

ISOMED 2154 WASTEWATER COUNTER



The ISOMED 2154 Wastewater Counter is used to measure the activity of radionuclides in wastewater from nuclear medicine facilities and radioiodine therapy stations.

The wastewater is collected in decay tanks. The activity of the radionuclides I-131 or Tc-99m is measured with detectors which are usually located in an inner tube in the center of the decay container.

Advantages

- Activity determination of the nuclides I-131 or Tc-99m (other nuclides on request)
- Up to 8 containers can be monitored simultaneously
- Display of the energy spectrum
- Integrated quality controls
- Measured values can be saved, exported, printed and displayed graphically

Key figures

Ø2" x 2"
→ NaI(Tl) scintillation probe

2 → Nuclides measurable

8 → Probes connectable

2 → Energy spectra comparable

Product Description

The ISOMED 2154 Wastewater Counter works on the basis of a computer with Windows operating system and monitor. An external multi-channel analyzer (MCA) and NaI scintillation probes are connected. The pulses arriving at the detector are processed by the MCA and output as a digital measured value. In addition, the measurements are displayed graphically as an energy spectrum.

Depending on the equipment, one to eight scintillation probes can be operated at the ISOMED 2154 Wastewater Counter, which are assigned to the individual measuring points.

The menu structure and operator guidance ensure simple, fast and error-free operation of the measuring system.

Functionalities

- Measured value display in Bq/l.
- In addition to the currently measured value, the measuring time, the statistical error and the calculated release date for disposal are also displayed.
- A control window shows the current energy spectrum and the position of the energy window.
- The energy window adjusts automatically according to the nuclide being measured.
- Additional display and evaluation program ISOMED 2254.

Technical Data

Operating system	Windows 10
Scintillation probe	Standard version with NaI(Tl) scintillator ø 2" x 2"
Energy range of the scintillator	10 keV to 2000 keV
Connectable scintillation probes	1 to 8
Measurable nuclides	I-131 or Tc-99m
Detection limits	100 Bq/l
Decision thresholds	50 Bq/l
Measurement error	< 30 %
Measuring time for lower detection limit	approx. 3600 s
Possible accessories	Cs-137 test source 9.5 kBq for device calibration Wall probe adapter Various printers ISOMED 2254 display and evaluation program