

# ENVIRONMENTAL AEROSOL SAMPLER

- FOR THE COLLECTION OF AEROSOLS IN THE ATMOSPHERE ON A FILTERING MEDIUM

## □ APPLICATIONS

- Sampling of solid pollutants for the analysis of :
  - radioactivity,
  - chemical analysis,
  - analysis by weight.
- Monitoring of the environment.
- Monitoring of the workplace.



- Instrument designed to be used outdoors.
- Low noise level for use inside buildings.
- In the basic version, a sampler equipped with a dual flow lateral pump.
- Electronic gas counter, temperature compensated.
- Display of both the total volume sampled and the instantaneous flow rate.
- Microcontroller management for ease of use.
- Choice of manual operation or pre-set programming for time and volume.
- Complies with draft French Standard NF M60-760.

FEATURES



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### Aerualics :

Maximum sampling flow rate :

- pump with blue filter :  $10 \text{ m}^3\text{h}^{-1}$ .
- pump with blue filter and iodine cartridge :  $6 \text{ m}^3\text{h}^{-1}$ .

### Sampling head :

The efficiency of the sampling head has been tested in a wind tunnel with dry particles of between 2 and 12  $\mu\text{m}$  and at wind speeds of 2 and 10  $\text{m}\cdot\text{s}^{-1}$ .

External / effective filter diameters : 53.5/47 mm.

Protective cover for filter.

### Volume measurement :

By electronically assisted gas counter.

Integrated temperature correction.

Gas counter resolution :  $0.01 \text{ m}^3$ .

Display from 0 to 999999  $\text{m}^3$  by increments of  $1 \text{ m}^3$ .

### Flow rate indication :

Deduce from the volume measurement.

Range : 2 to  $17 \text{ m}^3\text{h}^{-1}$ .

Resolution :  $1 \text{ m}^3\text{h}^{-1}$ .

Display from 0 to  $17 \text{ m}^3\text{h}^{-1}$  by increments of  $1 \text{ m}^3\text{h}^{-1}$ .

### Control :

14 bit RISC micro-regulator.

Display with LCD back-lit screen.

Dialogue with 2 push buttons.

Saving of parameters and date in case of mains power failure.

### Programming :

time :

Range : 1 to 9999 hours by increments of 1 hour.

volume :

Range : 1 to 999999  $\text{m}^3$  by increments of  $1 \text{ m}^3$ .

### Power supply :

220 V ~ single phase 50 Hz (with earth).

Power absorbed : 1 kW.

### Safety features :

- General protection by use of fuses.
- Pump protected by magneto-thermal trip switch.

### Temperature :

Operating temperature :  $0^\circ\text{C}$  to  $45^\circ\text{C}$ .

### Casing :

- Fibreglass and corrosion resistant stainless steel.

- Fitted with wheels, with retractable handle.

- Protection index: IP 54.

(not including sampling head)

### Size :

Height : 835 mm.

Width : 430 mm.

Depth : 610 mm.

Weight : 40 kg.

## ADDITIONAL OPTIONS

**Vacuum pump** as a replacement for the pump provided as standard.

Filters with high pressure drop can be used with a vacuum pump.

An integrated valve enables the sampling flow to be adjusted.

**Filters**

The following filters can be supplied :

- blue, yellow and pink fibrous filters ;
- membrane filters with a porosity of 1,2  $\mu\text{m}$
- AW 19 pre-filter.

**Active carbon cartridge**

For trapping of **iodine**.