

Portable Contamination Monitor

Product Code: 2010-09



WESTMINSTER
GROUP PLC



Key Features



170–300cm² detector size



3 versions available



800g total weight

Overview

Working with open unsealed radioactive material can lead to contamination of persons, equipment and surfaces.

Therefore, regular controls are mandatory to ensure the safety of humans and the environment. Mobile contamination monitors such as the CoMo-170 or CoMo-300 are used for direct and indirect contamination measurements. Combined with dedicated accessories, these powerful measuring devices provide a complete solution for contamination control and clearance measurements.

Features

- No gas-filled or gas-flushed detector
- 2 in 1 instrument: α - and β -/ γ -contamination measurement with only one detector, no detector change required
- Large detector surface allows fast and effective monitoring
- Combination of robust design and high efficiency
- Very light device with ergonomic housing design allows one hand operation
- Background measurement and subtraction
- User-friendly menu structure operated by just 5 function keys
- Various accessories



Specifications

Detector Type

- Thin-layer plastic scintillation detector with ZnS coating, two aluminium vaporised Mylar foils (2 μm each), a fine-mesh honeycomb grid and a protective cover
- Alpha- and beta-/gamma-separation via count height analysis

Detector Size

- CoMo-170: 170 cm^2
- CoMo-300: 300 cm^2

Detector Unit

- Autonomous, easily exchangeable assembly, integrated in the bottom of the overall housing

Background

- CoMo-170: α approx. 0.1 cps, β/γ approx. 9–13 cps
- CoMo-300: α approx. 0.1 cps, β/γ approx. 20–30 cps

Background Subtraction

- Automatic background measurement and subtraction, background measuring time programmable
- Option of net or gross measurement

Measuring Electronics

- Microcontroller-based electronics

Keyboard

- Foil keyboard with 5 function keys alarm
- Individually configurable for each type of measure
- Visual warning
- Acoustic warning (approx. 80 dB at a distance of 30 cm)
- Optional vibration alarm
- Earphones can be connected for audible feedback in noisy or sensitive environments

Nuclides

- Preset calibration ex works
- Settings and calibrations adjustable by user
- Auto-calibration function
- Library for up to 40 nuclides

Measuring Time

- Continuously in search mode or with user-configurable measuring time

LC Display

- Large-area graphic LC display (128 x 64 pixel)
- Automatic illumination via photocell (LDR) or adjustable fixed duration

Power Supply

- 2 batteries (AA battery LR 6) or rechargeable batteries (NiMH)
- Approx. 25 h operating time
- Can be recharged via charger or wall station

Nominal Operating Range

- $-10\text{ }^{\circ}\text{C}$ to $+40\text{ }^{\circ}\text{C}$ (special version down to $-20\text{ }^{\circ}\text{C}$)
- Up to approx. 90 % RF (non-condensing)
- IP 54

Dimensions

- CoMo-170: 280 x 125 x 135 mm (L (with handle) x W x H)
- CoMo-300: 318 x 157 x 172 mm (L (with handle) x W x H)

Weight

- CoMo-170: approx. 800 g (including batteries)
- CoMo-300: approx. 1,000 g (including batteries)

Housing

- Ergonomically shaped plastic housing

Interfaces

- USB interface (for connection with PC), battery charge/mains operation, external detectors, active wall station/wipe test station

Special Versions

- CoMo-170 DL: with additional GM counter tube integrated into the front for measurement of the dose rate
- CoMo-170/-300 G: with a thicker plastic scintillation detector for pure gamma measurements
- With magnetic field sensor (only CoMo 170)
- CoMo-170 BL: no PC interface for meeting the highest IT-security requirements