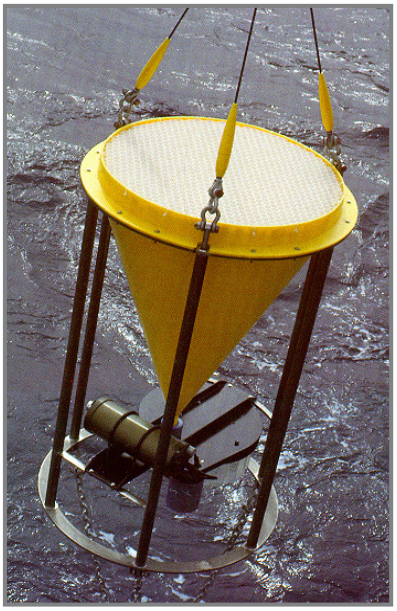
Parflux Mark78H Sediment Trap



- Number of samples: 21 with 250ml or 500ml bottles or 13 (wider bottle) with 500ml bottles.
- 5Ah alkaline battery pack.
- Depth-rated to 7,000 m (10,000 m option available).
- Lighter weight aluminum pressure case option available.
- Titanium frame reduces weight and resists corrosion.
- For more information about this sampler, see the Sediment Traps pages at mclanelabs.com.

Application:

The Parflux Mark78H Sediment Trap time-series sampler collects the flux of settling particles in oceans and lakes. The wide collection funnel has a hexagonal top and stores collected material in individual sample bottles. Bottles are sealed when not collecting samples. Samples are used for biogeochemical studies including paleoproxy or radionucleide investigations, carbon cycle studies, and environmental or pollution monitoring.

Features:

A 13 cup and a 21 cup version are available. The 21 cup model holds 250ml or 500ml sample bottles. The 13 cup model holds 500ml sample bottles. Optional Wet Sample Particle Divider (WSD-10) can split wet specimens into five or ten equal parts.

Sampling options:

Samples are pre-programmed or triggered adaptively from another computer or on-shore device. Pre-programmed samples can each have a different start date and time, samples can be collected at fixed time intervals from a specific start date, or samples can be automatically spaced at equal intervals by entering a start and end date. Sample data includes collection date/time, battery voltage and temperature before and after each sample event.

Customized hardware and software:

Adaptive sampling is possible with optional ethernet communication. Other options include tilt sensor which records mooring tilt, and pressure sensor for depth.

Deployment:

Deploys from a stand-alone mooring or a large high-tension vertical array.

Mark 78H Sediment Trap Specifications

DIMENSIONS:	Diameter:	91cm (35.8 in)
	Height:	164 cm (64.5 in)
WEIGHT APPROX (NO BRIDLE):	In air, 500ml bottles empty:	61 kg (134 lbs)
	In air, 500ml bottles full:	72 kg (159 lbs)
	In water, 500ml bottles full:	25 kg (55 lb)
COLLECTOR:	Number of samples:	21 or 13 (wider bottle)
	Bottle volume:	250 or 500 ml (21 samples) 500 ml (13 samples, wider bottles)
	Aperture area and diameter:	0.5 m^2, 80 cm
	Baffle material:	Polycarbonate, 1.0 mm wall thickness
	Cone material:	Natural polyethylene internal coating
	Baffle cells:	Approx. 368, 2.5 cm diameter
	Aspect ratio of cell (h/d):	2:5
	Included cone angle:	41°
ROTARY ASSEMBLY:	Drive motor type:	Electronic stepper motor
	Drive train:	Direct gear train
	Time to shift a bottle:	25 s (21 cup) / 38 s (13 cup)
	Gear plate diameter:	47 cm (21 cup) 45 cm (13 cup)
CONTROLLER:	Pressure housing:	Titanium
	Power supply:	14 “C” size alkaline cells
	Communications:	Serial (RS-232), Ethernet (optional)
OPERATIONS:	Maximum depth:	7,000 m (10,000 m model is available)
	Maximum deployment time:	18 months
	Operating temperature:	-2°to 35°C
	Storage temperature:	-20°to 50°C
FRAME:	Material:	Titanium, Grade 2
	Bridle eyes:	16 mm (5/8”), insulated