

PORTABLE CONTAMINATION MONITOR

CoMo-170/CoMo-170 F

with thin-layer plastic scintillation detector for highly sensitive measurement of α -, β - and γ -contaminations

Product features

- ▲ Indication of measured values either in cps or nuclide referred in Bq and Bq/cm², digital and analog (bargraph) indication of measured values
- ▲ The measuring system automatically identifies the existence of α -radiation.
- ▲ Calibrated nuclide file, free extensible (user-specific nuclides can be added)
- ▲ Settings and important measurement parameters are secured by a code word.
- ▲ Data storage
- ▲ Integrated calibration software
- ▲ Possibility to connect external detectors, e.g. for dose rate measurement, automatic detector identification
- ▲ USB and RS-232 interface for PC system
- ▲ Stationary use of CoMo-170 in wall station (option) with power supply

An essential advantage of the CoMo-170/CoMo-170 F is the detector technology, which completely works without gas filled or gas flow proportional detectors, using a thin-layer plastic scintillation detector with ZnS-coating. So it is possible to perform α -, β - and γ -measurements with only one detector. No expensive costs for consumable gas or for the repair of Xenon detectors. Replacement of a defective foil can be effected by the user himself.



Technical Data

Detector type:	Thin-layer plastic scintillation detector with ZnS-coating
Detector size:	170 cm ² , detector surface mechanically sheltered by a protective grid
Background counts:	α : approx. 0.1 cps β/γ : approx. 15 – 20 cps
Background counts subtraction:	With adjustable measuring time
Keyboard:	5 function keys
Alarm:	For each nuclide separately adjustable, acoustic alarm
Indication of measured values:	Either in cps or nuclide referred in Bq or Bq/cm ²
Nuclides:	25 nuclides, preset calibration factors, variable acc. to user requirements (user-specific nuclides can be added), integrated auto-calibration
Measuring time:	Continuous (adjustable attenuation), for stationary use adjustable in seconds
Display:	Large graphic LC-display (128 x 64 pixels), with illumination, illumination time adjustable
Power supply:	2 batteries, AA Mignon or corresponding accumulators (NiCd, NiMH), rechargeable by recharger unit (option) or by wall station (option) during stationary use
Temperature range:	-10°C up to +40°C special version down to -20°C
Dimensions:	280 mm x 125 mm x 135 mm (with handle)

Weight: Approx. 800 g (batteries included)
Housing: Ergonomically shaped plastic housing
Interface: - USB and RS-232 interface
- Charge/mains supply
- External detectors, wall station and smear test station

Efficiencies for various radionuclides

average values of measurements with 100-cm²-substances

C 14	approx. 14 %	In 111	approx. 8 %
F 18	approx. 18 %	I 123	approx. 7 %
P 32	approx. 25 %	I 125	approx. 12 %
S 35	approx. 5 %	I 131	approx. 21 %
Cl 36	approx. 42 %	Cs 137	approx. 35 %
K 40	approx. 30 %	Au 198	approx. 23 %
Co 57	approx. 7 %	Tl 204	approx. 43 %
Co 60	approx. 27 %	Am 241 α	approx. 22 %
Sr 89	approx. 27 %	Pu 238 α	approx. 12 %
Sr 90/Y 90 (referred to Sr 90)	approx. 42 %	U 238 α	approx. 26 %
Tc 99m	approx. 3 %		

CoMo-170 F especially for the use in NBC units, at fire brigades or civil protection.

Different technical data:

- ▲ Indication of measured values in cps (not nuclide referred in Bq or Bq/cm²)
- ▲ Software: fire brigades specific adaption
- ▲ All functions secured by a code word
- ▲ Additional alarm threshold for triple background count
- ▲ No external detectors
- ▲ No charging function

Optional accessories



CoMo in a floor control device



CoMo in a smear test measuring station

CoMo with connected detector for dose rate measurement



stationary use of the CoMo system in an active wall station

Further accessories, cases and spare parts on request.