

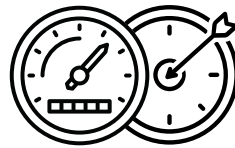


MHOS-S

CONTAMINATION MONITOR FOR HOSPITAL WASTE



Highly adaptable
systems



Fast and accurate
measurement procedure



Simple
user interface

Detector: plastic
scintillator

Touch-screen panel PC for
data acquisition and analysis

Automatic background
subtraction

Print of measurement reports
on coloured labels

Activity concentration
calculation

The **MHOS-S** gamma contamination monitor is designed to easily measure the level of radioactive contamination in hospital wastes contained in small bins or bags.

MHOS-S is composed of:

- a vertical structure housing the detector and the control panel PC
- a base platform equipped with a digital scale

MHOS-S performs a static measurement of the material, which is automatically started by the system once the waste container is placed upon the scale platform. The weight and activity data are then processed to provide the radioactive concentration, expressed in Bq or Bq/g.

Through the built-in touch-screen panel PC, the user can easily interact with the visualization software and manage the data, as well as the measurement parameters (such as the alarm threshold).

If a contamination alarm is detected, the system provides luminous and acoustic signals through the built-in alarm column.

MHOS-S is also equipped with printers, which produce a report label of each measurement (green or red for non-contaminated and contaminated waste, respectively).

A barcode/QR reader is also included, allowing fast and precise tracking of the monitored wastes.

The system performs an automatic subtraction of the environmental background. Each alarm event is archived and displayed in a graphical form.

The MHOS-S monitors have also an auto-diagnosis feature which continuously checks the electronics status.

The system is able to perform high-sensitivity, continuous measurements according to a pre-set integration time, minimizing the false-negative and false-positive events. MHOS-S can detect concentrations $< 1 \text{ Bq/g}$ in 5 kg of material with a 30 seconds measurement.

TECHNICAL SPECIFICATIONS

Control console

- Computer: industrial panel PC
- Display: 10" LCD touch-screen (typical)
- Ethernet port for remote PC communications
- Label printers (green and red labels, according to the measurement result)

Detection units

- Detector: 1 plastic scintillator $50 \times 20 \times 5 \text{ cm}$
- Lead shielding on the external sides, 10 mm thick
- Energy range: $35 \text{ keV} \div 2 \text{ MeV}$

Housing

- 1 steel column
- Dimensions (HxWxD): $200 \times 58 \times 62 \text{ cm}$
- Mobility: 2 fixed wheels, 2 pivoting wheels

Digital scale

- Maximum payload: 150 kg
- Weighting resolution: 50 g
- Platform dimensions: $40 \times 40 \text{ cm}$

Alarm column - ALU

- LED with siren
- White: ready, Yellow: measurement ongoing, Green: not contaminated, Red: alarm



MHOS-S operative example



MHOS-S user interface

ACCESSORIES AVAILABLE UPON REQUEST

- Warranty extension from 12 months to 24 months

