

# ORCA

## Multi-Channel Passive Acoustic Recorder

Rich, broadband, underwater  
acoustic recording.

The ORCA is a broadband underwater acoustic recorder and processor that supports multiple hydrophone channels and extremely high sampling rates. Now you can capture, record and process, in real time, extremely rich underwater acoustic data sets. The ORCA is available in full size and mini versions, 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. 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**  
from 24 KHz to 384 KHz

**Deep Solid State Recording**  
for Reliability

**Low Power Consumption**  
for Long Deployments

**Real Time Data Streaming**  
or Messaging over Ethernet or Serial Interfaces



## Product Applications

Acoustics Detection, Localisation and Classification

Marine Mammal Studies and Real Time Monitoring

Multi Sensor Ocean Observation

Ambient Noise Monitoring

Wind And Tidal Energy Monitoring

## Technical Specifications

**POWER**

Internal Power: Alkaline D Cells

External Power: 10-18 V DC

USB Power: 5 V DC

Average Power Consumption: 300 mW – 3W (depending on use)

**ANALOGUE INPUT CHANNELS**

Number of Channels: 5 – Standard

ADC Number of Bits: 16 – Standard

Dynamic Range Per Channel: 95.5 dB  
(full bandwidth, better at lower sampling rates)

Sampling Rates Supported:  
24 kHz, 48 kHz, 96 kHz, 192 kHz, 384 kHz

**HYDROPHONE OPTIONS**

Universal micro circular connectors for all 8 pin hydrophones

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

Customised sensitivities and bandwidths available on request

**MEMORY**

Integrated 128 GB SD Card and 2 TB Solid State Drive  
(Fat32 Formatted File System .wav) (Customised options available)

Configurable recording, schedule and duty cycling

**COMMUNICATIONS**

Ethernet

High Speed USB for Download

RS232 with external converter for real time monitoring

**ENVIRONMENTAL**

1000m depth rated (deeper on request)

Operating Temperature: -10°C to +50°C

\*Specifications subject to change without notice.

