

RADON DOSIMETRY

SYSTEM EIC (ELECTRET ION CHAMBER)

The EIC (Electret Ion Chamber) system, a well-known and reliable technology —referred to in Italy as the “**electret chamber system**”—consists of a Teflon disk that is electrically charged through a process that makes the charge permanent. The disk is **mounted on a plastic support** that allows its use with dedicated chambers of defined volume.

The combination of electrets with **different sensitivities** and chambers with varying volumes, allows for the evaluation of the average radon gas activity concentration in air, over a wide **range of exposure times: from a few days to several months**.

The **relative simplicity of the measurement operations**, combined with LBS’s continuous focus on verification and calibration procedures for its equipment, ensure results characterized by **extremely high precision and accuracy**.

APPLICATIONS

Evaluation of the average **activity concentration** of radon gas in air.



FEATURES

- High **robustness** and **structural** strength.
- Response independent of **temperature, humidity, dust, mechanical shocks, external electrostatic charge concentration, ion concentration outside the dosimeter.**
- Possibility to choose the **measurement range best suited to specific needs**, continuously ranging from a few days up to one year, with virtually negligible fading.

TECHNICAL SPECIFICATIONS — RADON DOSIMETRY EIC SYSTEM

Name	System EIC (Electret ion chamber)
Sensitive element	Electrets with different sensitivities (LT and ST)
Chamber	S – 210 ml / L – 58 ml
Sensitivity	From 296 Bqday/m ³ to 25,160 Bqday/m ³ (*)
Range dinamico	From 9,250 Bqday/m ³ ·day to 629,000Bqday/m ³ (*)

(*) Parameters depending on the electret-chamber configuration used.