



Remote Access Sampler - 500 ml

Application:

The Remote Access Sampler (RAS-500) is a deep ocean or coastal time-series water sampler that autonomously collects pure, unbiased specimens using a user-defined sample schedule. The RAS-500 collects ambient water and suspended material in individual clear or opaque sample bags for biological, dissolved major and minor nutrient, dissolved trace metal, or dissolved organic carbon analysis. Bags can be pre-filled with preservative for sample preservation.

Features:

Water flows directly to sample bags without passing through the pump. Non-volatile memory stores critical deployment data. Options include In-line pre filters available on each sample, acid flush for intake cleaning between samples, and incubation selection for applying fixative after sample collection.

Sampling:

User-defined schedule controls sampling event time limits, data collection periods, flow and volume of collected samples. Programmable controls also define volume and frequency of optional acid flushes and rinsing cycles. Commands for adaptive, external control of sampling are also available.

McLanePro:

The RAS-500 uses McLanePro, a graphical user interface built for McLane's Gen3 electronics. McLanePro eases the steps of event programming, data offload, and firmware updates.

- Number of samples: 48 with 500 ml sample bags.
- Power: 24 commercially available, user replaceable "D" cell alkaline batteries.
- Patented multi-port valve isolates each sample.
- Optional programmable biofouling pre- and post- acid flushes clean intake.
- Sample collection with or without pre-filters.
- For more information about this sampler, see the [RAS](#) pages at [mclanelabs.com](#).

*U.S. Patent Nos. 5,341,834 & 5,441,071
Japan Patent No. 248282

Event 1			
Scheduled Start Time	03/27/2023 15:50:00		End Time
Start Time	03/27/2023 15:50:00		End Temperature (C)
Start Temperature (C)	27.9	End Battery (Vdc)	30.5
Start Battery (Vdc)	28.6	End Battery (Vdc)	28.1
Procedures			
Procedure	Volume Requested (mL)	Volume Pumped (mL)	Result
Water Flush	100.0	100.0	Volume reached
Sample	500.0	500.0	Volume reached
Post-Sample Antifouling Flush	10.0	10.0	Volume reached
Event 1 Details			
Event 1 Sensor Data			
Event 2			
Scheduled Start Time	03/27/2023 16:05:00		End Time
Start Time	03/27/2023 16:05:00		End Temperature (C)
Start Temperature (C)	28.2	End Battery (Vdc)	30.6
Start Battery (Vdc)	28.6	End Battery (Vdc)	28.1
Procedures			
Procedure	Volume Requested (mL)	Volume Pumped (mL)	Result
Water Flush	100.0	100.0	Volume reached
Sample	500.0	500.0	Volume reached
Post-Sample Antifouling Flush	10.0	10.0	Volume reached
Event 2 Details			
Event 2 Sensor Data			

Remote Access Sampler - 500 ml Specifications

DIMENSIONS:	Height: 128 cm (50 in)
	Width: 73 cm (29 in)
	Length: 73 cm (29 in)

WEIGHT (APPROX):	In air (sample tubes empty): ~110 kg (240 lbs)
	In air (sample tubes filled): ~148 kg (325 lbs)
	In water: ~57 kg (125 lbs)

MULTI-PORT VALVE:	Number of ports: 50 (48 samples)
	Material: HYDEX plastic valve stators and Kynar plastic rotor

SAMPLE COLLECTION:	Size: Approximately 500 ml
	Material: 2 mil Tedlar® (clear), 4 mil Mylar laminated (opaque) or 4 mil Kynar (clear)

PUMP:	Flowrate: 75 ml/min fixed rate ($\pm 3\%$ error)
	Type: Gear pump
	Drive Housing: Pressure balanced oil filled

CONTROLLER:	Pressure housing: Aluminum, 6061-T6 hardcoat anodized, 316 SS fasteners, 316 SS bulkhead connectors, Zinc anodes
	Communications: USB, RS-232, RS-485 with optional added bulkhead connector.

OPERATIONS:	Maximum depth: 5,500 m
	Battery: 24 user replaceable "D" cell alkaline batteries
	Maximum deployment time: 18 months
	Operating temperature: -2° to 35° C (nonfreezing)

FRAME:	Material: 316 SS, electropolished, 316 SS isolated hardware (titanium available)
	Structure: In-line weldment, 5 ton tension rating