# SENSITIVE INTEGRATING ION CHAMBER

# Model ~ TBM-IC-AJI

# **FEATURES**

- SEES X-Ray PULSE DOWN TO 0.2µR
  - o mR to 10 R TOTAL DOSE
- WIDE RANGE: 0.1 mR/hr to 10 R/hr-(1 uSv/h to 100 Sv/h) DOSE RATE (Standard)
- FIVE AND A HALF DECADES
- 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
- **OPTIONAL: RS-232 SERIAL PORT**
- **IP63; CE MARK**



# **APPLICATION:**

The TBM-IC-AJI is a fast, sensitive ion chamber instrument. The TBM-IC-AJI ion chamber is light weight and stable with essentially drift-free electrometer technology.

# **DESCRIPTION:**

- The TBM-IC-AJI ion chamber is 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 (1 uSv/h to 100 mSv) in a single range.
- Dose range is 0.0001mR 10R/h (1 pR/h to 100 mSv) 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 C14
- Detects X-rays down to 2 KeV as well as higher energy Betas and Gammas.

\*Note: TA also makes ion chambers that measure up to 10 million R/hr

See ION CHAMBER COMPARISON CHART

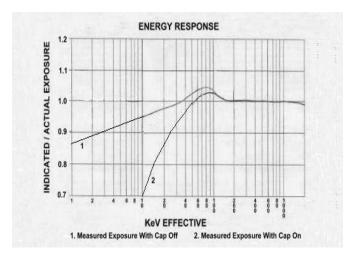


TECHNICAL ASSOCIATES

DIVISION OF

# SENSITIVE INTEGRATING ION CHAMBER

# Model ~ TBM-IC-AJI



#### **SPECIFICATIONS:**

**DETECTOR:** Free Air ion chamber 3.7" dia x 6" long. Internal volume almost one liter **Wall & Cap:** Methacrylate, graphite lined 180 mg/cm² walls and 540 mg/cm² cap.

Window: 3.0" dia. x 0.5 mg/cm<sup>2</sup> Mylar.

Energy Response: CAP-OFF: Sensitive down to 2 KeV +/- 20% 4 KeV to 6 MeV

**ELECTRONICS:** 

Readout: LCD 8 digits.

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 (1 µSv to 10 mSv) in a single range

Integrate 8 digits user settable, as low as 0.01mR (1µSv) 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 with batteries.

# **OPTIONS:**

- Closed chamber (no mylar window).
- Alarm light on mR/h Rate Mode
- Serial RS-232 Data port plus software.
- Readout in Si units: Sv and Sv/h. (TBM-IC-AJI-SV)
- Thicker chamber wall to 1g/cm<sup>2</sup> (TBM-IC-AJI-1g)
- Thin Cap same thickness as chamber side wall (180 mg/cm<sup>2</sup>





# TECHNICAL ASSOCIATES

DIVISION OF

USNUCLEARCORP

OTCOB-UCLE