



VF NUCLEAR



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POWER PLANTS



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MANAGEMENT



CALIBRATION  
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NUCLEAR  
MEDICINE



## FRM-24

# FREE RELEASE MONITOR

## MAIN ADVANTAGES

- Automatic evaluation of measurement
- Detection of gamma radionuclides in the released material
- Tunnel passage with 4 scintillation detectors

## PURPOSE

FRM-24 monitor is designed to measure the activity of radionuclides that may be present in the material released to the environment. It is possible to measure gamma radiation in material that passes through the measuring tunnel.

Based on the measurement result, it is possible to decide whether the material is to be free released into the environment, decontaminated, or classified and disposed of as radioactive waste.

FRM-24 consists of the following basic parts:

- Loading roller platform with integrated weigh scale
- A measurement chamber:
  - 4 plastic scintillation detectors
  - 50 mm lead shielding
  - Inner stainless steel lining
  - Conveyor belt with electric drive
  - Control unit with LED information display
  - Visual indication of the monitor status and measurement results
- Unloading roller platform

The FRM-24 measures the material as follows:

- Placing the measured material on the loading platform
- Identification of measured material: type, packaging, degree of filling, selection of a radionuclide vector (fingerprint)
- Weighing of measured material with the possibility of package weight deduction
- Determining measurement mode:
  - Static: the material is measured without movement in the measuring tunnel
  - Dynamic: the material moves on the belt through the tunnel
- Measurement results:
  - Weight of material
  - Total activity and total specific activity
  - Detector response distribution
- Automatic measurement evaluation to determine whether or not the material can be released into the environment or not

# FRM-24

## FREE RELEASE MONITOR

### SPECIFICATION

Model	K0906-03
Detectors	4 plastic scintillator
MDA ( <sup>137</sup> Cs)	600 Bq
Lead shield thickness	50 mm
Belt feed rate	10 – 20 mm/s
Measuring tunnel dimensions (W × H)	630 × 420 mm
Monitor dimensions (W × H × D)	1695 × 1557 × 1629 mm
Measured material weight	3 – 100 kg
Measuring unit weight	3300 kg
Power supply	230 V / 50 Hz

### OPTIONAL ACCESSORIES

Reference source (Cs-137, 350 kBq)
ID card or chip reader
Transport castor wheels
Printer to print measurement reports

### RELATED PRODUCTS

<b>WAM</b>	Waste Assay Monitor
<b>FRM-02</b>	Free Release Monitor
<b>HF</b>	Hand-Foot Contamination Monitor
<b>PAM-100</b>	Portable Activity Meter
<b>PAM-170</b>	Portable Activity Meter
<b>FCM-11</b>	Frisking Contamination Monitor



FRM-24 side view



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Specification subject to change without prior written notice.

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