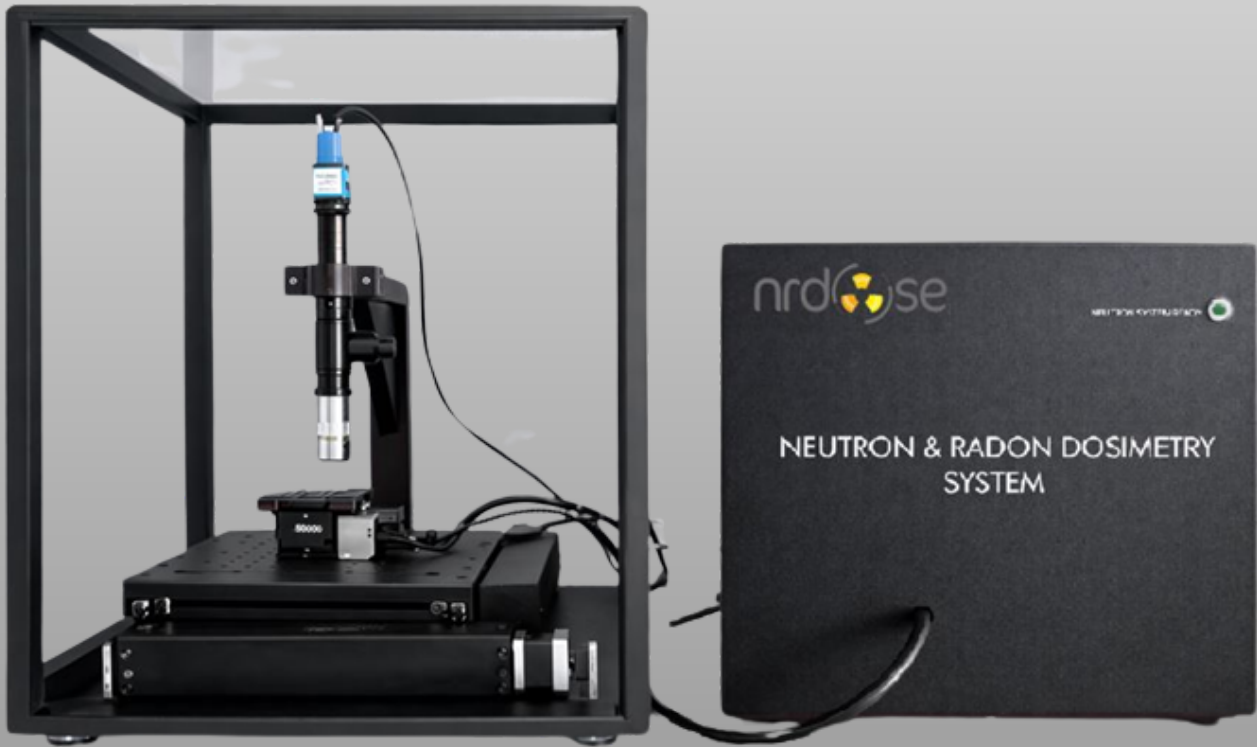


RADON DOSIMETRY SYSTEM



The Radon Dosimetry System has been developed to perform radon activity measurements using Solid-State Nuclear Track Detectors (SSNTD). The system consists of passive dosimeters, the NRDOSE Dosimeter Reader, chemical etching modules, and software components.

The main component of the system, the NRDOSE Reader, utilizes advanced image processing techniques incorporating deep learning and artificial intelligence algorithms to analyze the geometric characteristics of the tracks. In order to enhance track visibility and improve measurement efficiency, a chemical etching system is applied during the measurement process. Thanks to this system architecture, radon activity measurements can be performed with high accuracy and reliability.

CR-39 detectors are widely used in radon dosimeters due to their stability and their ability to detect alpha particles emitted as a result of radon decay.



- Radon Dosimetry System Software Features;**
- Dosimeter Reading Mode
 - QC Mode
 - User Settings
 - Dosimeter History (Reading Data)
 - Contact Information

APPLICATION AREAS

- Residential Buildings and Indoor Living Areas
- Schools and Public Buildings
- Hospitals and Healthcare Facilities
- Workplaces and Industrial Buildings
- Underground and Basement Areas

TECHNICAL SPECIFICATIONS	
READER	Focus: Automatic
	Display Area: 1.0 mm x 0.75 mm
	Imaging Area: 1.0 mm × 0.75 mm
	Reading Time: 3 min / dosimeter
	Analysis: Artificial Intelligence (AI)
	Dosimeter Capacity: 9 per magazine
	Operating Temperature: +10 °C to +40 °C
	Power Supply: 200–240 V, 50–60 Hz
	Camera: CCD Camera
	Lens: Optical
	Resolution: 0.7 µm/pixel
MEASUREMENT RANGE	50 – 2500 kBq·h/m³
RADON DOSIMETER	Detector: CR-39 Solid State Nuclear Track Detector (SSNTD)
	Dimentions: 25 mm x 25 mm
	Usage: Single-use
ETCHING SYSTEM	Etchant Solution: Potassium Hydroxide (KOH)
	Temperature: 90 °C
	Time: 3 hours

- Proficiency Tests;**
- ISO 11665-4: 2021

- Quality Standards;**
- ISO/IEC 17025: 2017 (Irradiation and calibration laboratories)
 - ISO 9001:2015