icListen

The new standard in broadband digital marine acoustics

The icListen Smart Hydrophone is the industry's most sensitive broadband digital hydrophone. It's a compact, all-in-one instrument capable of processing data while collecting in real-time.

Use icListen as a digital hydrophone, acoustic data logger, or both at once. Collect hard to detect data accurately and cost effectively while reducing data handling and storage.

Introducing our new Smart Cable

Smart Cable - Connect four hydrophones to a single input connector. For more detail see Array Brochure.

Applications	HF	HF-X2	AF	AF(L)
Marine Mammal Monitoring	∗		∗	
Earthquake and Tsunamis				∗
Pile Driving/Explosives		∗		
Ocean Observatory	∗		∗	∗
Pipeline Leak Detection	∗			
Wind Farms	∗			
Shipping Noise	∗		∗	

- **Detect** real-time events using Epoch Mode. Determine when spectral or WAV data is stored or transmitted in real-time.

- **Use** a web browser to access the webserver to setup, test, and operate icListen.

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

- **Simplify** data processing and project planning.

- **Wide** dynamic range eliminates gain settings.

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

- **Compact** and self-contained, can be carried in one hand.

- **Extend** your reach beyond 100m using an Ethernet Repeater up to 500 m.
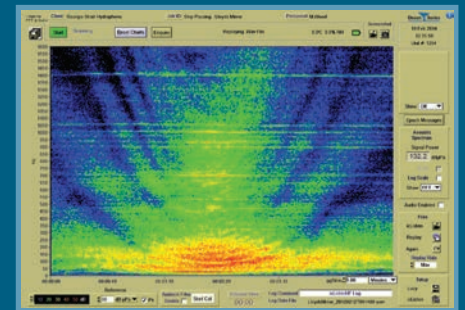
24-bit Smart Hydrophone

- Quiet
- Low Power
- Calibrated
- Acoustic Array
- High Value Rich Data
- Easy to Deploy

Lucy Software

Lucy is used to setup and test icListen.

Display real-time waveform or waterfall displays using our PC software Lucy.

Ocean Sonics

The Smart Hydrophone Company

OceanSonics.com

Bandwidth (+/- 6 dB)
HF: 10 Hz to 200 kHz
AF(L): 1 Hz to 12 kHz

Sample Rate (Max S/sec)
HF: 512,000   **HF-X2:** 512,000
AF(L): 32,000

Power
24 Vdc input
2 W with Ethernet link

Synchronization
Accuracy 0.25 usec
Lock Range 1.0 Hz +/- 8 ppm
GPS PPS
External IEEE 1588 Module Optional

Acquire Modes
Record: Waveform / FFT / Epoch

Maximum Internal Data Storage
256 GB

Dynamic Range
HF: 95 dB
AF(L): 106 dB

Sensitivity
HF: -169 dBV re. µPa
HF-X2: -209 dBV re. µPa
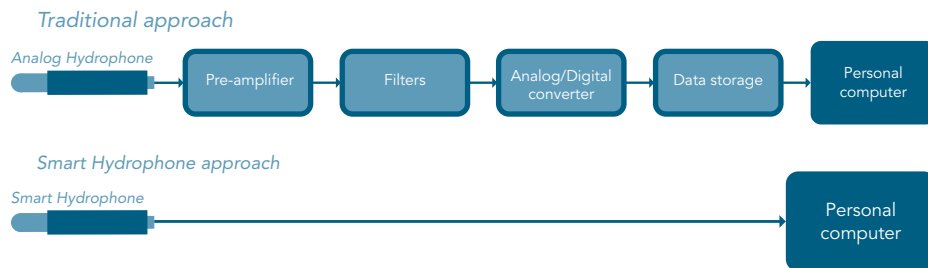**AF(L):** -160 dBV re. µPa

Case Material and Depth
Engineered Plastic and Titanium - 200m
Engineered Plastic and Titanium - 900m
Titanium - 3500m
Titanium - 6000m

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What makes icListen different?

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

Traditional approach

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

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

Comparison of the icListen Models

icListen	Min Freq	Max Freq	Battery Life	Interface	Web Server	Self Noise
HF	10 Hz	200 kHz	10 Hours	Ethernet	Yes	27
HF(L)	1 Hz	200 kHz	10 Hours	Ethernet	Yes	27
HF-X2	1 Hz	200 kHz	10 Hours	Ethernet	Yes	67
AF	10 Hz	12 kHz	10 Hours	Ethernet	Yes	18
AF(L)	1 Hz	12 kHz	10 Hours	Ethernet	Yes	24

Compare icListen Models to Ocean Ambient Levels