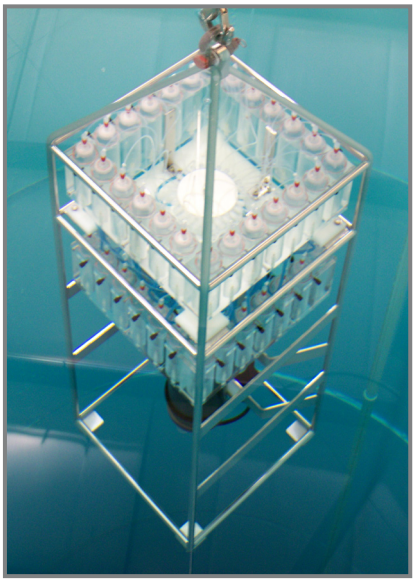

- Number of samples: 48 with 100 ml sample bags.
- 10 Ah alkaline battery pack.
- Patented multi-port valve isolates each sample.
- Optional programmable biofouling pre- and post- acid flushes clean intake.
- Sample collection with or without inline pre-filters.
- For more information about this sampler, see the RAS pages at mclanelabs.com.

Remote Access Sampler - 100 ml

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 Luer locking valves or Jaco fittings. Water flows directly to sample containers 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. EEPROM stores critical deployment data with a report of sample event conditions.

Customized hardware and software:

Other customization is possible such as 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*

Remote Access Sampler - 100 ml Specifications

DIMENSIONS:	Length:	43 cm (17 in)
	Width:	43 cm (17 in)
	Height	165 cm (65 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 ml Tedlar® (clear) or 4 ml laminated (opaque)
PUMP:	Flow rate:	50 ml/min fixed rate (±3% error)
	Type:	Gear pump
	Drive:	Brushless 3 phase DC motor
CONTROLLER:	Pressure housing:	Aluminum, 6061-T6 hard coat anodized
	Power supply:	31.5 VDC alkaline battery pack
	Power consumption:	3.1 Ah (1 year deployment)
	Communications:	Serial (RS-232)
OPERATIONS:	Maximum depth:	5,500 m
	Battery endurance:	10 Ah alkaline battery pack
	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)