

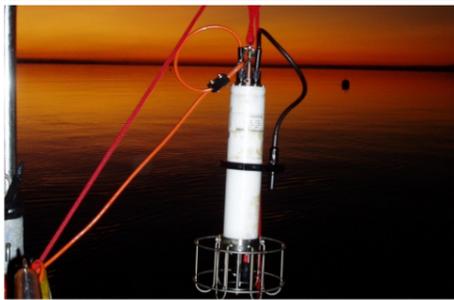
Oceanographic Survey Equipment





Aanderaa Seaguard CTD

A robust multi-parameter instrument designed specifically for long-term deployments. Equipped with the standard sensors for measuring conductivity, temperature and pressure, there are optional probes/sensors that can be added to the base platform. Examples include Oxygen Optode 4835 (oxygen concentrations), Cyclops-7 (fluorometer) and CTG PAR Irradiance Sensor (quantify photosynthetically active radiation).



Idronaut Ocean Seven 316 Probe

A multi-parameter probe ideal for either vessel-fixed measurements or profiling to a pressure of 1500 dBar. As well as the standard conductivity, temperature and pressure measurements, additional probes/sensors can be linked to the Idronaut during monitoring, e.g. a Seapoint Turbidity (optical) Sensor.

Temperature range : -3°C to 50°C
Conductivity range : 0 to 64µS/cm



Falmouth Scientific NXIC CTD

The NXIC is designed to collect high quality salinity data by measuring conductivity, temperature and pressure (depth). Although capable of autonomous deployments on seabed frames, it is primarily used for providing real time data during water column profiling or vessel-mounted operations. Additional probes/sensors can be attached for use during deployment, e.g. a Seapoint Turbidity (optical) Sensor.

Temperature range : -5°C to 45°C
Conductivity range : 0 to 90µS/cm



In-Situ Level and AquaTROLL 200

The AquaTROLL measures conductivity, water level/pressure and temperature in the harshest conditions. The LevelTROLL measure temperature and depth. They can be used in either autonomous mode when deployed on moorings or to provide real-time data.

Temperature range : -20°C to 65°C
Conductivity range : 5 to 100,000µS/cm



Aquatec AQUAlogger 520T/PT

Fully self-contained, compact data logger capable of monitoring temperature and pressure on a short or long term basis. Inexpensive add-on to seabed-mounted instrument frames for use in tidal cycle approximations or for observing temperature distribution in coastal waters.

Temperature range : -2°C to 30°C



Zebra-Tech D-Opto Logger

A self-contained optical dissolved oxygen logger that records temperature, dissolved oxygen percentage saturation and dissolved oxygen content ppm.

Resolution : 0.01% Saturation, 0.001ppm
Range : 0.00 to 25.00 ppm

Nortek AWAC Profiler - 1 MHz

This is designed as a coastal monitoring system for long term monitoring of waves (direction and height) and currents (speed and direction). The small, rugged sensor can be mounted within a frame placed on the sea floor or on a SUBS floatation collar.

Max current profile range : 30m
Max depth for wave measurement : 40m



Nortek AWAC (Acoustic Wave and Current) Profiler - 600 kHz

Capable of providing current profiles together with wave height and directional data. The small, rugged sensor is usually mounted within a frame placed on the sea floor in an upward looking direction.

Max current profile range : 50m
Max depth for wave measurement : 60m



Teledyne RDI Workhorse Sentinel ADCP (Acoustic Doppler Current Profiler) - 300kHz and 600kHz

Used to provide detailed maps of the distribution of water currents and suspended material through the water column or along predetermined transects. Primarily designed for autonomous deployments of up to 12 months in water depths less than 150m, they can be easily deployed on buoys, vessels or mounted onto a seabed frame. Sensor configuration and real-time discharge measurements can be observed using the Windows-based WinRiver software. Playback of data is also feasible.

Maximum profiling range:
600 kHz : 70m
300kHz : 150m



Nortek Aquadopp Single-Point Current Meter

A robust and versatile 3-D ocean current meter that integrates Doppler velocity measurements with temperature, pressure, tilt and compass records. It can be side-mounted onto a fixed structure or wall or placed on a mooring.

Water velocity measurement range : +/-5m/s



Nortek Aquadopp Profiler - 2 MHz

A side-way looking, shallow water current profiler (<80m) equipped with temperature, pressure, tilt and compass sensors. It can be deployed on a small bottom frame, on a mooring rig, on a moored surface buoy or on any other fixed structure.

