

# BAB-A4 2000

## Aerosol in air monitor

- BAB-A4 is an aerosol in air Monitor for survey of artificial beta and alpha isotope. It measures the instantaneous and averaged concentrations (volumetric activity) of such isotopes.

- Real time compensation of natural gamma background, Radon and Thoron
- Detection head optimized for:
  - excellent compensation quality
  - high detection efficiency
  - low residual dust retention
- Permanent calculation of the detection limits and comparison to the alarm thresholds,
- Automatic filter paper replacement
- Follow-up of Radon and Thoron concentrations
- Measurements buffer: 8 days and one month
- Automatic restart after main cut-off
- Gamma dose rate measurement
- Very good immunity to industrial EM perturbations



### ➤ Technical characteristics

**Detectors:** Dual Silicon diodes (gamma compensation)

**Alpha range:**  $10^{-3}$  to  $10^{+5}$  Bq.m<sup>-3</sup>

**Beta range:**  $10^{-2}$  to  $10^{+5}$  Bq.m<sup>-3</sup>

**Detection Limits (Bq/m<sup>3</sup>)** at 6  $\sigma$ , measuring time: 3 h, BKG: 100 nSv/h,  
Radon < 1 Bq /m<sup>3</sup>:

- 0.04 (beta)
- 0.01 (alpha total)

**Measuring time:** Automatic adaptation between 1 min and 4 hours with respect to the detection limits and background

**Display:** Internal and external

**Air flow:** 3.1 to 4.5 m<sup>3</sup>/ h with permanent control

**Dimensions & weight:**

- detection module: 50 x 30 x 60 cm<sup>3</sup> – 28 kg
- pump: 50 x 37x 28 cm<sup>3</sup>– 11 kg.
- mobile version: 50 x 111 x 44 cm<sup>3</sup>: 56 kg

**Power supply:** 230V/50Hz or 110V/60Hz; 400 VA – 4 A max

**Housing:** Weatherproof cabinet

**Temperature:**

- 5°C to + 45°C
- 20°C to + 45°C as an option

**Relat. humidity :** 100% without condensation

**Alarm:** local and/or remote connectable in chain

**Networking:**

- Software for parameters and datas downloading
- Remote control via MODBUS or RS 422 (option)