

**Internal Data Storage**
- 32 GB

**Dynamic Range**
- 120 dB