

## PAB-2

### $\alpha$ and $\beta$ smear and filter test monitor

- Autonomous and user-friendly
- Measuring/recording of the external background noise
- Real-time monitoring
- Dual proportional counter, sealed Ar-CO<sub>2</sub>
- Adjustable contamination thresholds
- Surface contamination (Bq/cm<sup>2</sup>)
- Audible alarm
- Parameter access restricted by a key
- Printer and PC outputs



The PAB-2 low background counter allows you to measure  $\alpha$  and  $\beta$  contamination from a surface. The smear test, with a diameter of 51 mm, and the filters are controlled and sorted according to the radiological thresholds and preset uncertainty.

When no sample is placed, the gamma background is measured. Measuring time is then automatically adjusted according to this background value and with respect to the detection limit.

The PAB-2 is used for testing the contamination on transport casks, parcels, luggage, ..., any material leaving from a controlled area or nuclear site.

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## PHYSICAL CHARACTERISTICS

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- **Detector:**
  - Dual sealed Ar-CO<sub>2</sub> detector, window diameter Ø 51 mm, sensitive to  $\alpha$  and  $\beta$  radiation, lead shielding
  - Background noise in normal environment (100 nSv/h):
    - Background noise for  $\alpha$ : 0.002 c/s
    - Background noise for  $\beta$ : 0.3 c/s
  - Efficiency:
    - $\alpha$  (Pu 239) > 0.2 c/s/a/s/2p
    - $\beta$  (Co 60) > 0.14 c/s/Bq
- **Processing unit:**
  - Electronics based on industrial microprocessor
  - Display on large LCD screen
  - Anticoincidence algorithm
  - Memorization of the 3,840 last values time stamped on a flash memory
  - Maintenance mode allowing quality control of the dual detector

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## ENVIRONMENTAL CHARACTERISTICS

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- **Operating temperature:** +5° C to +40° C
- **Storage temperature:** -10° C to +65° C

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## MECHANICAL CHARACTERISTICS

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- **Weight:** 20.5 kg
- **Size:** 412 x 342 x 246 mm (l x w x h)

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## ELECTRICAL CHARACTERISTICS

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- **Main power supply:** 110V/230 V ; 50-60Hz

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## INTERFACES

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- **RS232 output** (printer and computer)

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## ACCESSORIES & PRODUCTS REFERENCES

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- PAB-2S for improved alpha efficiency (see above)
- PAB-2R with additional shielding to reduce background at high dose rate
- Internal battery with charger – 8-hour autonomy
- External power supply +14.4 VDC1A with car adapter
- Drawer to accommodate a tray with dimensions Ø 56 mm x 3 mm maximum (on request)



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