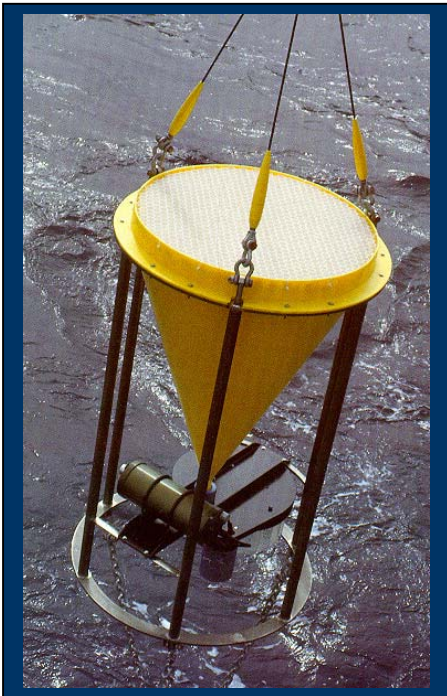


PARFLUX Mark78H Sediment Trap

Application: A time-series sampler that autonomously collects the flux of settling particles on an operator-defined schedule. The wide top funnel accumulates particulate specimens into individual sample bottles. Sediment Traps are part of ongoing studies of the global carbon cycle and are used for paleoproxy and radionuclide investigations and environmental or pollution monitoring.

PARFLUX Trap Features and Benefits



- ❖ Collect **21 or 13 samples** in **250 or 500 ml** bottles.
- ❖ **Titanium** frame and pressure case **reduce weight** and **resist corrosion**.
- ❖ Deployment duration **up to 18 months**.
- ❖ Cone interior is natural polyethylene to maintain **sample integrity**.
- ❖ Sample **data** includes **collection date/time**, **battery voltage**, and **temperature** before and after each sampling event.
- ❖ Optional Wet Sample Particle Divider (WSD-10) divides wet specimens into **five or ten equal parts**.

Sample schedule options: Specify the date and time of each sample, or a start date and fixed time intervals, or equally space samples between start and end dates.

Customized hardware and software: An optional Compass/Tilt sensor records a time history of tilt magnitude and direction. Other sensor options include transmissometers, scatterometers, and high accuracy pressure transducers.

Deployment: Stand-alone mooring or a large high-tension vertical array.

PARFLUX Sediment Trap Specifications

Dimensions	Height and Diameter	164 cm (64.5 in) x 91cm (35.8 in)
	Vertical Surface Area	0.66 m ²
Weight (without bridle)	In air, 500ml sample bottles empty	61 kg (134 lb)
	In air, 500ml sample bottles full	72 kg (159 lb)
	In water, 500ml sample bottles full	25 kg (55 lb)
Aperture/Funnel	Aperture Area	0.5 m ²
	Aperture Diameter	80 cm
	Baffle Material	Polycarbonate, 1.0 mm wall thickness
	Number of Baffle Cells	Approx. 368
	Baffle Cell Diameter	2.5 cm
	Aspect Ratio of Cell (h/d)	2:5
	Included Cone Angle	41°
	Internal Coating (liner)	Natural Polyethylene
Rotary Assembly	Number of sample bottles	21 or 13 (wider bottle)
	Standard Bottle Volume	250 or 500 ml
	Driving Motor Type	Electronic stepper motor
	Drive Train	Direct Gear Train
	Drive torque at the 2nd spur	30 kg / cm
	Time to Shift a Bottle	21 cup = 25 s / 13 cup = 38 s
	Gear Plate Diameter	21 cup = 47 cm (18.5 in) 13 cup = 45 cm (17.7 in)
Battery	Primary battery	14 "C" size alkaline cells
	Memory backup	9V alkaline battery
Frame	Material	Titanium, Ti-45 G-2
	Structure	Weldment
	Bridle Configuration	3 and 3 in-line
	Bridle eyes	1.29 cm insulated
Operation Conditions	Depth	10,000 m (Titanium pressure case)
	Minimum deployment period	One minute per bottle
	Max. continuous deployment	18 mos.
	Temperature	-2° to +50°C (electronics tested to -10°C)

Specifications Subject to Change without Notice



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