

05-2022 Subject to change

# PORTABLE CONTAMINATION MONITOR CoMo-170/CoMo-170 F

with thin-layer plastic scintillation detector for highly sensitive measurement of  $\alpha$ -,  $\beta$ - and  $\gamma$ -contaminations

## **Product features**

- Indication of measured values either in cps or nuclide referred in Bq and Bg/cm², digital and analog (bargraph) indication of measured values
- The measuring system automatically identifies the existence of  $\alpha$ -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  $\alpha$ -,  $\beta$ - and  $\gamma$ -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<sup>2</sup>, detector surface mechanically sheltered by a protective grid

**Background counts:** α: approx. 0.1 cps

 $\beta/\gamma$ : 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<sup>2</sup>

**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)





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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

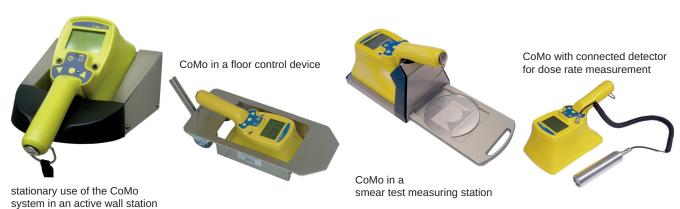
Efficiencies for various radionuclides average values of measurements with 100-cm²-substances			
C 14	approx. 14 %	In 111	approx. 8 %
F 18	approx. 18 %	I 123	approx. 7 %
P 32	approx. 25 %	I 125	approx. 12 %
S 35	approx. 5 %	I 131	approx. 21 %
CI 36	approx. 42 %	Cs 137	approx. 35 %
K 40	approx. 30 %	Au 198	approx. 23 %
Co 57	approx. 7 %	TI 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.

