## AIR MONITOR SURVEY METER/WIPE COUNTER Model # AIR-TBM

**ECONOMICAL**, **PORTABLE**: Air Monitor • Survey Meter • Wipe Counter

## **FEATURES:**

- •ALPHA. BETA-GAMMA
- •TRIPLE USE:
  - AIR MONITOR
  - WIPE COUNTER
  - SURFACE MONITOR
- •REAL TIME
- •LINE OPERATED PUMP (BATTERY PACK **OPTIONAL**)
- •PORTABLE
- •INTEGRATED EXPOSURE
- •STANDARD TBM-3A RATEMETER
- •DRAWS AIR FROM ROOM
- **•**EASY CHANGE FILTER
- •SLIDE-ON WIPE-HOLDER



**AIR MONITOR:** Model **AIR-TBM** is used to monitor alpha, beta and gamma from radioactive chemicals in the air be they gas, aerosol or particulate. The **AIR-TBM** is an ideal device to assure safety against airborne radioactive contamination by means of constant collection and monitoring capability. It provides integrated exposure information and provides real time readout. It is a complete system but may be expanded per need.

**PRINCIPAL OF OPERATION:** Air is pulled thru a charcoal impregnated filter paper by a pump. This filter is constantly observed by a 2" diameter thin window GM tube and ratemeter.

**DESCRIPTION:** The **AIR-TBM** uses standard 57-70 mm filters in T/A's easy change, no leak filter, to trap any airborne radioactivity. The filter is under constant surveillance via pancake GM tube. Air is drawn through the system by a continuous duty pump. The unit is completely self-contained and portable. Room air is drawn in through the charcoal impregnated filter paper. Then through the pump and its 3 ft. exhaust hose which can be extended. Wipe holder WH-15 accepts wipes from 1" diameter up to 2" diameter.

A unique ``groove and track" system allows the air sampler (Model# AS-I5) and wipe holder (Model# WH-15) to be separated from the detector/ratemeter (Model# TBM-3A). The TBM-3A is itself a compact surface monitor and survey meter. The AS-I5 can be left with the pump turned on, so collection of air pollutants is not interrupted.

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## **SPECIFICATIONS:**

•Measures: Airborne radioactivity including aerosol, particulate and gases - but excluding the noble gases.

•Sensitivity: Limit of sensitivity (99% confidence level) one nanoCi collected on filter paper (as beta over 0.1 MeV). This is the integrated content of entire amount of air drawn through the system. This corresponds to 2 x 10<sup>-11</sup> μCi/cc after 5 days with pump running or 1 x 10<sup>-10</sup> μCi/cc after 24 hours or 3 x 10<sup>-9</sup> μCi/cc after pump runs for 1 hour. This level is below 2/10th of the California Safety Code Title 17 (and NRC Title 10) limit for 40 Hr. exposure to most hazardous beta and/or gamma emitter in absence of AC 227.

•Detector: 2" diameter. Thin window 1-3/4" x 1.5-2 mg/cm<sup>2</sup> pancake GM detector, Model T-1190

Background: Typically 25 cpm

•Flow Rate: Calibrated at factory. Typically 5 liter/min.

•Filters: Includes package of fifty filters, charcoal impregnated #41, 70mm. Can use membrane, paper or glass fiber filters.

•Case: Electronics housed in instrument-case, carrying handle included.

•Dimensions: Excluding Pump: 3" W x 5" H x 6"D •Shipping Weight: Depends on pump ordered.

•Electronics: TBM-3A Ratemeter.

•Ranges: 0-500, 5k, 50k cpm. 0-0.2, 2, 20 mR/hr.

•Meter Response Time: 2 seconds

•Meter: 2.5 in. taut band, 2%

•Pump Power: 115V, 50-60 Hz (230 V optional) battery pack is optional.

Options:

Pulse output, Recorder output, Flow regulator. Flow meter, \* Large pump

\* Extended Life Pump

\* Unit fitted with inlet hose to allow monitoring of hoods

Pump	Model #	Flow Rate	Weight
Battery Operated	AP-B4	4 ft <sup>3</sup> /hour	1 lb
AC Operated	AP-5020E	0.5 ft <sup>3</sup> /minute	6 lb
AC Operated	AP-5030E	1 ft <sup>3</sup> /minute	12 lb
AC Operated	AP-5040E	2 ft <sup>3</sup> /minute	14 lb

Additional pumps available, please call with specifications

