

SPECIFICATION

NuFMS-PL250

Object Contamination Monitor



The NuFMS-PL250 device is used for rapid monitoring of contamination on small to medium size objects. Its shielded chamber allows to reach low level of beta and gamma detection and advantageously replaces manual frisking.

BENEFITS

- *Cost effective object monitor*
- *Equipped with a plastic liner for easy decontamination*
- *Mobile unit*
- *250 liters chamber*

KEY FIGURES

5 detectors

plastic scintillators

25 mm Pb shield

on 6 sides

200 Bq

detection limit (¹³⁷Cs)

SPECIFICATIONS

Type of radiation monitored	beta, gamma
Upper limit of gamma radiation (¹³⁷ Cs)	2MBq
Detection Limit (¹³⁷ Cs)	200 Bq (60 seconds, background 100 nSv/h)
Detection Limit (⁶⁰ Co)	50 Bq (60 seconds, background 100 nSV/h)
Number of detectors	5
Detector size	500 x 500 x 50 mm
Electronics	SCA-T (4-channel counter)
Shielding	25 mm Pb lead (all 6 sides)
Exterior finishing	Powder coating in RAL7035 (light grey) and other colors available upon request.
Alarming device	Multicolored signal post (3 colors, adjustable audible alert)
Background measurement mode	Adjustability: automatic or manual, as needed
Measurement mode of an object	Adjustable: automatically or by button on demand
Measurement time	Automatically adjusted based on the specified detection limit (restricted to the maximum measurement duration) or a set time.
Door	1
Dimensions of the measuring chamber (height x width x depth)	700 x 600 x 600 mm
External dimension (with frame)	2000 x 900 x 700 mm



PRODUCT DESCRIPTION

The device consists of a lockable chamber on a support frame. The inside is equipped with a plastic liner for easy decontamination. Inside the chamber, there are 5 detectors for ionizing radiation. Lead plates shield the chamber from all directions. A beacon, the screen and controls are located in the top section. Positioned in the top section are indicators, a screen, and controls. Connection ports for power supply, LAN, and RS485 are situated in the rear left corner. Power supply and assessment devices are located under the lid.

OPERATION

To begin the process, objects are placed inside the device after opening the door. The measurement starts after closing the door and finishes either after the maximum time interval has passed or when the desired detection limit is achieved, which can be adjusted by the user. If contamination is detected (following a statistically significant increase in the number of counts compared to background measurement), the operator is warned through audiovisual signals. The background reference level without the object can be automatically measured or can be set by the health physicist. The device also allows to detect any internal contamination following removal of the object.