

# COMO 170

## PORTABLE CONTAMINATION AND RADIATION MONITOR

FOR DETECTION OF  $\alpha$ ,  $\beta$  AND  $\gamma$  SURFACE CONTAMINATION

- ALPHA-, BETA-, AND GAMMA SENSITIVITY, SELECTIVE DETECTION
- ONE DETECTOR, LARGE AREA
- EFFICIENT FOR VARIOUS NUCLIDES
- SCINTILLATION PROBE
- NO COUNTING GAS



CoMo 170 is a portable contamination monitor for  $\alpha$ ,  $\beta$  and  $\gamma$  surface contamination. The detected events are counted over time and displayed digitally in c/s, Bq or Bq/cm<sup>2</sup>. Measurement results can be stored and transferred by RS 232 C.

CoMo 170 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  $^{238}\text{U}$ , beta radiation like  $^{14}\text{C}$ . 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

- $^{14}\text{C}$  : 14%
  - $^{32}\text{P}$  : 25%
  - $^{38}\text{Cl}$  : 42%
  - $^{18}\text{F}$  : 18%
- Etc.



#### Technical specifications

Detector type	thin layer plastic scintillator with ZnS coating
Detector size	170 cm <sup>2</sup>
Background	alpha 0.1 c/s - beta 15-25 c/s
Background subtraction	adjustable background measurement time
Measurements electr.	μ-controller supported electronics
Keyboard	foil keyboard 5 function keys
Alarm	acoustic alarm, separately adjustable for each nuclide
Result display	25 nuclides, preset calibration factors, user specific nuclides may be added, integrated auto-calibration
Measurement time	continuous, for stationary application, adjustable in seconds
Display	large area graphical LCD display, 128 x 64 pixels with adjustable illumination duration
Power supply	2 AA Mignon or rechargeable batteries (can be charged by charge unit in stationary mode via wall station with inductive charge conservation)
Operating conditions	-10 to +40 °C, no condensation
Interface	RS232C

#### Physical specifications

Dimensions	W280 × D125 × H135mm (W9,19" × D4,01" × H4,43")
Weight	0,75 kg (1,65 lbs)