

Orca

Multi-Channel Underwater Acoustic Monitoring



Key Features

- Up to 5 Synced Hydrophone Channels
- Flexible Sampling Rates from 24kHz to 384kHz
- Up to 4TB Internal Memory
- Long battery life
- Real-time data sampling

Orca is a broadband underwater acoustic recorder that supports multiple hydrophone channels, enabling localisation of sound sources, and extremely high sampling rates. Easy to deploy and configure, Orca

applications include underwater noise characterisation, marine mammal studies, and submarine vehicle integration. Orca can record and process data internally, or stream over Ethernet.

TRAC Software

TRAC is Orca's proprietary configuration, analysis and display software. TRAC presents digital multichannel acoustic data including real-time spectrograms, third octave plots with percentiles, and live real-time audio.

Specifications

Subject to change without notice

Power	Internal Power: 72 Alkaline D Cells (User Replaceable) External Power: 12.6-26 vDC Consumption: 900 mW – 3W (Depending on Use)
Analogue Input Channels	Number of channels: Up to 5 ADC Number of Bits: 16 Bits Sigma Delta Dynamic Range Per Channel: 90 dB (full bandwidth, better at lower sampling rates) Sampling Rates Supported: 24kHz – 384kHz
Hydrophone Options	Hydrophone mounted on end cap, or connected with custom cable lengths / Customised sensitivities and bandwidths available on request
Memory	Integrated 1 TB SD Card and 2 TB Solid State Drive for Standard version, expandable to 6TB / (Fat32 Formatted File System .wav) upgradeable to 6TB / Configurable recording, schedule and duty cycling
Real Time Processing	Onboard 1/3 Octave Analysis on Sound Pressure Levels (at up to 48kHz sampling)
Communications	Ethernet High Speed USB for Download RS422 (232 available with external converter) for real time monitoring
Environmental	750m and 2500 depth standard (deeper options available on request) Material: Delrin or Titanium Operating Temperature: -10°C to +-50°C