- Number of samples: 13 with 250 ml (500 ml bottle frame available).
- Performs well in both low and high flux environments.
- Depth-rated to 7,000 m (10,000 m option available).
- Titanium frame reduces weight and resists corrosion.
- For more information about this sampler, see the Sediment Traps pages at mclanelabs.com.

Parflux Mark 8 Sediment Trap

Application:

The Mark 8 Sediment Trap is a time-series instrument 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 sampling is part of ongoing global carbon cycle studies, paleoproxy and radionucleide investigations and environmental or pollution monitoring. At half the size of the traditional PARFLUX Mark78H Sediment Trap, this next-generation Trap is easy to deploy and performs well in both low and high flux environments.

Features:

Manufactured with the same field-proven components – electronics, rotator assembly, drive motor, baffle, collection cone – as the Mark 78H Trap. Non-volatile memory stores critical deployment data. 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. Methods for defining scheduled sampling are flexible. Specify the date and time of each sample, a start date and fixed time intervals, or equally space samples between start and end dates. Data for each sample event includes collection date/time and battery voltage.

Customized hardware and software:

Adaptive sampling is possible with optional ethernet communication. Other options include compass/tilt sensor which records a time history of tilt magnitude and direction, pressure sensor and external temperature sensor.

Deployment:

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

Mark 8 Sediment Trap Specifications

DIMENSIONS:	Diameter:	66 cm (26 in)
	Height:	116 cm (45.5 in)
WEIGHT APPROX (NO BRIDLE):	In air, 500 ml bottles full:	42 kg (93 lbs)
	In water, 500 ml bottles full:	21 kg (47 lbs)
COLLECTOR:	Number of samples:	13
	Bottle volume:	250 (500 ml option) 500 ml (13 samples, wider bottles)
	Aperture area and diameter:	0.25 m^2, 56.5 cm (22.2 in)
	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:	38 s
	Gear plate diameter:	34.5 cm
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 option 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