

# SENSITIVE INTEGRATING ION CHAMBER

Model # TBM-IC-AJI

## FEATURES:

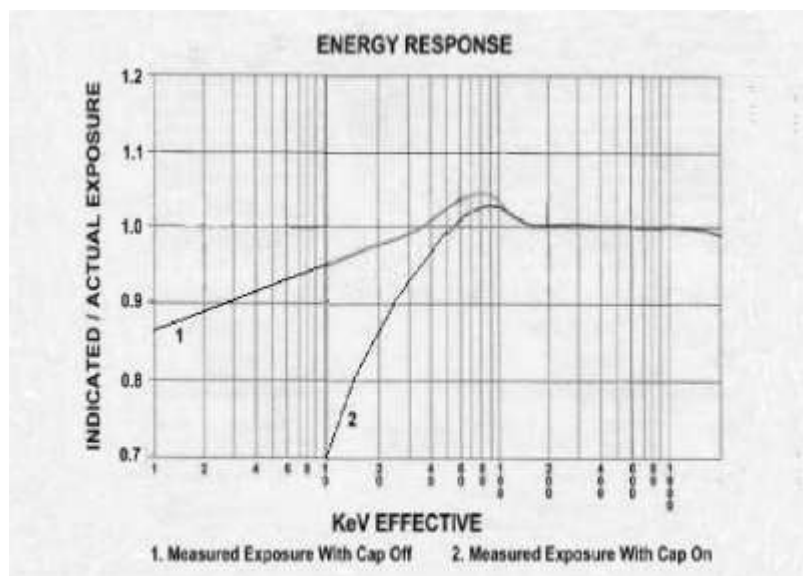
- SEES X-Ray PULSE DOWN TO 0.2 $\mu$ R
- 0.0001 mR to 10 R TOTAL DOSE
- WIDE RANGE: 0.1 mR/hr to 10 R/hr- DOSERATE (Standard)
- DIGITAL READOUT: 8 digit-rate, 8 digits integrate •DOSE RATE & TOTAL DOSE READ OUT •LIGHTWEIGHT 28 oz. ( 870 grams)
- TBM PACKAGE
- FLAT RESPONSE - FREE AIR ION CHAMBER •SEES BELOW 2 KEV GAMMA OR X-RAY •SEES ALPHA, BETA, GAMMA, X-RAY

## APPLICATION:

Whenever a fast, sensitive ion chamber instrument is needed, the **TBM-IC-AJI** is the latest in a series. The **TBM-IC-AJI** ion chambers are now lighter. Based on newest more stable, essentially drift-free electrometer technology.



**DESCRIPTION:** The **TBM-IC-AJI** consists of a 3.7" dia x 6" long air 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 9.999 R/h in a single range. Dose range is 0.0001mR - 10R in a single range. 180 mg/cm<sup>2</sup> graphite lined methacrylate walls accurate "air equivalence". Thin (0.5 mg/cm<sup>2</sup>) Mylar window allows high sensitivity readings for alpha and for low energy beta such as C<sup>14</sup> in addition X-rays down to 2 KeV as well as higher energy Betas and Gammas.



**TA** **TECHNICAL ASSOCIATES**

**Active Radsys**

W: [www.activeradsys.it](http://www.activeradsys.it) Tel: 0544 408071

E: [info@activeradsys.it](mailto:info@activeradsys.it) Fax: 0544 201477

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## SPECIFICATIONS:

- Detector:** Free Air ion chamber 3.7" dia x 6" long. Internal volume almost one liter
- Wall & Cap:** Methacrylate, graphite lined  $180 \text{ mg/cm}^2$  walls and  $540 \text{ mg/cm}^2$  cap.
- Window:** 3.0" dia. x  $0.5 \text{ mg/cm}^2$  Mylar.
- Readout:** LCD 8 digits.
- Energy Response:** CAP-OFF: Sensitive down to 2 KeV +/- 20% 4 KeV to 6 MeV
- Indicator Lamp:** Green LED 10 pulses/sec per mR/h. Red Over-range Indicator
- Range:**
  - Rate 8 digit 0.01 mR/h to 1.0 R/h in a single range Or
  - 0.1 mR/h to 10 R/h in a single range
  - Integrate 8 digits user settable, as low as 0.01uR Dose
- Electrometer:** Solid State MOSFET input.
- Electronics:** A-D converter LCD drivers.
- Batteries:**
  - 1 set of CR-1220 Lithium lasts for the shelf life 7 years. 6 ea. (AA) - 1000hr. NEDA 15A – 1000 hrs.
  - (Longer with Alkaline or Li-ion or Nimh AA cells)
- Dimensions:** 6" x 4" x 12" including handle.
- Weight:** 28 oz. complete with batteries. 870 (grams)
- OPTIONS:**
  - Readout in Si units: Sv and Sv/h. (TBM-IC-AJI-SV)
  - Thicker chamber wall to  $1 \text{ g/cm}^2$  (TBM-IC-AJI-1g)
  - Thin Cap same thickness as chamber side wall ( $180 \text{ mg/cm}^2$ )
  - Closed chamber (no mylar window).
  - Alarm light on Mr/Hr- Rate Mode
  - Serial RS-232 Dataport plus software.