

HAND-, FOOT- & CLOTHES MONITOR

α , β AND γ CONTROL AREA FOR PET SYNTHESIS,
RADIONUCLIDE AND QUALITY CONTROL LABORATORIES

- ALPHA-, BETA-, AND GAMMA SENSITIVE, SELECTIVE DETECTION
- 2 HAND AND 2 FOOT DETECTORS, 1 BODY DETECTOR
- SCINTILLATION PROBE
- NO COUNTING GAS
- NUCLIDE SPECIFIC DISPLAY AND ALARM



HFC is a hand-, foot- and clothes-monitor for the detection of α , β and γ contamination. The detected events are counted over time and displayed digitally in c/s, Bq or Bq/cm². Measurement results can be stored and transferred by RS 232 C.

HFC is using 2 scintillator materials : ZnS for detection of alpha-radiation, plastic scintillator foil for detection of beta- and gamma-radiation. The large area detector window is permeable for low energy alpha radiation like ^{241}Am , beta radiation like ^{14}C . The thin window can be replaced easily by the user and measurements can be continued without delay. The light flashes generated by the alpha or beta/gamma radiation can be separated by pulse analysis. Nuclide specific sensitivity is calculated and alarm values are preprogrammed.

Efficiency for various nuclides

- ^{14}C : 8%
 - ^{60}Co : 23%
 - $^{99\text{m}}\text{Tc}$: 5%
 - ^{241}Am : 25%
- Etc.



Detector display

Technical specifications

Detector type	thin layer plastic scintillator with ZnS coating
Detector size	hand 375 cm ² (15 x 25 cm) - foot 450 cm ² (15 x 30 cm)
Background	alpha 0.1 c/s - beta 15-25 c/s
Background subtraction	adjustable background measurement time
Measurements electr.	integrated PC 104
Keyboard	foil keyboard
Alarm	separately adjustable for each detector
Result display	selectable in c/s or nuclide related in Bq/cm ²
Measurement time	adjustable in seconds
Display	large area graphical color LC display, 10,4"
Power supply	230 V, 50 Hz
Interface	RS232C



Physical specifications

Dimensions :	W1160 x D830 x H700 mm (W38,06" x D27,23" x H22,97")
Weight :	45 kg (99,2 lbs)

