



Aerosol and Iodine sampler

PA 300/1000/2000

➡ Filter sampling of airborne AEROSOLS

Applications :

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



- In situ sampling on filters, followed by laboratory analysis.
- 3 instruments are proposed:
 - PA 300, 300 l/h, battery powered, 8 hours autonomy,
 - PA 1000, 1.5 m³/h, battery powered, 4/6/12 hours maximal autonomy,
 - PA 2000, 2 m³/h, mains powered.
- Sample flow adjustable.
- Numerous sampling heads available, easily interchangeable (diameter 47 to 140 mm).
- Regulation of the sampling flow at the nominal value chosen by the user.
- Instruments equipped with efficient pumps receiving standard filters including membranes with high pressure drop.
- Protected Access by confidential code, no ON/OFF switch accessible.
- 3 operating modes: continuous, timer, programmed.
- Display of the values for the sampled volume and the instant flow rate.
- Data reading and parameter setting via keyboard or *PaView* software.
- Compliant with the French standard M 60-760 and IEC 61172.

ALGADE INSTRUMENTATION

Avenue du Brugeaud - BP46 - 87250 Bessines sur Gartempe - France
Tél : +33(0)5 55 60 50 00 Fax : +33 (0)5 55 60 50 59 e-mail : algade@algade.com
www.algade.com



Aerosol and Iodine sampler

PA 300/1000/2000



Specifications :

Sampling media:

« pink », « yellow » paper filter, fiberglass, membrane,
Activated carbon cartridges.

Sampling head :

Standard diameters 51, 78, 90, 130, 140 mm
Sub standard diameters allowed
Sintered bronze filter support for homogeneous sampling
Closure by screw ring.
Adjustable angle (45° or 90°)
Displacement of the sampling media allowed

Sampling pumps :

	PA300	PA1000	PA2000
Pompe	Rotary vane 12 V DC	Diaphragm vibrating 12 V DC.	Diaphragm vibrating 230V AC

Sampling flow rate:

Nominal flow adjustable from 30% to 100% of the maximum value by the **PaView** monitoring software, available from www.algade.com

	PA300	PA1000	PA2000
Factorysetting	300 l.h ⁻¹	1.5 m ³ .h ⁻¹	2 m ³ .h ⁻¹
Max. Value	400 l.h ⁻¹	1.6 m ³ .h ⁻¹	2.5 m ³ .h ⁻¹

Adjustment to $\pm 0.5\%$ of the nominal flow
Regulation every 36 seconds.
Tolerance on the measurement of the sampled volume ($\Delta V/V$)
< 0.8%

Programming :

Weekly programming with a daily operational range.

Checked parameters :

Temperature : accuracy 0.5°C (absolute)
Power voltage : 0.1 V (resolution)
Drawn current.

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).

Environnement :

0°C to +45°C / 10-90 % relative humidity.
Protection rating : IP54.
Sound level (dBA):

PA300	PA1000	PA2000
<55	<52	<60

Compliant with standards EMC EN 55022 and IEC 61000-4

Housing : Poly carbonate. L*1 : 340*190 mm.

	PA300	PA1000	PA2000
Height	190 mm	300 mm	300mm
Weight	5 kg	7 kg.	6 kg

Power supplies :

PA300 : Lead Battery 8 hours discharge
Integrated battery charger
PA1000 : Mains 230 V or battery, discharge 4/6/12 hours depending on battery
PA2000 : Mains 230 V single phase + ground, 100W.

Configuration and data download:

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

The PA 300 / 1000 / 2000 instruments are supplied with :

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



Reference to order :

1 - Type of instrument
PA 300 (300 l.h⁻¹ / Battery/ 8 hours discharge)
PA 1000 (1.5 m³.h⁻¹/Battery/ 4 hours discharge)
PA 2000 (2 m³.h⁻¹/Mains power supply)

Reference
P-531-100
P-531-101
P-531-102

3 - Accessories

45° elbow
90° elbow

P-531-114
P-531-115

Additional battery for PA1000
60% additional capacity + 1,5 Kg
LiFePO4 battery
300% additional capacity + 2.5 Kg

M-531-117
P-531-147

2 - Filter media
Filter dia 51/47 mm *
Filter dia 78 /70 mm*
Filter dia 90/80 mm *
Filter dia 130/120 mm *
Filter dia 140/125 mm *
Cartridge

Reference
P-531-110
P-531-130
P-531-111
P-531-129
P-531-112
P-531-113

(*)Indicate the useful diameter/outside diameter

ALGADE INSTRUMENTATION

Avenue du Brugeaud - BP46 - 87250 Bessines sur Gartempe - France
Tél : +33(0)5 55 60 50 00 Fax : +33 (0)5 55 60 50 59 e-mail : algade@algade.com
www.algade.com