Autonomous Plankton Sampler

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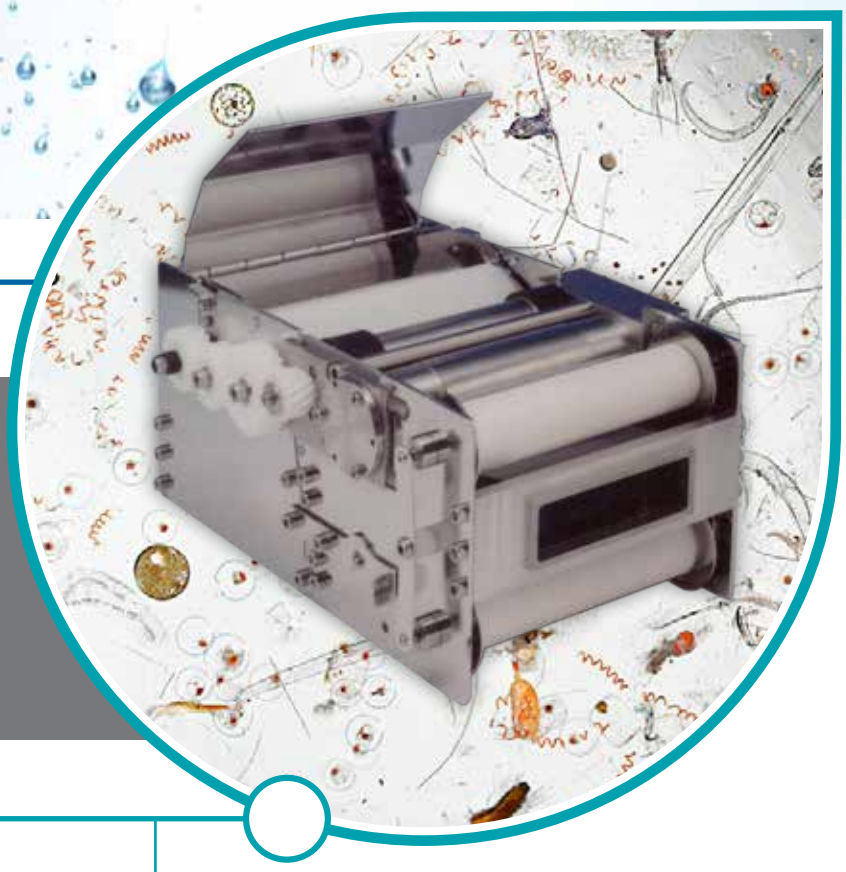

The CTG Autonomous Plankton Sampler provides a fully automated plankton collection system for use on both underwater vehicles and in-line systems

Applications

- Fisheries research
- Plankton studies
- Ship borne in-line systems
- Fixed depth and undulating towed vehicles

Features

- On-board batteries and microcontroller
- Hydrodynamics closely matched to the Hardy Sampler
- Integral flow meter
- Variety of mesh sizes and materials available
- Pre-programmed or commanded sampling
- Automatic advance from onset of clogging

Chelsea Technologies Group Ltd

Product Information

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What can the Autonomous Plankton Sampler do for you?

Introduction

CTG's Autonomous Plankton Sampler provides Marine Biologists with a fully automated tool to collect plankton in the oceans, enabling analysis of plankton species distribution and abundance.

How does it work?

The CTG Autonomous Plankton Sampler is loaded with two rolls of gauze on two separate spools. When the mechanism is activated, both gauze lengths are advanced 70mm via an electric motor. The frequency of each advance is programmed by the user via PC on either a time or flow-rate basis. One of the gauze lengths rests against a 100mm x 50mm aperture open to the flow of water, and it is here where the plankton is collected. On advance, the sampled plankton is sandwiched by the other gauze, and both gauze lengths and the sample are collected in the preserving tank.

Configurations

The CTG Autonomous Plankton Sampler is available either with internal battery or externally powered. Both silk and nylon gauzes are available. A suitable flow meter is available as well as a flow-through housing.

Specification

Size	140mm x 235mm x 291mm
Weight	12.75kg
Depth rating	200m
Voltage Input (externally powered version)	12 Vdc
Batteries (battery powered version)	6 x 1.5V Compound primary cell
Internal memory	32 kbyte NVRAM
Material	Stainless steel
Time between gauze advances	15 seconds to 1 year
Switch on	Internally programmable or external trigger
Preservation	Formalin tank
Gauze size	80 to 400µm range
Filtration area	50 x 100mm
Inlet port	25 x 100mm
Maximum tow speed	25 knots

Flow Meter Option Specification

Flow speed range	14 – 140 LPM
Internal diameter	19mm
Size	33mm x 83mm x 96mm
Output	Sine wave output proportional to flow rate. 30mV peak / peak at 10% flow range. 1000Hz at full flow. (Converted and recorded as pulses within Plankton Sampler logger)

Contact us today to see how we can help you

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