

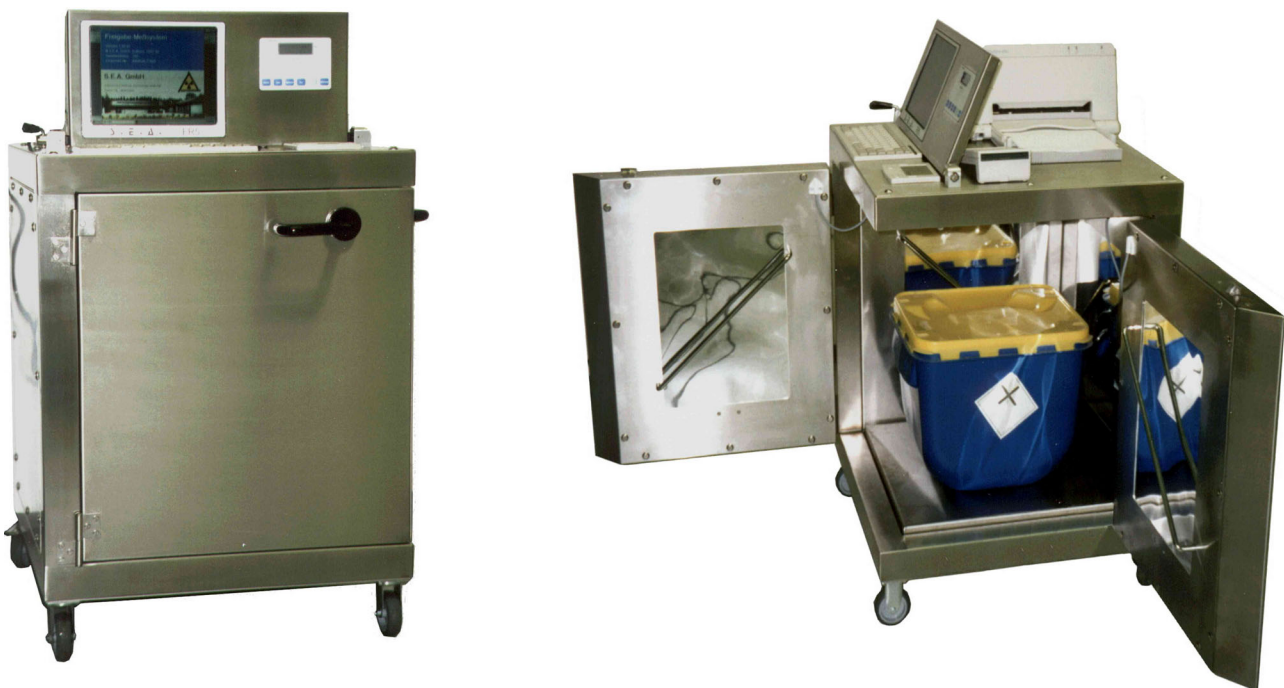


**PRODUCT INFORMATION**

Certified according DIN EN ISO 9001



# Clearance Monitor



The Clearance Monitor serves for checking waste bags or boxes and contaminated clothing or utensils in Nuclear Medicine.

Because mainly short life isotopes are used in nuclear medicine most waste can be considered inactive after a certain storage time.

The Clearance Monitor makes possible to check if the activity value of the waste is below the levels for restricted disposal, which have been established by the authorities, and to store and record the measurement results. The monitor features an accounting software with calculation of activity decay and suggested date for repetition of measurement for final disposal.

The cleared waste can be disposed of as regular waste which means a considerable cost reduction.

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# Clearance Monitor

## Hardware Characteristics

- Clearance Monitor with large measurement chamber for measurement of waste bags or boxes
- One or two detectors per side depending on monitor version and one at bottom of chamber
- Monitor versions with NaI scintillation detectors for gamma-measurement or with thin, large-area plastic scintillation detectors for beta-contamination measurement
- Each detector with coupled photo multiplier tube and high voltage supply
- Lead shielding 5 mm
- Two doors for easy loading of chamber
- Integrated or external weigh scale with serial interface, 0,1 kg – 50 kg, depending on monitor version
- Housing made of stainless steel
- With transport rolls for mobile use
- Mains supply 100 – 240 VAC 50/60 Hz
- Electronics based on industrial grade Pentium
- Colour liquid crystal display, 12,1" TFT
- ASCII-keyboard with mouse pad
- Acoustical and optical alarm
- Parallel interface for desk jet printer and serial interface for label printer

## Software Characteristics

- WINDOWS-based software
- User guided system software for registration of measurement values and calculation of activity
- Digital indication of measurement value in cps or nuclide related in Bq
- Indication of measurement result in graphical form
- Measurement data base
- Accounting software for waste bags/boxes and calculation of activity decay and date for repetition of measurement for final disposal
- Password protected menu level for setting parameters
- Nuclide selection, freely programmable
- Calibration software and quality assurance

Clearance Monitors with NaI - Scintillation Detectors		
Monitor Type	FR-5 NaI	FR-9 NaI
Type of measurement	$\gamma$ - measurement	$\gamma$ - measurement
Number of detectors	5	9
Dimension of detector	70 mm x 70 mm x 13 mm	70 mm x 70 mm x 13 mm
Chamber dimensions (width x depth x height)	50 cm x 50 cm x 59 cm	50 cm x 50 cm x 89 cm
Weigh scale	integrated	integrated
Overall dimensions, approx.	69 cm x 69 cm x 110 cm	69 cm x 69 cm x 140 cm
Weight of monitor, approx.	130 kg	185 kg

Clearance Monitors with thin, large-area Plastic Scintillation Detectors		
Monitor Type	FR-5 PVT	FR-9 PVT
Type of measurement	$\beta$ - measurement	$\beta$ - measurement
Number of detectors	5	9
Dimension of detector	150 mm x 300 mm	150 mm x 300 mm
Chamber dimensions (width x depth x height)	45 cm x 45 cm x 56 cm	45 cm x 45 cm x 85 cm
Weigh scale	external	external
Overall dimensions, approx.	69 cm x 69 cm x 110 cm	69 cm x 69 cm x 140 cm
Weight of monitor, approx.	130 kg	185 kg

We reserve the right to change specifications!

