

Passive Acoustic Monitoring

Passive Acoustic
Monitoring



Marine life
Monitoring



Marine Survey



Communications
Gateway



MetOcean



Water Quality



Surveillance



The AutoNaut is a near silent vessel and therefore ideal for Passive Acoustic Monitoring (PAM).

Equipped with a Seiche hydrophone array system, the PAMAutoNaut provides a revolutionary new technique for marine acoustic surveys. It resolves the issues of traditional monitoring methods by providing both mobility and high signal-to-noise ratio and can unobtrusively monitor marine mammals.

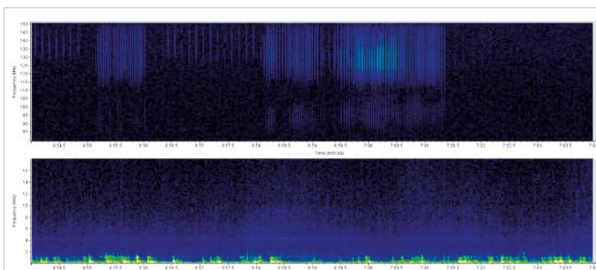
- Marine mammal monitoring
- Ambient sound measurement
- Sound source characterisation (SSC)

AutoNaut

Passive Acoustic Monitoring



Seiche Digital Thin Line Array



Harbour porpoise detected by PAM-AutoNaut (viewed in PAMGuard software)

SENSORS

Seiche analogue array

The Seiche analogue array incorporates two hydrophone sensors and a depth gauge. It is 30m in length and has been designed for minimal flow noise and simple deployment.

Seiche digital thin line array

This high-sensitivity acoustic array is fully configurable in real-time. Eight digital hydrophone sensors are incorporated within the 25metre array.

Additional sensors

Additional sensors can also be incorporated for supplementary meteorological and oceanographic data as well as visual imaging.

AutoNaut

The AutoNaut is an uncrewed surface vessel (USV) propelled forward by the motion of the waves. Patented Wave Foil Technology enables long-term mission duration. Powered entirely by renewable energy and with no requirement for offshore personnel the AutoNaut significantly reduces costs and safety risks at sea. Solar energy powers an extensive range of sensors and equipment for 24/7 operation.

- Uncrewed operation: no offshore personnel at risk
- Powered by renewable energy: no fuel costs, no emissions
- Mission duration of several months
- Station keeping within 25 metres
- Storm-proven robustness
- Simple deployment/recovery from vessel or slipway
- Flexible payload and sensor capacity
- Data transfer