PERSONAL AIR SAMPLER & RADIATION ALARM

Model ~ MINI-AIR Sampler for all Airborne Hazards “Little Bro”
Model ~ MINI-AIR-RAD Total Airborne Activity – “Big Bro”

FEATURES: “Little Bro” & “Big Bro”
- REAL-TIME AIR FLOW METER
- COLLECTION OF ALPHA, BETA, GAMMA PARTICULATES
- FLOW RATE 3 LPM.
- BATTERY OPERATED – RECHARGEABLE BATTERIES OK
- INTEGRATED EXPOSURE
- CAN DRAW AIR FROM ROOM OR BREATHING ZONE
- QUICK CHANGE FILTER
- SNIFER HOSE – 3 Feet
- OPTIONAL: BATTERY CHARGER
- IP65

FEATURES: “Little Bro”
- COLLECTS DIVERSE AIR BORNE CONTAMINATION
- MULTIPLE SPECIALIZED FILTER MEDIA INCLUDING TRITIUM TRAP IS ACCEPTABLE

FEATURES: “Big Bro” PLUS TBM-3D
- DETECTS MOST NUCLIDES INCLUDING ORGANIC C-14
- GM 1” THIN WINDOW DETECTOR
- ELECTRONICS – TBM-3-D
- DETECTS 6 x 10^6 μCi/cc in 30 minutes
- READS DIRECTLY IN cps or μCi
- CE MARK
- OPTIONAL: RS-232 COMPUTER AND/OR DATA ARCHIVE, RETREIVAL, DISPLAY INTERFACE
- OPTIONAL: ALARM
- CE Mark

APPLICATION:
The MINI-AIR Series Air Monitors assure safety against airborne radioactivity contamination by means of constant monitoring check. It provides integrated exposure information.

The MINI-AIR Series is sensitive and versatile. Although designed as an industrial workplace and hospital breathing air measurement system, it may also be used to monitor fume hoods and stack effluent.

Mini-Air-RAD Option: Alarm and record capability.

Mini Air-RAD “Big Bro”
Air Pump, < Flow Meter, Filter Holder & Detector
< Detector

TBM-3D & “Big Bro” Together
Mini Air-RAD Sampler System

TECHNICAL ASSOCIATES
OVERHOFF TECHNOLOGY
7051 Eton Ave., Canoga Park, CA 91303
818-883-7043 (Phone) 818-883-6103 (Fax)
tagold@nwc.net WWW.TECH-ASSOCIATES.COM
PERSONAL AIR SAMPLER & RADIATION ALARM

Model ~ MINI-AIR Sampler for all Airborne Hazards “Little Bro”
Model ~ MINI-AIR-RAD Total Airborne Activity – “Big Bro”

DESCRIPTION: MINI-AIR-RAD System “Big Bro”
- The MINI-AIR-RAD System uses standard or charcoal filters in TA’s unique quick change, no leak holders to trap any airborne radio-nuclides. The filter is under constant surveillance via a GM detector.
- Air is drawn by a high volume pump through the filter and exhausted to the room or through an optional hose. An Inlet and outlet hose may be attached to allow monitoring of hoods, glove boxes, stacks, etc.
- Power is controlled by a rocker switch.
- Time is controlled by a rocker switch wired into the pump circuit.
- The unit is completely self-contained and portable.
- Complete with 10 charcoal and 100 glass fiber filter disks.

DESCRIPTION: MINI-AIR “Little Bro”
- The MINI-AIR- uses standard or charcoal filters in TA’s unique quick change, no leak holders to trap any airborne contamination.
- Air is drawn by a high volume pump through the filter and exhausted to the room or through an optional hose. An Inlet hose may be attached to allow monitoring of hoods, glove boxes, stacks, etc.
- Power is controlled by a rocker switch.
- The unit is completely self-contained and portable.
- Complete with 10 charcoal and 100 glass fiber filter disks.

NOTE: The Mini-Air “Little Bro” is capable of collecting diverse airborne contaminants such as Smoke & Fumes from Diesel or Cigarettes, as well as Biological and Chemical Threats and Toxins including Radiation.
The Mini-Air is versatile and the user may use specialized filter media for specific airborne contaminants.
PERSONAL AIR SAMPLER
&
RADIATION ALARM

Model ~ MINI-AIR Sampler for all Airborne Hazards “Little Bro”
Model ~ MINI-AIR-RAD Total Airborne Activity – “Big Bro”

SPECIFICATIONS: Mini-Air-RAD “Big Bro”

- **Electronics:** TBM-3D Programmable Digital Rate meter
- **Air Flow Pump:** Miniature 1-3 Liter/min Pump and Filter holder.
- **Air Flow Pump Power:** (6) AA Batteries - Rechargeable Batteries OK.
- **Electronics Power:** TBM-3D - (6) AA Batteries - Rechargeable Batteries OK.
- **Range:** 1 x 10^{-10} to 1 x 10^{-5} μCi/cc (or Ci/m^3) (Depends on count time)
- **Readout:** 6 Digit LCD - TBM-3D.
- **Air Flow Meter:** Displays flow rate 0.5 – 3.0 LPM.
- **Filters:** Includes package of 100 glass Fiber and 10 charcoal filter papers. (Can also use membrane filters.)
- **Sniffer Hose:** 3 Feet
- **Case:** Air Pump & Detector housed in polished blue aluminum.
- **Electronics Case:** TBM-3D housed in green aluminum housing; handle included.

