

## BAB-E

### $\alpha/\beta$ Environmental particulate monitor

- Static and dynamic compensations of ambient gamma radiation and natural radon/thoron progenies
- Robust and durable
- Uniform sample print for more accurate measurement
- Low dust retention sampling line
- Available as static or relocatable version
- Optional gamma dose rate or noble gas
- Optional local and remote alarm
- Compatible with DataExpert supervision software



**The BAB-E particulate monitor is specially designed for the continuous monitoring of  $\alpha$  and  $\beta$  artificial radioactive particulate activities.**

BAB-E is housed in a durable, weatherproof cabinet engineered to survive the harshest environmental conditions.

Innovative background and radon compensation technics allows more accurate measurement and minimize false alarm rate

Main applications are:

- monitoring of very low particulate concentrations in the environment
- working place monitoring, as a fixed or mobile unit
- environmental monitoring
- ventilation duct air monitoring
- follow-up of in-air radon and thoron daughter concentrations...

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## PHYSICAL CHARACTERISTICS

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- **Detector:** large area dual silicon diode, 2 x 360 mm<sup>2</sup>
- **Energy range:**  $\alpha$ : 2 to 10 MeV -  $\beta$ : 80 keV to 2 MeV, adjustable artificial  $\alpha$  ROI
- **Measuring range:**  $\alpha$ : 10<sup>-3</sup> to 5.10<sup>4</sup> Bq/m<sup>3</sup>;  $\beta$ : 10<sup>-2</sup> to 5.10<sup>4</sup> Bq/m<sup>3</sup>
- **Pneumatic circuit:** inlet: sampling nozzle
- **Outlet:** 32 mm nozzle
- **Pump flow rate:** 8 m<sup>3</sup>/h

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## ENVIRONMENTAL CHARACTERISTICS

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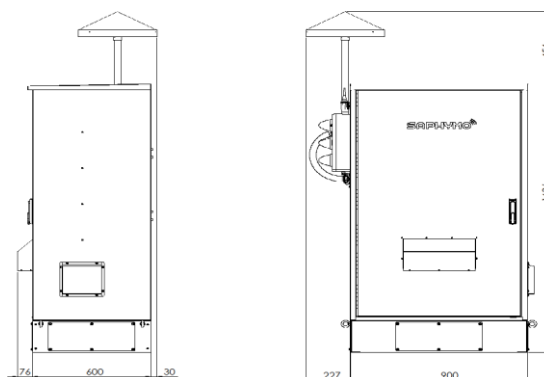
- **Temperature range:** from -20 ° C to +45° C
- **IP index:** IP 54
- Air conditioner as an option

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## MECHANICAL CHARACTERISTICS

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- **Overall dimensions:**
  - **Height:** 2140 mm
  - **Width:** 1127 mm
  - **Depth:** 706 mm
- **Total weight:** 150 kg



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## ELECTRICAL CHARACTERISTICS

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- **Power supply:** Mains single-phase 230V-50Hz
- **Consumption:** 1500 VA
- **Electromagnetic interference:**
  - **emission:** EN 61000-6-4
  - **immunity:** EN 61000-4-3, level 3

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## INTERFACES

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- **Display:** 3 lights and 1 horn (90 dB, 1 m distance, internal acknowledgement). Local alarm unit as an option
- **Outputs:**
  - relay outputs for local and remote display unit
  - 3 analog outputs 4 – 20 mA
  - 2 x RS 485 to JBUS Modbus protocol
  - Ethernet connection

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## ACCESSORIES & PRODUCTS REFERENCES

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- Wireless data link, (SkyLink radio, ShortLink radio)
  - Gamma GM-xN probes for environment dose rate monitoring
  - Compatible with DataExpert Supervision software
  - Optional: detector head lead shielded reducing background influence in accident conditions
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