

The new standard in broadband digital marine acoustics

icListen Models HF, AF, LF

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 newest icListen

icListen R-Type - See the R-Type brochure for the Smart Hydrophone using the new Reson sensor technology.

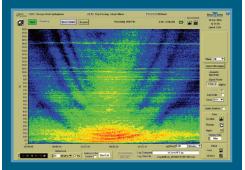
Applications	HF	HF-X2	AF	AF(L)	LF
Marine Mammal Monitoring	*		*		
Earthquake and Tsunamis				*	*
Pile Driving/Explosives		*			
Ocean Observatory	*		*	*	
Pipeline Leak Detection	*				
Wind Farms	*				
Shipping Noise	*		*		

- **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 the GSM Radio Buoy, ISM Radio Buoy or Ethernet Extender.



### 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.





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

**LF:** 1 Hz to 1600 Hz

Sample Rate (Max S/sec)
HF: 512,000 HF-X2: 512,000
AF: 32,000 LF: 4,000

#### **Power**

12 - 24 Vdc input 2 W with Ethernet link

#### **Synchronization**

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

#### Acquire Modes

Record: Waveform / FFT / Epoch

**Maximum Internal Data Storage** 128 GB

**Dynamic Range HF and AF:** 118 dB **LF:** 134 dB

#### Sensitivity

**HF, AF and LF:** -170 dBV re. μPa **HF-X2:** -210 dBV re. μPa

#### **Case Material and Depth**

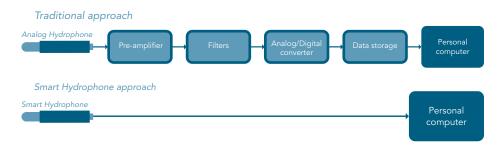
Engineered Plastic - 200m Engineered Plastic and Titanium - 900m Titanium - 3500m



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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.



**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
LF	1 Hz	1.6 kHz	30 Hours	Serial		22

## Compare icListen Models to Ocean Ambient Levels

