



Remote Access Sampler - 100 ml

Application:

The Remote Access Sampler (RAS-100) is a deep ocean or coastal time-series water sampler that autonomously collects pure, unbiased specimens under an operator-programmed sample schedule. The RAS-100 collects ambient water for biological, dissolved major and minor nutrient, dissolved trace metal, or dissolved organic carbon analysis. The more compact frame is a lighter system to deploy. It is ideal for applications where a large RAS-500 sample may not be required.

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 volume and frequency of acid flush and rinsing cycles, sampling event time limits, data collection periods, and flow and volume of collected samples.

Customized hardware and software:

Options include in-line prefilters on each sample. An 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.

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- Number of samples: 48 with 100 ml sample bags.
- Power: 24 user replaceable “D” cell batteries.
- Patented multi-port valve isolates each sample.
- Optional programmable biofouling pre- and post- acid flushes clean intake.
- Sample collection with or without inline pre-filters.
- For more information about this sampler, see the [RAS](#) pages at mclanelabs.com.

Remote Access Sampler - 100 ml Specifications

DIMENSIONS:	Height: 165 cm (65 in)
	Width: 43 cm (17 in)
	Length: 43 cm (17 in)

WEIGHT (APPROX):	In air (sample tubes empty): ~75 kg (165 lbs)
	In air (sample tubes filled): ~86 kg (190 lbs)
	In water: ~42 kg (93 lbs)

MULTI-PORT VALVE:	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

SAMPLE BAGS (48):	Size: Approximately 100 ml
	Material: 2 mil Tedlar® (clear), 4 mil Mylar laminated (opaque) or 4 mil Kynar (clear)

PUMP:	Flow rate: 75 ml/min fixed rate ($\pm 3\%$ error)
	Type: Gear pump
	Drive: Brushless 3 phase DC motor

CONTROLLER:	Pressure housing: Aluminum, 6061-T6 hard coat anodized
	Power supply: 36 VDC
	Power consumption: 3.1 Ah (1 year deployment)
	Communications: Serial (RS-232)

OPERATIONS:	Maximum depth: 5,500 m
	Battery: 24 user replaceable "D" cell alkaline batteries
	Min/Max deployment time: 5 minutes per sample/18 months
	Operating temperature: 0° to 50° C (electronics tested to -10 C°)

FRAME:	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)