

Overview

The AcSample is a triplicate, in-situ eDNA samplers. All AcSample units include a box with 3 inlets and 3 outlets, each inlet connected to a High Flow peristaltic pump with flow meter and luer lock connection for filter. Control electronics provide timed, depth-based, and volume-based triplicate sampling modes.



Properties and Options

Property	AcSample-5m	AcSample-M	AcSample-D
Release Date	January 2026	January 2026	TBD 2026
Depth Range	0 - 5 meters	0 - 55 meters	0 - 200 meters
Mechanical	Air-filled box containing pumps, sensors, battery, and electronics.	Oil-filled box with pumps, flow sensors and underwater cable to air-filled bottle with battery and control electronics.	
Mode Options	1) Depth Triggered/Time triggered Autonomous 2) Matched Volume Autonomous 3) Duty Cycled Autonomous 4) Serial Controlled		
Sensor Logging	RTC Time Total flow in mL/minute (per pump) Current draw in mA (per pump) External Pressure/temperature		
Battery	57 Wh Internal Lithium Rechargeable		
Data Offload	Shore cable console (recommended) or SD card.		
Charging	Via shore cable.		
Filter attachment	Luer lock.		
Filter compatibility	Filter-agnostic, see flow rates table below for examples.		

Tap Water Flow Rates

Filter Type	mL/min
Cobetter filter holder with 47 mm diameter, MCE hydrophilic 0.45 um pore	258
Sterivex 0.22 um pore	144
Smith-Root 1.5 um pore GF Non-self-preserving Filter	600
33 mm diameter, 0.45 um pore PES hydrophilic	198

