

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

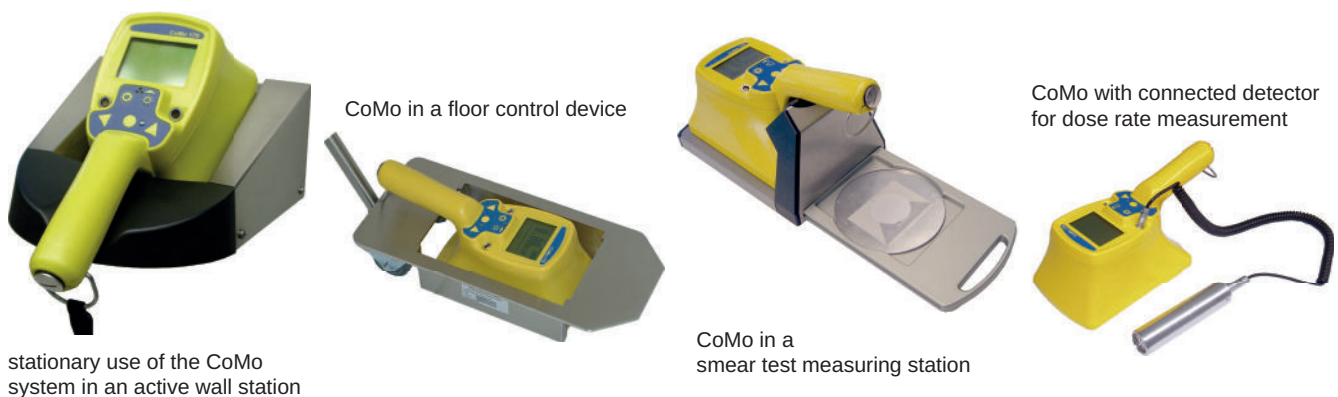
Efficiencies for various radionuclides			
average values of measurements with 100-cm ² -substances			
C 14	approx. 14 %	In 111	approx. 8 %
F 18	approx. 18 %	I 123	approx. 7 %
P 32	approx. 25 %	I 125	approx. 12 %
S 35	approx. 5 %	I 131	approx. 21 %
Cl 36	approx. 42 %	Cs 137	approx. 35 %
K 40	approx. 30 %	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



Further accessories, cases and spare parts on request.