**Weight & Dimensions:**
- **Pump & Detector Assembly:** 1.75” Diameter x 8.5” Long.
- **Electronics:** TBM-3D: 3" W x 4" L x 5.5" H including handle.
- **Electronics Weight:** 1 lb 10 oz.
- **Electronics, Pump, Detector Assembly Weight:** 2 lbs 10 oz
- **OPTIONAL:** Adjustable Flow Rate: Variable from 0.5 to 3 LPM

**NOTE:** See Following Chart For Greater Detail.

SPECIFICATIONS: Mini-Air “Little Bro”

- **Air Flow Pump:** Miniature 1-3 Liter/min Pump and Filter holder.
- **Power:** (6) AA Batteries - Rechargeable Batteries OK.
- **Air Flow Meter:** Displays flow rate 3.0 LPM.
- **Filters:** Includes package of 100 glass Fiber and 10 charcoal filter papers. (Can also use membrane or specialty filters.)
- **Sniffer Hose:** 3 Feet
- **Case:** Air Pump & Filter Holder housed in polished blue aluminum.

**Weight & Dimensions:**
- **Air Sampler Dimensions:** 1.75” Diameter x 9.5” Long
- **Weight:** 1 lbs.

**NOTE:** See Following Chart For Greater Detail.
# PERSONAL AIR SAMPLER & RADIATION ALARM

Model ~ MINI-AIR Sampler for all Airborne Hazards **“Little Bro”**
Model ~ MINI-AIR-RAD Total Airborne Activity – **“Big Bro”**

<table>
<thead>
<tr>
<th>MODEL:</th>
<th>MINI-AIR-RAD “Big Bro”</th>
<th>MINI-AIR “Little Bro”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has Belt Clip:</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Detector:</td>
<td>T-1210 GM Tube</td>
<td>External</td>
</tr>
<tr>
<td>Size/Material:</td>
<td>1“ dia. Pancake</td>
<td>N/A</td>
</tr>
<tr>
<td>Window:</td>
<td>Mica 1.5 - 2.0 mg/cm²</td>
<td>N/A</td>
</tr>
<tr>
<td>Detector: Radiation</td>
<td>Alpha, Beta, Gamma</td>
<td>Optional External STB-3</td>
</tr>
<tr>
<td>Biological Hazards:</td>
<td>User Specific Filter</td>
<td>User Specific Filter</td>
</tr>
<tr>
<td>Chemical Hazards:</td>
<td>User Specific Filter</td>
<td>User Specific Filter</td>
</tr>
<tr>
<td>Iodine:</td>
<td>Carbon Filter</td>
<td>Carbon Filter</td>
</tr>
<tr>
<td>Detects Particulates:</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Detects Aerosol &amp; Reactive Gases*:</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Filter: Glass Fiber Charcoal Filter Paper- 1” dia</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Iodine Sensitivity: (30 min)</td>
<td>$5 \times 10^{-8}$ µCi/cc</td>
<td>N/A</td>
</tr>
<tr>
<td>Public Release: (1 x $10^{-10}$ µCi/cc)</td>
<td>10 Hour exposure</td>
<td>N/A</td>
</tr>
<tr>
<td>WEIGHT:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mini-Air-RAD - Electronics:</td>
<td>2 lbs</td>
<td>Optional</td>
</tr>
<tr>
<td>Mini-Air-RAD - Air Pump &amp; Detector &amp; Filter Holder:</td>
<td>1 lbs</td>
<td></td>
</tr>
<tr>
<td>Mini-Air - Air Pump &amp; Filter Holder:</td>
<td>1 lbs</td>
<td>Included</td>
</tr>
<tr>
<td>Air Pump:</td>
<td>Included</td>
<td>Included</td>
</tr>
<tr>
<td>RAD Shielding:</td>
<td>Optional</td>
<td>None</td>
</tr>
</tbody>
</table>

*Detects all airborne activity EXCEPT H-3,Fe-55 and Noble Gases

Electronics: TBM-3D  Optional
PERSONAL AIR SAMPLER  
&  
RADIATION ALARM

Model ~ MINI-AIR Sampler for all Airborne Hazards “Little Bro”  
Model ~ MINI-AIR-RAD Total Airborne Activity – “Big Bro”

**Easy Use Procedure:**  Mini-Air-RAD “Big Bro”

Flow-rate has been preset (user can change those if desired).
1. Turn on Rate meter or Scaler.
2. Put in clean filter.
4. Detach sampler and clip it to your belt.
5. Turn on Pump.
6. At end of job or work shift, Reattach Rate meter.
7. Digital display reads out directly in counts per second,  
or in uCi trapped in the filter (for a single isotope of interest with known conversion factor).
8. Filter must be clean at start of each new air sample.
9. User can change scale factor in order to readout in different units.

**Easy Use Procedure:**  Mini-Air “Little Bro”

Flow-rate has been preset (user can change those if desired).
1. Put in clean filter.
2. Clip it to your belt.
3. Turn on Pump.
4. Filter must be clean at start of each new air sample.