

PAB-3R

α and β smear test monitor for large wipe

- Autonomous and user-friendly
- Measuring/recording of the external background noise
- Real-time monitoring
- Dual proportional counter, sealed Ar-CO₂:
 1. For measuring α and $\beta\gamma$ contamination
 2. For measuring and compensating γ background
- Adjustable contamination thresholds
- Surface contamination (Bq/cm²)
- Audible alarm
- Parameter access restricted by a key
- RS232 output



The PAB-3R low background counter allows you to measure α and β contamination from a surface. The wide area smear tests are controlled and sorted according to the radiological thresholds and preset uncertainty.

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

The PAB-3R is used for testing contamination on transport casks, parcels, luggage,...., any material leaving from a controlled area or nuclear site.

PHYSICAL CHARACTERISTICS

- **Detector:**
 - Dual sealed Ar-CO₂ detector, window 163 x 163 mm, sensitive to α and β radiation, lead shielding
 - **Efficiency (indicative values with a \varnothing 44mm source):**
 - α (Am 241): 6%
 - β (Co 60): 14%
 - **Energy range:**
 - α > 3 MeV
 - β > 40 keV
- **Processing unit:**
 - Electronics based on industrial microprocessor
 - Large LCD Display Screen
 - Anticoincidence algorithm
 - Records the last 3,840 samples
 - Maintenance mode allowing to control quality of the double detector
- **Detection limit: β (Co 60)** **Better** than 0.4 Bq/cm² in a 1 μ Sv/h background
Response time <10 seconds; Sampling rate: 10%; Wiped surface: 300 cm²

COMPLIANCE TO STANDARDS

- Directive 92-31/CEE
- Directive 93-68/CEE
- EMI, level 3 according to NF 6100-4-4, 89-336/CEE
- IEC 61010-1

ENVIRONMENTAL CHARACTERISTICS

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

MECHANICAL CHARACTERISTICS

- **Dimensions Single drawer:** suitable for max. 163 x 163 mm wipe test
- **Weight:** 145 kg
- **Size:** 412 x 342 x 246 mm (w x d x h)

ELECTRICAL CHARACTERISTICS

- **Main power supply:** 230V-50Hz
- **Consumption:** 25VA
- **Main fuses:** 2 fuses, 1A, type 5 x 20

INTERFACES

- **RS232 output** (data compatible with hyperterminal and datasheets)

ACCESSORIES & PRODUCTS REFERENCES

- Battery
- Printer

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