



Portable Radon Monitor

Model: TBM-IC-RN

Description

The **TBM-IC-RN** consists of a 3" dia x 5" long air ion chamber coupled to a stable solid state.

MOSFET input electrometer with built in Analog to Digital converter to read out directly in a nanoCi/liter.

Range is 10 pCi/l to 1 μ Ci/l. Easy change Ion Chambers allow conversion between chambers.

Two non-pressurized ion chambers are included; an open screen chamber, and a solid wall chamber.

OPEN SCREEN CHAMBER:

- Designed for measuring ambient radon and no air pump is required. A cloth sleeve is provided as an accessory.

SOLID WALL CHAMBER:

- Designed for a sample to be pulled from a closed space such as a hood, glove box, or other enclosed spaces. A pump is required for the solid wall chamber and is offered as an option.

- It has 2 self-sealing detachable hose barbs providing immediate grab sample and read out, eliminating excess labor, delay, and cost.

- User can collect sample air and measure in place or disconnect the 2 hoses thus sealing the chamber and relocate to a cleaner environment to take the reading from the captured grab sample.

Features

- Compact Digital Readout:
 - 6 Digit Rate
 - Digit Integrate
- Small Lightweight 26 oz.
- TBM Package
- Linear Response
- (2) Non-Pressurized Interchangeable Easy Clean Ion Chambers
- Solid Wall Chamber
- Open Screen Chamber (Shown)
- Fast Response
- Wide Range
- Easy Change Ion Chambers

Optional Air Pump for Solid Wall Chamber


Application

Whenever a fast, sensitive Radon Detector is needed, the **TBM-IC-RN** detects 10 pCi/l in 5 seconds and detects public release level in less than 10 minutes.

The **TBM-IC-RN** ion chamber is small and lightweight. It uses stable, essentially drift-free electrometer technology.



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Specifications

- **Detector:** (2) Non-pressurized interchangeable ion chambers 3" dia x 5" long. Internal volume 600 cc
 - Open Screen Chamber
 - Solid Wall Chamber with two self-sealing detachable hose barbs
- **Chamber Walls:** Both chambers have Nickel plated aluminum
Open screen chamber has stainless steel mesh and provided cloth sleeve
- **Readout:** LCD: 6 Digit Rate; 8 Digit Integrate.
- **Indicator Lamp:** Green LED for High Level. Red LED for Over-Range
- **Range:**
 - Rate** 6 digit 10 pCi/liter to 1 μ Ci/liter in a single range
 - Integrate** 8 digits 1 pCi/liter* to 100,000 pCi/liter in a single range

*less than 1 minute Indication FOR VERY HIGH LEVELS
- NOTE:** **TBM-IC-RN** in Integrate Mode has no timer. User must provide clock or stopwatch
- Air Flow:** Open Screen Chamber Passive Diffusion
Optional: Solid Wall Chamber
- Electrometer:** Solid State MOSFET input
- Electronics:** Analog to Digital converter LCD drivers
- Batteries:** 15 each (Button) NEDA CR-1220 - shelf life 7 years
6 each (AA) – 1000 hr. Read Out
- Dimensions & Weight:**
 - Dimensions:** 11" x 4" x 8" including handle and optional pump
 - Weight:** 26 oz. complete with batteries
 - Optional: Closed Wall Chamber:** Air Pump - 1 lb
- Options:** Readout in SI units: KBq/m³ User Specified at time of order
- Pump:** Closed Chamber - Lightweight Battery Powered Pump
- Air Flow:** Flow Rate: 4 CFH



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TBM-IC-RN Solid Wall Chamber With Hose Barbs




TBM-IC-RN Solid Wall Chamber With Air Pump

Working Level and Rn-222 Radon Gas vs. Radon Daughters:

- Option 1:** Particulate pre-filter removes much of the Radon daughters from the in-coming air stream but lets the Radon gas pass into the ion chamber for measurement.
- Option 2:** Activated charcoal pre-filter stops much of the Radon gas.



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