

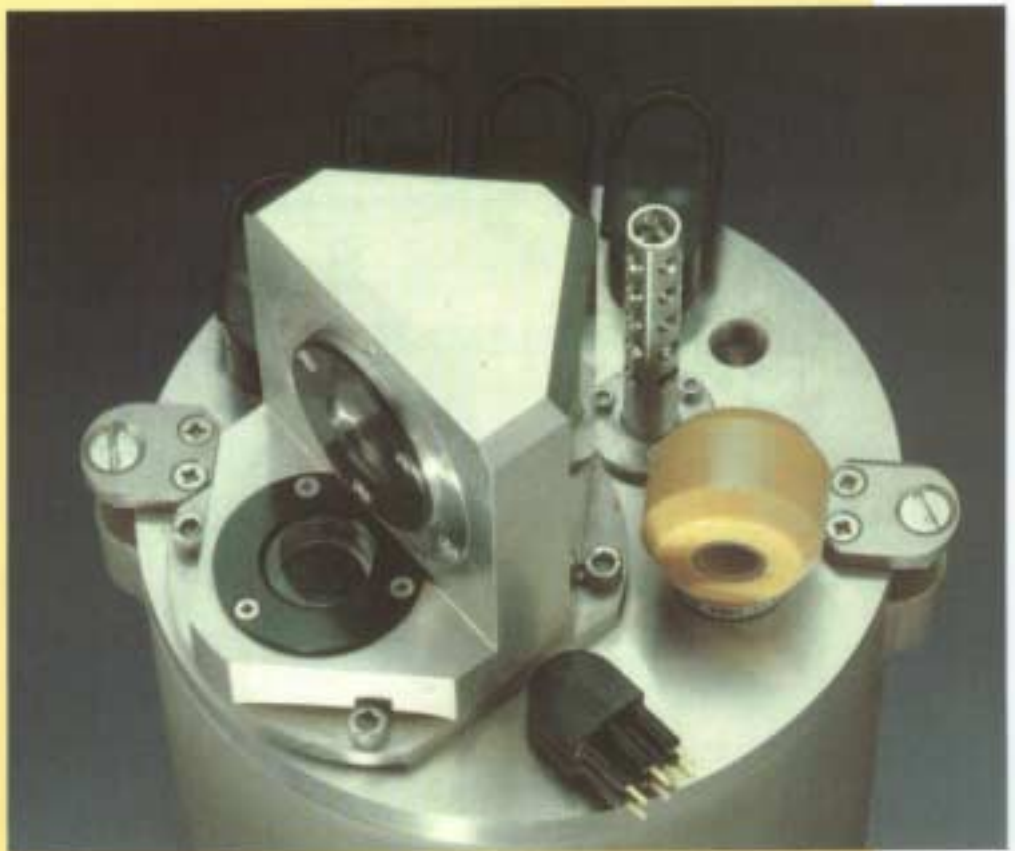


# AQUAPACK

Multi-parameter monitoring system

## APPLICATIONS

- High performance monitoring of oceans, rivers, lakes and reservoirs
- Towed body, fixed or mobile installations
- Pollution monitoring
- Dye tracking



## FEATURES

- Conductivity, temperature, depth and fluorescence as standard
- Chlorophyll-a, rhodamine-B, and nephelometer options available
- Solid state memory and/or real-time data transmission  
Internal batteries and/or externally powered
- Titanium pressure housing

# AQUAPACK

Aquapack is a compact, portable, robust and fully integrated system. Sensors and systems developed to withstand the rigours of the open-ocean environment are now available to meet the demands of lake, river and reservoir environmental monitoring.

## DEPLOYMENT MODES

The Aquapack sensor suite provides data on all basic parameters to describe temporal and spatial variables in the marine and freshwater environments. It may be mounted on towed vehicles such as Chelsea Instruments' Aquashuttle or SeaSoar, on buoys, on a mooring or deployed in vertically profiled mode.

## INSTRUMENT DESCRIPTION

A single titanium housing contains all sensors, sensor processing boards, data transmission and/or data logger and internal batteries. Data is either stored on the internal data logger or is transmitted up the cable using RS422 format. An interface converts RS422 to RS232 for onward transmission to a PC. Programming is via the CI Aquasoft communications package. This allows archiving of data and real time conversion to engineering units with associated graphs and tabular displays.

The basic sensor pack comprises CTD-F. Spare analogue channels are available to interface a range of additional externally mounted sensors including transmissometers, pH, Redox, dissolved oxygen and PAR.

## SPECIFICATION

### General

(Dependent upon specific configuration)

Size:	170mm dia x 310mm
Weight:	11kg in air 6kg in water
Depth rating:	200m
Battery life:	5 hours at 10°C (1Hz sampling rate) plus sleep mode option.
External input:	10-15VDC (Portable Interface Unit) 18-72VDC (Standard Interface Unit)
Material:	Titanium

### Data logger

Capacity:	2Mbyte (expandable to 8 Mbytes)
No. of readings:	50k of all 16 channels

### Data transmission

Type:	RS422
Data rate:	Up to 38.4 K baud
Scanning rate:	50Hz to 1 sample/day user programmable

### Sensors

	Type	Range	Accuracy	Resolution
Temperature:	Pt resistance	-2 to +25 deg C	0.003 deg C	0.0005 deg C
Conductivity:	induction cell	1-70mmho/cm	0.005mmho/cm	0.001mmho/cm
Depth:	Strain gauge with internal temperature compensation	0-200dbar	0.20dbar	0.003dbar
Fluorescence:	Fluorimeter	0.01-100µg/l	0.01µg/l*	0.005µg/l*

\*or a 3% of reading whichever is greater



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