

# RUGGED ION CHAMBER TBM

Model # TBM-IC-MVR and TBM-IC-LE

## FEATURES:

- SEES BETA, GAMMA, X-RAY
- DIGITAL READOUT: 6 digit-rate, 8 digits integrate
- DOSE RATE & TOTAL DOSE READ OUT
- SMALL LIGHTWEIGHT UNDER 3 LBS.
- NO RANGE SWITCHING
- FLAT RESPONSE - SEALED ION CHAMBER
- SEES AXIALLY BELOW 5 KEV GAMMA OR X-RAY
- RADIAL (SIDEVIEW) DETECTION DOWN TO 20KeV (**TBM-IC-LE**)•
- FAST RESPONSE•
- WIDE RANGE: 0.1 mR/hr to 50,000 mR/hr
- **OPTIONAL**  $\mu\text{Sv/h}$  &  $\mu\text{Sv}$  DOSE READOUT



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## APPLICATION:

Whenever a fast, sensitive ion chamber instrument is needed, Models **TBM-IC-MVR & TBM-IC-LE** is the preferred **choice**. These sealed ion chambers are small, lightweight, rugged, and based on essentially drift-free electrometer technology.



**TECHNICAL ASSOCIATES**

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# RUGGED ION CHAMBER TBM

## Model # TBM-IC-MVR and TBM-IC-LE

### DESCRIPTION:

The Models **TBM-IC-MVR & TBM-IC-LE** consist of a 3" dia x 5" long sealed ion chamber coupled to a stable solid state MOSFET input electrometer with built in A to D converter to read out directly in mR/h or mR\*. Rate range is 0.1 mR/h to 50,000mR/h in a single range. Dose range is 0.001mR - 10R in a single range. The sealed ION Chamber obviates the need to make temperature and pressure corrections and eliminates the need for dessicant change.

**Model TBM-IC-LE fluted chamber** sideview sensitivity is down below 20 KeV and end-on below 5 KeV. The Thin (0.5 mg/cm<sup>2</sup>) Kapton window allows high sensitivity readings for low energy Beta such as Tc-99 in addition to other Betas, Gammas and X-Rays. **Model TBM-IC-MVR has a fluted chamber option.**

\*  $\mu$ Sv/h and  $\mu$ Sv dose readout is optional.

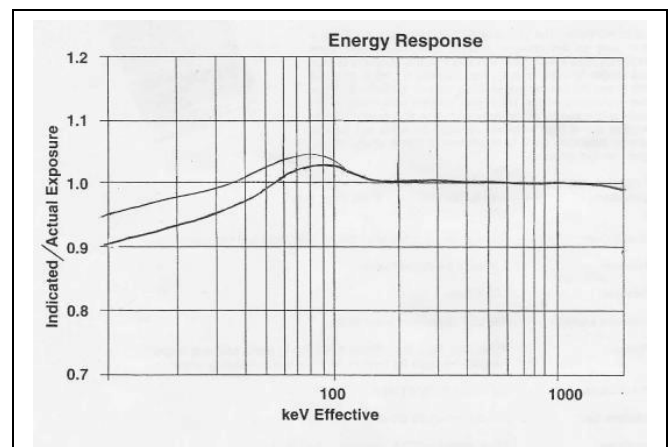
### SPECIFICATIONS:

<b>Detector:</b>	Sealed Air ion chamber 3" dia x 5" long. Internal volume 450 cc
<b>Wall &amp; Cap:</b>	Aluminum wall, plastic plus graphite lined and 540 mg/cm <sup>2</sup> cap. <b>Optional</b> 1g/cm <sup>2</sup> walls.
<b>Window:</b>	2.0" dia. x 0.5 mg/cm <sup>2</sup> Kapton.
<b>Readout:</b>	LCD 8 digits with <b>backlight</b> .
<b>Indicator Lamp:</b>	Green LED 10 pulses/sec per mR/h Red Over-Range Indicator
<b>Range:</b>	Rate 8 digit 0.1 mR/h to 50,000 mR/h in a single range. Integrate 8 digits 0.001 mR to 10R in a single range.
<b>Audio Alarm:</b>	User settable anywhere within TBM range
<b>Electrometer:</b>	Solid State MOSFET input.
<b>Electronics:</b>	A-D converter LCD drivers.
<b>Batteries:</b>	22 ea. (Button) NEDA CR-1220 - 7 years life. 6 ea. (AA) NEDA 15A – 200 hour life
<b>Dimensions:</b>	5-1/2" x 3-1/2" x 8" including handle.
<b>Weight:</b>	2.9 lbs. complete with batteries.

**Options:** Readout in Si units: Sv and Sv/h.

**Optional Chamber Sleeves:**

- X-Ray-SLV is X-Ray compliance sleeve with 10cm<sup>2</sup> aperture.
- Deep dose Gamma sleeve.



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