



FILTER SAMPLING OF AIRBORNE AEROSOLS

Applications :

- Solid particle sampling for analysis radioactivity, weight contents, chemicals, pesticides, asbestos.
- Air monitoring in workplaces (Industry, Hospitals,...)
- Response on radiological incidents
- Expertise



PA 4000 with a 140 mm diameter filter



- In situ sampling on filters or cartridge, followed by laboratory analysis.
 - Centrifugal turbine for silent running.
 - Sampling flow rate adjustable from $1.5 \text{ m}^3 \cdot \text{h}^{-1}$ to $4.0 \text{ m}^3 \cdot \text{h}^{-1}$ according to filter type.
 - Mains powered.
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- Regulation of the sampling flow rate at the nominal value chosen by the user.
 - Protected Access by confidential code, no ON/OFF switch accessible.
 - 3 operating modes: continuous, timer, programmed.
 - Sampled volume and instant flow rate values available on display.
 - Data reading and parameter setting via keypad or *PaView* software.
 - Compliant with the French standard M 60-760 and IEC 61172 standard.



Specifications

Sampling media:

« pink » C577, « yellow » C357 paper filter,
Activated carbon cartridges.

Sampling head:

140 mm diameter
Sintered bronze filter support for homogeneous sampling
Fastening by screw ring or spring depending on model
Adjustable angle (45° or 90°)
Possibility of off-setting the sampling media

Sampling pump:

Centrifugal turbine, 24 VDC.
Maximal pressure drop: 80 mbar

Sampling flow rate:

Nominal flow adjustable from 40 to 100% of the
maximum value with **PaView** monitoring software,
available from www.algade.com

Factory setting 1.5 m³.h⁻¹

Max Value⁽¹⁾ 4.0 m³.h⁻¹

Adjustment to ± 0.5% of the nominal flow
Regulation every 60 seconds.

Tolerance on the measurement of the sampled volume
($\Delta V/V$) < 2%

Note⁽¹⁾: Value subject to filter compatibility

Sampling modes:

Continuous : manual sampling

Timer: Sampling for a set duration

Programmed: Weekly programming with a
daily operational range.

Parameters monitored:

Temperature: accuracy 0.5°C (absolute)

Power voltage : 0.1 V (resolution)

Monitoring:

14 bits RISC Microcontroller

Back-lit 4*20 LCD screen

Command by 2 push-button pad.

Protected Access by 4 digit confidential code

Data back-up in the event of power failure (sampled
volume and parameters).

Memory capacity:

1Mbytes Flash memory (Data back-up in the event of
power failure).

Environment :

-15°C to +45°C / 10-90 % relative humidity.

Protection rating: IP54.

Sound level: < 45dBA @ 2.0 m³.h⁻¹

Compliant with standards CEM EN 55022 and CEI
61000-4.

Housing :

Polycarbonate. L x l x h : 340 x 190 x 300 mm.

Weight: 5 kg

Alimentation :

Mains 230V, 50Hz

Power usage @ dP 80 mbar < 120W

Configuration and data download:

Data transfer via RS232C cable serial link or by modem /
GSM (19200 Bauds, 8bits, 1 stop).

The PA 4000T is supplied with:

- 230 V Power cable ,
- Serial link cable,
- Verification certificate.
- **PaView** Software



References to order :

1- Type of instrument	Reference
PA 4000	P-531-105
2- Filter media	Reference
Filter dia 140/125 mm	P-531-112
Cartridge	P-531-113
3- Accessories	Reference
45° elbow	P-531-114
90° elbow	P-531-115
Tube for filter off-setting	M-570-111
<i>(Up to 10 m according to sampler and medium)</i>	

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