

PORTABLE RADON MONITOR

Model # TBM-IC-RN

FEATURES:

- DIGITAL READOUT:
6 Digits Rate,
8 Digits Integrate
- SMALL LIGHTWEIGHT 26 oz.
- TBM PACKAGE
- FLAT RESPONSE - FREE AIR ION CHAMBER
- SEES AXIALLY BELOW 5 KEV GAMMA OR X-RAY
- SEES ALPHA, BETA, GAMMA, X-RAY
- FAST RESPONSE
- WIDE RANGE

APPLICATION: Whenever a fast, sensitive Radon Detector is needed, the **TBM-IC-RN** detects 10 picoCi/l in 5 seconds and detects public release level in less than 10 minutes. This instrument is the latest in a series. The **TBM-IC-RN** ion chambers are now smaller and lighter and based on newest stable, essentially drift-free electrometer technology.



TBM-IC-RN

DESCRIPTION: The **TBM-IC-RN** consists of a 2.9" dia x 3.5" long air ion chamber coupled to a stable solid state MOS-FET input electrometer with built in A to D converter to read out directly in a nanoCi/liter. Range is 10 picoCi/l to 1 μ Ci/l. Ion Chamber walls are 180 mg/cm² graphite lined methacrylate walls and give accurate "air equivalence." Quick change Ion Chamber Shell allows conversion to TBM-IC-Survey Meter.

SPECIFICATIONS:

Detector: Free Air ion chamber 2.9" dia x 3.5" long. Internal volume 300 cc.
Wall & Cap: Methacrylate, graphite lined 180 mg/cm² walls and 540 mg/cm² cap.

TA **TECHNICAL ASSOCIATES**
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\$Revision: 1.2\$

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SPECIFICATIONS (Continued):

Readout:	LCD: 6 Digits Rate; 8 Digits Integrate.
Indicator Lamp:	Green LED 10 pulses/sec per mR/h. Red Over-range Indicator.
Range:	Rate 6 digit 10 picoCi/liter to 1 μ Ci/liter in a single range. Integrate 8 digits 1 picoCi/liter* to 100,000 pCi/liter in a single range. *less than 1 minute Indicator. Note: TBM-IC-RN in Integrate Mode has no timer. User must provide clock or stop-watch.
Electrometer:	Solid State MOSFET input.
Electronics:	A-D converter LCD drivers.
Batteries:	10 ea. (Button) NEDA CR-1220 - shelf life 7 years. 6 ea. (AA) NEDA 15A - 1000hr.
Dimensions:	11" x 4" x 8" including handle and optional pump.
Air Flow:	Passive Diffusion or lightweight Battery powered pump.
Weight:	26 oz. complete with batteries. Optional pump is 2 lbs.
Options:	Readout in SI units: Bq/m ³ .
Optional Pump:	Flow Rate: 4 SCFH. Batteries: 2 AA Batteries.

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 which stops much of the Radon gas is also available.

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