

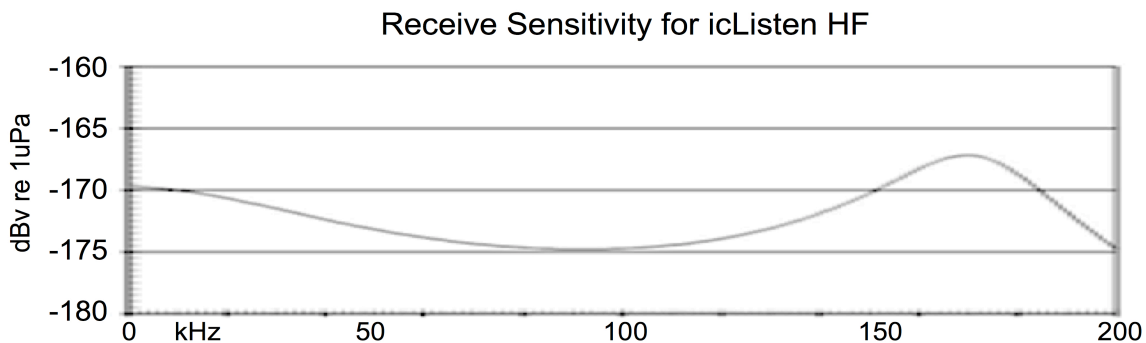
Specification

icListen HF 200 kHz

Broadband Smart Hydrophone SB2/35-ETH

The icListen HF Smart Hydrophone is a digital hydrophone that processes and stores acoustic data. It transmits waveform or spectral data over its data link in real-time.

Performance	Value
Peak Measured Signal	177 dB re μPa
Frequency Response	10 Hz to 100 kHz ± 3 dB 10 Hz to 200 kHz ± 5 dB
Noise (Spectral Density)	30 dB re $\mu\text{Pa}^2 / \text{Hz}$ at 10 kHz
Sensor Receive Sensitivity - see chart for details	-171 dBV re μPa with pre-amp
Data Interface	Ethernet Standard Serial Optional
Max Depth	200m Standard 3500m Titanium



Instrument access methods

- **Web browser** to view instrument status, download logged data, configure instrument settings & power down.
- **SFTP** to manage files on instrument. Copy, & delete stored data files. Install firmware upgrade.
- **Stream** time series and FFT over UDP or TCP/IP socket. Used by the Lucy program, and can be used to develop user drivers.
- **Lucy** PC software to view & process data, enquire & setup instrument.

Mechanical

Mechanical	mm
Overall length, including connector	267
Body and sensor element length	230
Body (can) only length	165
Body diameter	45
Sensor element diameter	20

Dimensions are the same for 200m and 3500m depth rated units.



Specification

Item	Description
Material	200m unit - Engineered plastic. 3500m unit - Titanium.
Calibration	Done at 30 Hz in air. High frequency tank calibration measurements supplied with instrument.
Sample Rates	512, 256, 128, 64, 32, 16, 8, 4, 2 & 1kSample/sec. Waveform sample rate can be different from that for FFT. Sigma-delta primary sampling at 16 MHz.
Power	12-24 (10.8-26.4) Vdc, reverse polarity protected. Note: reversing polarity causes h/w reset. Unit draws 1.2W. Ethernet version when connected draws 2W.
Batteries	Internal lithium Ion 3.7V rechargeable, suitable for air shipping Capacity 2.6 A-h
Safety	Electrical interface is designed to survive miswiring. Isolation between DC power and the instrument or communication interface is greater than 100 MΩ, @ 250Vac. Plastic units use brass connectors. Titanium units use titanium connectors.
Connector	Standard instrument connector is SubConn MCBH-8M. Pinouts are available in the instrument user's guide.
Cables	Ethernet 100m Maximum Ethernet Extender Option 1600m Maximum Serial RS422 1200m Maximum Serial RS232 5m Maximum