

SOFiA

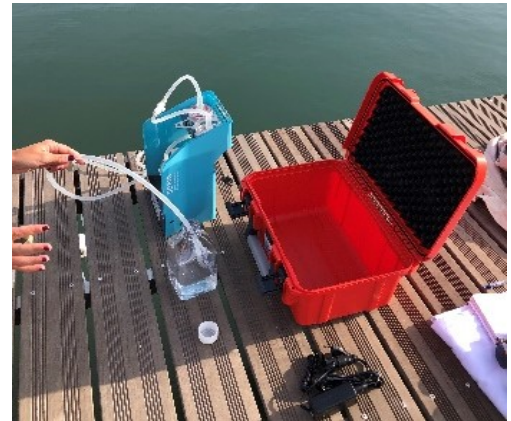
Autonomous Filtration Operational System

Water sampler for the field

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SOFiA is a handy peristaltic pump coupled with a filtration system for fast and standardized sampling of surface water. The device is lightweight, portable, rugged, easy to use, water-resistant and requires minimal maintenance.



Coming with a 2.5h-autonomy battery and a carrying case, it is usable for field work in a wide range of environments: rivers, lake, ponds, costal and sea waters, directly in water or from banks, platforms, boats etc.

●●● Key-Benefits of coupled sampling/filtration

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|---|---|
| Standardization of water volumes | > higher monitoring data quality |
| Water samples concentrated onto filters | > reduction volume/cost of transportation |
| Adaptability of filters | > multiple applications |

Filters	Applications
PC, PVDF, cellulose	Molecular biology, metagenomics, transcriptomics, proteomics
Glass microfiber G/FC	Analyses of chemicals, toxins, pigments etc
Mixed cellulose ester	Cell culture – colony counting
No filter	Cell enumeration

●●● Technical information

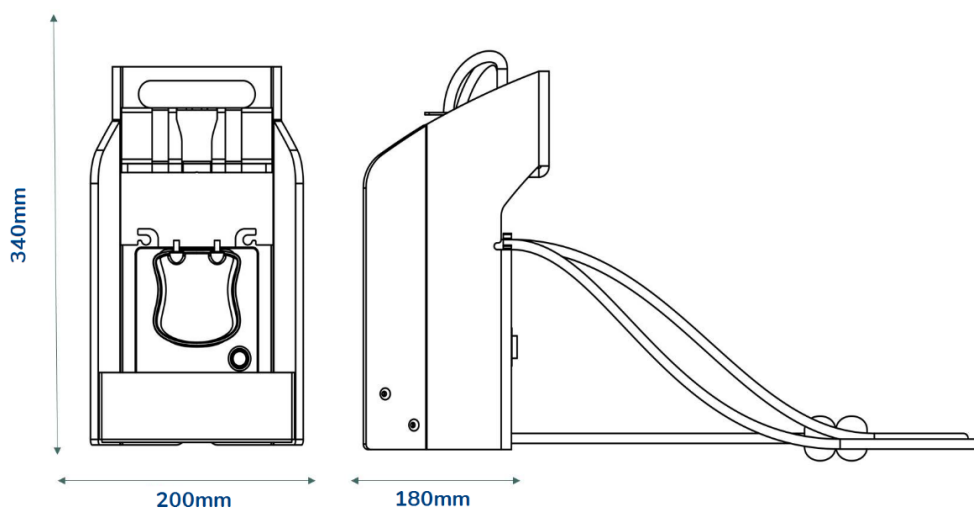
- Medical grade tubing/pipes
- Battery: 2.5h autonomy
- Flow: 1L/min
- Outlet flow pressure: 40psi
- Weight: 2.2 kg

●●● Accessories

- Floats, inlet filter
- Battery charger and plug
- Filter-holders for Ø 47-mm filters
- Robust carrying case

●●● Price: from 890€ (excl. tax.) - also available for rental.

Detailed technical information on next page →



Performance data		Unit
Flow rate	ml/min	1000 +/-8%
Flow direction		CW/CCW Reversible
Pump head material		Transparent PC
Output fluid pressure	psi	40 min
Recommended loading fluid pressure	psi	18
Input resistant pressure	psi	2.0 min
Vacuum suction	Kpa	30 min
Current @ rate flow	A	1.0 max
Operation temperature (environment)	°C	-10 ~ +50
Storage temperature (environment)	°C	-10 ~ +70
Loading noise (testing distance 30 cm)	dB	77 max
Net weight	kg	2.2
Outline dimension	mm	340(H) x 200 (L) x 180 (W)
Electrical data		
Battery capacity	mA	2600
Battery voltage	V	14.4
Charging voltage	V	16.8 ± 0.2
Charging current	A	1.3
Charging method		CC-CV
Accessories (included)		
Storage case material		Orange PC
Storage case dimension	mm	430(L) x 300(W) x 220 (H)
External tubes material		Transparent FDA Silicon
External tube diameter (internal/external)	mm	6/10
External tube length	mm	100
Accessories (in full-option version only)		
In-line filter-holder number and material		2x Transparent PC
In-line filter-holder diameter	mm	50
Filter-holder sterilization	°C	121 (Autoclave)
External tube length	mm	2000
Float Number and material		2x White/Orange, PC
Float internal/external diameter	mm	12/75

Microbia Environnement is a biotechnology company expert in environmental microbiology that develops innovative molecular biology tools (genetic biosensors) for the early detection of toxigenic microalgae and cyanobacteria responsible of harmful algal blooms in freshwater, brackish and marine ecosystems. As water sampling is crucial for the deployment of such powerful technologies, the SOFiA system has been designed to optimize the collection of microorganisms and their genetic material from environmental water. Beyond that specific use, the filtering system of SOFiA is easily adaptable to any water quality analytic workflows.