



## 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.

### Features:

Sample bags are available with Jaco fittings. Water flows directly to sample bags without passing through the pump. Non-volatile memory stores critical deployment data.

### Sample schedule options:

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.

### Customized hardware and software:

Customization includes optional in-line prefilters on each sample. An optional external temperature sensor is also available.

### Deployment:

Deploys from different mooring types such as a stand-alone mooring, bottom lander, or tethered from a ship.

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

- Number of samples: 48 with 500 ml sample bags.
- Power: 24 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](http://mclanelabs.com).



Avda. Filipinas, 46  
28003 Madrid  
Tfo. 91 5537207

E-mail [grafinta@grafinta.com](mailto:grafinta@grafinta.com)

## Remote Access Sampler - 500 ml Specifications

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<b>DIMENSIONS:</b>	Height:	128 cm (50 in)
	Width:	73 cm (29 in)
	Length:	73 cm (29 in)

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

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<b>MULTI-PORT VALVE:</b>	Number of ports:	50 (48 samples)
	Material:	HYDEX plastic valve stators and Kynar plastic rotor
	Drive:	High torque stepper motor with 100:1 planetary gear head
	Positioning:	Optical sensor with slotted disk

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<b>SAMPLE BAGS (48):</b>	Size:	Approximately 500 ml
	Material:	2 mil Tedlar® (clear), 4 mil Mylar laminated (opaque) or 4 mil Kynar (clear)

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<b>PUMP:</b>	Flow rate:	75 ml/min fixed rate (±3% error)
	Type:	Gear pump
	Drive:	Brushless 3 phase DC motor

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<b>CONTROLLER:</b>	Pressure housing:	Aluminum, 6061-T6 hard coat anodized
	Power supply:	36 VDC
	Power consumption:	3.5 Ah (1 year deployment)
	Communications:	Serial (RS-232)

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<b>OPERATIONS:</b>	Maximum depth:	5,500 m
	Battery:	24 user replaceable "D" cell alkaline batteries
	Min/Max deployment time:	10 minutes per sample/18 months
	Operating temperature:	0° to 35° C

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<b>FRAME:</b>	Material:	316 electro-polished stainless steel (titanium available)
	Structure & bridle configuration:	In-line mooring, weldment, 4 in-line
	Frame & bridle eyes:	19 mm (3/4"), insulated
	Maximum in-line tension:	2,300 kg (5,000 lbs)

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