Profiling range (nominal) : 12-25m





Nortek Vector 3D Acoustic Velocimeter

This instrument is used to measure 3D water velocity at a single point using Doppler velocity measurements. Equipped with sensors to measure temperature, pressure, and orientation (direction and tilt). It can be deployed as a self-contained instrument with an internal recorder or for real time data collection. Probe head can be also attached to a fly-lead connection.

Sampling rate : 1-64Hz
Velocity sampling point : 0.15m from probe

JFE Infinity-Turbi

The Infinity-Turbi is an autonomously deployable data logger for long-term turbidity measurements. They have dual sensors for low (0 - 1000 FTU) and high (0 - 100,000 ppm) ranges. The instrument can provide high accurate turbidity measurements in normal to muddy water.

Aquatec AQUAlogger 210TY Turbidity Logger

This has a built-in turbidity sensor using optical backscatter measurements. Can be deployed on underwater frames or buoys to monitor coastal sediment transport as well as suspended sediment concentrations. A Zebra-Tech Hydro-Wiper, designed to keep the sensor's lens clean of deposits and bio-fouling, can be fitted alongside enabling longer periods of deployment.

Burst sampling : every 1-255 secs or min

McVan ANALITE NEP 160 Turbidity Sensor

Portable meter where readings are taken by inserting probe into the water or media to give instantaneous turbidity levels.

Turbidity Range : 0 to 20,000NTU
Readings : can be set to every 1-90 seconds or minutes. Stored in the Notepad (up to 100).

Argus Surface Meter (ASM)

Embedded within a titanium or stainless steel rod, backscatter infrared laser sensors measure and record suspended sediment concentrations and bed level. Optical communication window situated at the top end of the housing allows data downloads to be performed without opening the instrument. Has three additional sensors; Inclinator, Pressure Gauge, Temperature sensor

Max water depth : 40m
Sensor distance range : 0-100mm
Number of sensors : 100 per metre
Measuring OBS range : 0-2000NTU



Aanderaa Seaguard WLR

A robust multi-parameter instrument designed for measuring tide level, tide pressure, pressure and temperature. Can be deployed in shallow water on a seabed frame or can be mounted onto a fixed structure in the upper water column. Similarly to the CTD version, they are optional probes/sensors that can be added to the WLR base platform if required.

Midas WTR Wave/Tide Recorder

The MIDAS WTR is fitted with a choice of strain gauge or high accuracy piezo-resistive pressure sensors, and a fast response PRT temperature sensor. They use Linear Wave Theory requiring a specific number of data points to be sampled over a period of time. These data points are then processed on board the instrument to generate an accurate summary of the wave activity during the measured period. The MIDAS WTR therefore operates in a strict pattern of "sample, process, sleep", with the user controlling the number of samples and the sampling rate, together with the duration of the sleep period.

MetOcean iSPHERE Drogues

These provide a simple means of investigating the current movement regime in a particular area using a weighted underwater sail with an internal GPS tracking device and temperature sensor, attached to a surface buoy. As they can be tracked via a website which is updated every ten minutes with the most current location of the drogue, it can be left out for periods of 24-48 hours.

Sonardyne Transponder and Surface Control Unit

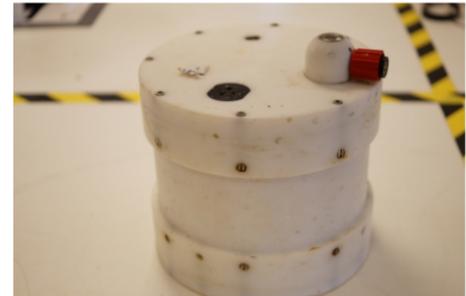
These can be used for relocating seabed-moored equipment when surface indicator buoys have gone astray. The transponder can be secured to an underwater frame or buoy and its position can be determined using a surface unit that can measure ranges to the transponder

SUBS (Streamline Underwater Buoyancy System) buoy/flotation collar

Improves data by significantly enhancing instrument stability in the water column. Ideal for use with ADCPs, single point current meters, optical and acoustic instrumentation. Light weight and easy to handle.

Chelonia C-Pod

C-Pods are self-contained ultrasound monitors that select tonal clicks and record the time, duration and other features of each click to 5 microseconds resolution. By selecting which sounds to log, C-Pods can provide highly sensitive monitoring for porpoises and other cetaceans in the survey area.





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