

A yellow and grey FAI Silent Sequential Air Sampler is shown in a grand, ornate hall with a high, vaulted ceiling featuring intricate frescoes and a large chandelier. The device is positioned in the foreground, angled towards the viewer. The word 'SILENT' is overlaid in a bold, white, sans-serif font with a blue outline.

SILENT

INDOOR SEQUENTIAL AIR SAMPLER

SILENT *Sequential Air Sampler* is a sequential instrument specifically developed for particulate matter collection in indoor environment. To assure extended unattended sampling periods, up to 4 inlets (each one carrying one membrane filter) can be installed in the sequential unit and programmed for cycles in the desired sequence.



SILENT SEQUENTIAL AIR SAMPLER

INDOOR SEQUENTIAL AIR SAMPLER



FI5001 - SILENT meets the requirements of PM sampling aimed to the chemical characterization of the collected dust in domestic environments.



MAIN FEATURES

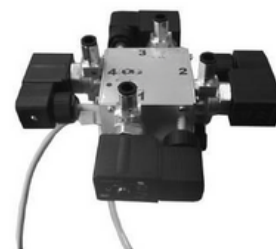
- Very **low noise** (35db), allowing PM collection also in bedrooms, classrooms, hospitals, museums, libraries, etc.
- **PM collection** on $\varnothing 47$ mm membrane filters, allowing subsequent chemical analyses
- **PM_{2.5}** or **PM₁₀** sampling inlet with the possibility to collect also the coarse fraction ($>2.5\mu\text{m}$ or $>10\mu\text{m}$)
- **Flow rate: 10 l/min**, able to assure the collection of a sufficient PM amount for the daily measurement of PM concentration and composition in indoor environments



Sampling Head



Impactor plate



Sequential Unit



Housing of the main filter



TECHNICAL SPECIFICATIONS

NOISE LEVEL	35 db
FLOW RATE	Adjustable in the range 2 – 12 liter/min
REPRODUCIBILITY OF THE FLOW RATE MEASUREMENT	2% of the measured value
RELATIVE UNCERTAINTY OF THE FLOW RATE MEASUREMENT	5% of the measured value
FLOW RATE SETTING	Manual adjustment with regulation valve in automatic flow control
SAMPLING INLET	PM_{2.5} at 10 Liter/min (optionally PM₁₀ at 10 Liter/min)
STANDARD FILTER CARTRIDGES	Standard ∅ 47 mm filter membranes for collecting PM_{2.5} (or PM₁₀) particulate matter to be placed in the filter-holder
ADDITIONAL FILTER CARTRIDGES	Additional standard ∅ 25 mm filter membranes for collecting particulate matter > PM_{2.5} (or PM₁₀) to be placed on the impactor plate
UNATTENDED OPERATION	4-filter capacity for unattended operation by using the sequential unit
DATA STORAGE	Data buffer containing 50 records (battery backed-up)
INPUT/OUTPUT	<ul style="list-style-type: none"> • Keypad/Display for data retrieval and user programming • USB interface for data retrieval and Firmware updating
POWER REQUIREMENTS	230 V (+- 10%) 50 Hz, 1.5 A
OPERATING CONDITIONS	Indoor environment
STORAGE CONDITIONS	Temperature between - 20 and + 60 °C
SIZE (W x D x H)	
SAMPLING UNIT	175 x 410 x 350 mm
PM_{2.5} INLET	∅ 65 x 95 mm
PM₁₀ INLET	∅ 65 x 110 mm
SEQUENTIAL UNIT	210 x 210 x 115 mm
WEIGHT	
SAMPLING UNIT	17 Kg
PM_{2.5} INLET	420 g
PM₁₀ INLET	500 g
SEQUENTIAL UNIT	2.1 Kg
STANDARD SYSTEM CONFIGURATION	Sampling unit, stand, sampling head
OPTIONAL ITEM	Sequential unit housing up to 4 sampling heads



ABOUT FAI INSTRUMENTS

The global industrial production, the economic growth and the rapid technological changes are creating new and complex problems of environmental degradation. Society is called upon to contribute, each one with its own skills and abilities, to solve these environmental damages.

FAI instruments operates in the field of air quality control and develops high-technology instruments for air pollution's sampling and monitoring in accordance with the latest European and International standards. The far-reaching knowledge acquired in this field and wide range of technological proposals available allows FAI Instruments to satisfy every requirements from our clients.

FAI Instruments has always had three main purposes:

1. Provide solutions to specific air quality control needs
2. Offer the best technologies and reliable valid products
3. Keep abreast of all the latest scientific developments in the field of air quality control

Today these goals can only be achieved by a company who possess a high level of professionalism, competence and specialization in its field. FAI Instruments totally satisfies these requirements, since in its activities it avails itself of:

- Highly professional human resources, who are studying and defining the problems, who are managing new projects and also supply consultancy, etc...
- Partnerships with Universities, public and private researches' agencies for advanced studies on particulate matter

FAI Instruments considers essential a support system which is efficient and prompt, aimed at guaranteeing professional services such as contracts and agreements, including:

- Installation and commissioning assistance
- Repair and spare parts supply
- Preventive maintenance plans
- Remote support assistance via modem monitoring and diagnostics
- Training courses for equipment technicians
- Training courses for equipment operators



Brand of



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