#### WIDE RANGE ION CHAMBER

#### Model ~ TBM-IC-HLS

#### **FEATURES:**

- SEES X-Ray PULSE DOWN TO 0.002µR
- 1pSv to 10 mSv
- WIDE RANGE: 0.1 mR/hr to 1,000 R/hr- RATE
- 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
- CORRECT RANGE for ANSI N42.33 \*



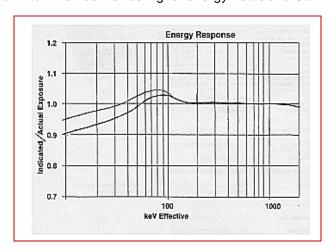
## **APPLICATION:**

Whenever a fast, sensitive ion chamber instrument is needed, the TBM-IC-HLS is the latest in a series. The **TBM-IC- HLS** ion chambers are lighter. Stable, essentially drift- free electrometer technology.

#### **DESCRIPTION:**

The **TBM-IC-HLS** 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 in two ranges directly in mR/hr or optional µSv/h Dose Rate.

- Integrated Dose reads in total R or optional total Sv.
- The Ion Chamber has 180 mg/cm<sup>2</sup> graphite lined methacrylate walls giving accurate "air equivalence".
- A thin (0.5 mg/cm<sup>2</sup>) Mylar window allows high sensitivity readings for Alpha and for low energy Beta such as C14.
- X-ray sensitivity is down to 2 KeV as well as higher energy Betas and Gammas.







**TECHNICAL ASSOCIATES OVERHOFF TECHNOLOGY** 



7051 Eton Ave., Canoga Park, CA 91303 818-883-7043 (Phone) 818-883-6103 (Fax)

### WIDE RANGE ION CHAMBER

#### Model ~ TBM-IC-HLS

#### **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.

Readout: LCD 8 digits.

Indicator Lamp: Green LED 10 pulses/sec per mR/h. Red Over-range Indicator

Range:

Rate 8 digit 0.1 mR/hr to 1.000 R/h in a two ranges. – Dose Rate

Integrate 8 digits 0.01 mR to 1,000 R. – Total 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.

# Weight & Dimensions:

**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.
- √ Thicker chamber wall to 1g/cm²
- ✓ Thin Cap same thickness as chamber side wall (180 mg/cm²).
- ✓ Closed chamber (no mylar window).
- ✓ Alarm light on Mr/Hr- Rate Mode
- ✓ RS-232 Serial Output









<sup>\*</sup>ANSI N42.33 Portable Radiation Detection Instrumentation for Homeland Security –

Type 2 – Hazard Assessment