

2.5 RSKS TYPE DOSIMETER

This type of radon detector is the standard type in the Radosys's detector production program.

This type is a replacement for the former RSFS type detector.

Its advantage as compared to the RSFS type:

- Reduced size with max dimension of 1 inch, providing advantage at cost of service delivery by standard mail in many countries.
- Improved background value because of its improved geometry and of eliminating extra packaging components. Now the background value of the RSKS detector is in the range of the performance of the bare Radosys PADC/CR-39 detector chips, which latter provides one of the best quality for radon detectors on the global market today.
- The opening mechanism of the RSKS detector is very friendly. No any special tool is needed. This can be dismantled by rather standard pliers.
- Its geometry provides larger area for customized labels with more textual information and images.

Detector Specification

Application Area: Indoor Radon Test

Also Workplace Application with Notice:

There is No any Built-In Working Hours Control Feature

Scope of Lab Practice: Routine Analysis

Meets the requirements for Lab Accreditation/Approval

Typical Time of Exposure: 3 months. Can be extended to 6 months

Applicable also for short term test of 20 days, with precaution about the excess imprecision occurring at short term tests.

Overall System Imprecision Utilizing RSFS Radon Detector:

15% for test region from 150 to 2000 kBq.h.m⁻³

Alpha Particle Detecting Substance: PADC/CR-39 Plastics

Diffusion Chamber Concept: Air-Gap Filter

Tamper Proof

Robust structure with extra crash protection

Electro-Static Protection: Diffusion Chamber Made of Conductive Plastics

Detecting Substance Pre-Treated by Dipping

CR-39 Chip Size: 100 mm²

Typical Equilibrium Time: 3 hours

Typical Sensitivity: 2.0 tracks.cm².kBq⁻¹.h⁻¹.m³

Typical Initial Background 0.3 tracks.mm⁻²

Saturation Limit greater than 12000 kBqh/m³

Note: Subtype RSFV with saturation limit of 100000 kBqh/m³ is also available

Standard Packaging Features:

- Custom Designed Label Service is Included

- Fully assembled detectors in airtight pouch with Al-vapor finish.

Chapter 2. Overview of the Radosys detectors

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- Each detector is sealed into airtight/radon proof pouch in N₂ atmosphere individually.
- Pouch is equipped with external detector ID label, with customized, two-color label.
- Pouch is equipped with V-like edge cutting section to open easily.
- Bar code on the external label is also available feature.



Chapter 2. Overview of the Radosys detectors

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