



# AQUALYTICAL



**C.L.A.M. - sturdy compact design for ease of use in the field.**



**C.L.A.M. with onboard totalizer and external digital display reset and pump control buttons.**



**The C.L.A.M. provides a convenient submersible sealed unit with clear visual volume display, external control, and 48 hours of continuous submersible operation.**



**C.L.A.M. disk - that's all that gets sent to the lab, leaving the water behind**

## C.L.A.M.®

### Continuous Low-Level Aquatic Monitoring

#### PRODUCT DESCRIPTION:

The C.L.A.M. is a state-of-the-art small submersible extraction sampler using EPA approved SPE (Solid Phase Extraction) media to sequester Pesticides, Herbicides, PAH's, TPH, and other trace organics from water. The C.L.A.M. uses low flow rate extraction sampling (5-60 ml/minute), where water is drawn continuously through the extraction media. It provides an extraction event that can be hours or days long, allowing capture of trace pollutants from illicit and episodic events. The C.L.A.M. extracts the water in-situ with the same technology the labs use on the bench. It provides a pre-extracted quantitative sampling event representing up to a hundred liters of water, lowering the laboratories' detection limits a hundred fold. A convenient onboard totalizer provides the volume extracted on a visual display. The small, dry extraction disk is all that is sent to the laboratory for solvent elution and analysis.

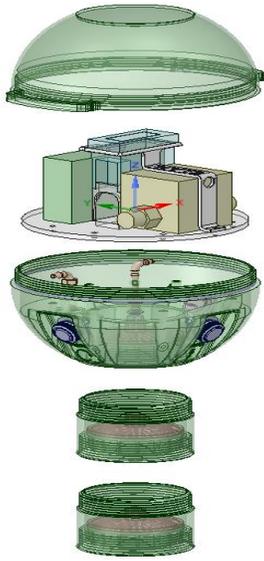
#### PRODUCT APPLICATIONS:

The C.L.A.M. can be used in applications such as sampling of urban water systems, rivers, monitoring wells, drinking water systems, watersheds and lakes, agricultural runoff, storm water and marine environments. There are approximately 100 substances controlled by regulations and that list grows every year with lower detection requirements. The C.L.A.M. is your water monitoring solution.

#### PERFORMANCE SPECIFICATIONS:

- Provides high volume field time integrative extractions up to 100 liters.
- High volume extractions, allow for ultra-low detection level
- Uses low flow rate extraction sampling (5-60 ml/minute)
- The small extraction disk is the only item to be sent to the lab for solvent elution and analysis.
- Weighs less than one pound.
- It is ballasted to float 2/3 submerged for subsurface sampling, or can be weighted for depth sampling up to 20 feet, or tube tethered to disk for extended depths..
- The C.L.A.M. SPE disk media is the same used in environmental laboratories for compliance trace organic analysis.
- Micro pump suction draws the water through the extraction media first, preventing analyte surface adsorption on tubing and pumps
- The media and housing uses special lofted filters to retard fouling
- Unique flow design prevents contamination in tubing or pump
- The C.L.A.M. runs submerged for 48 hours on a single recharge.
- Just sending the small, dry extraction disk to the laboratory for solvent elution and analysis saves costs of extraction, expensive cooler shipments of sample bottles, and seven day holding time requirements.

# AQUALYTICAL



**C.L.A.M. Sphere in the floatation position**



**Choose the type of disk that best meets your testing needs.**



## Redesigned with Onboard Totalizer C.L.A.M.®

Continuous Low-Level Aquatic Monitoring

*Left: The new spherical designed C.L.A.M incorporates a sealed polycarbonate unit housing, an onboard totalizer with its volumetric acquisition system, a positive displacement micro pump, and rechargeable lithium-ion batteries.*

### NEW DESIGN SPECIFICATIONS:

- The C.L.A.M.'s clear high impact polycarbonate sealed sphere houses a micro pump, the volume data acquisition system, and the rechargeable lithium-ion battery system.
- The C.L.A.M. sphere is 5 inch in diameter, the size of a grapefruit.
- Luer fittings on the C.L.A.M inlet allow for easy disk attachment.
- Two or more Disks or prefilters can be locked together for total and dissolved studies or breakthrough efficacy data.
- Protection tubes provided to shroud the use of two or three disk arrays.
- Water tight external recharging port.
- External stop/start IP68 submersible pump button
- Eight digit display sealed in the sphere, visible from exterior with a exterior submersible reset button.
- Uses a small onboard mechanical oval gear flow sensor, with accuracy of +/- 1% of empirical volume.
- Designed to leave the water behind!!

#### Solid Phase SPE Extraction Disk

The field hardened housing contains C-18 media which is the media of choice for the extraction of TPH, PAH's Pesticides and all non-polar groups. Like all the C.L.A.M. disks, it has Luer lock fittings which allow the filter to be locked to the C.L.A.M. body and interlocking of different filter types in two stage assemblies.

#### Solid Phase HLB Extraction Disk

This disk will retain a wide variety of non-polar and polar compounds such as: EPA 525 SOC's, Pesticides, Pyrethroids, Herbicides, TPH, PAH's, Pharmaceuticals, PCP's, PCB's, Dioxins, Furans, PBDE's, Analgesics and Stimulants such as caffeine.

#### Pre-Filtration Disk

The Pre-Filtration disk allows for toxicological studies for total and dissolved trace organics. It can be used in a two stage filter assembly, where the filter removes the sediment and allows the water soluble organics to be retained on the bottom HLB or SPE type.