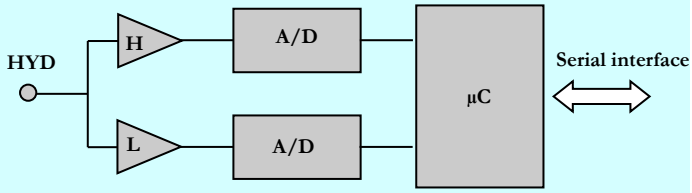
NeXOS has received funding from the European Union's Seventh Programme for research, technological development and demonstration under grant agreement No 614102

A1

Compact, low power, low noise, digital hydrophone with embedded processing

Main Features:
Two ADC with different gain for true 50 to 180 dB re 1uPa dynamic range
Hi depth: up to 3000 m.
Configuration via serial protocol:
Sampling frequency 5 to 100 kS/s.
Selectable Equalizer: Hi Pass Filter one pole at 3.2 kHz.
Selectable processing algorithms

BLOCK DIAGRAM

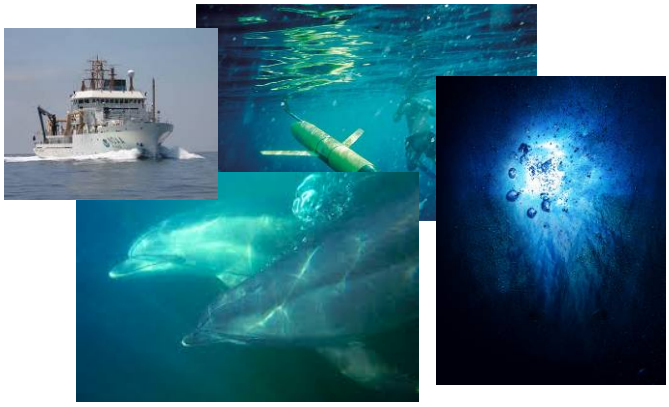


EMBEDDED FUNCTIONS

NOISE SPECTRA
ACOUSTIC SHIP SIGNATURE
MARINE MAMMAL DETECTION
PREPARED FOR SEISMIC EVENT DETECTION
OPEN-SOURCE FOR ADD-ON PROGRAMMING

A1 - SPECIFICATIONS

Sensitivity (low gain)	- 178 dB re 1 µPa at 5 kHz
Sensitivity (high gain)	- 148 dB re 1 µPa at 5 kHz
Flat frequency range	from 1 Hz to 50 kHz, ± 1,5 dB
Beam pattern	Omni-directional
Depth	3.000 meters
Power supply	4,6 to 42 Vdc
Power consumption	300 mW
Dimensions:	35 mm x 270 mm
Moulding Material	Polyurethane
Output Interface	Digital, Serial, EIA RS-422
Plug and work	OGC-PUCK enabled
Sensor web	Processed data via OGC SWE



Digital Hydrophone A1 innovations

Very compact digital hydrophone with embedded processing
Designed for Gliders / AUVs, also useable for deep fixed platforms
Measurements of human activities, nature sounds and seismic events.

SMID TECNOLOGY