

ORCA

Multi-channel passive acoustic recorder

Now you can capture, record and process, in real time, extremely rich underwater acoustic data sets.

The Orca is a broadband underwater acoustic recorder and processor that supports multiple hydrophone channels and extremely high sampling rates.

The Orca is available in large and small form factors both supporting five synchronously sampled hydrophone inputs, configurable sampling rates and internal solid-state storage.

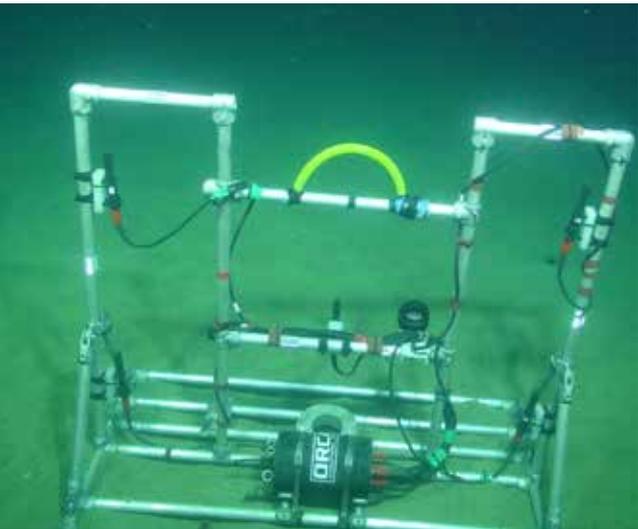
The Orca is easy to use, deploy and configure, and is flexible enough for almost any underwater acoustic measurement scenario. Applications include underwater noise characterisation, marine mammal studies, underwater detection and localisations, and submarine glider integration.

Your data can be recorded and processed autonomously or streamed in real time via Ethernet.

Key Features

- » Multiple Synchronously Sampled Input Channels
- » Flexible Sampling Rates
24kHz to 384kHz
- » Up to 4TB Internal Memory
- » Long Term Deployments
- » Real Time Data Streaming
Audio and Spectrogram





Orca Ace acoustic recorder deployed at 120m in the North Sea for STEMM-CCS project



Orca 72D deployment in the North East Atlantic on iMARL project

Technical Specifications

POWER

Orca 72D: 72 Alkaline or Lithium D cells
Orca Ace: Rechargeable lithium cell

Optional External Power: 10 – 18 V DC

ANALOGUE INPUT CHANNELS

Number of channels: Up to 5 channels

ADC Number of Bits: 16 Bits Sigma Delta

Sampling rates supported: 24 kHz – 384 kHz

HYDROPHONE OPTIONS

Hydrophones mounted on end cap, or connected with custom cable lengths

Customised sensitivities and bandwidths available on request

MEMORY

Up to 2TB SD card internal storage and up to 2TB solid state drive

Configurable recording, schedule and duty cycling

REAL TIME PROCESSING

Onboard 1/3 Octave Analysis on Sound Pressure Levels (at up to 48 kHz sampling)

COMMUNICATIONS

Ethernet for configuration & real time monitoring

High Speed USB for data offload

ENVIRONMENTAL

Orca 72D: 750m standard (up to 3000m on request)
Orca Ace: 200m

Operating Temperature: -10°C to +50°C

*Specifications subject to change without notice.

TRAC Software

TRAC software is a real-time configuration, analysis and display software designed for use with Orca. TRAC presents digital multichannel acoustic data including real time spectrograms, third octave plots with percentiles, and live real time audio.

TRAC is a free application.

