

AIR MONITOR 空气监测器

MULTI-USE RADIATION MONITOR 多用途辐射监测器

Model # AIR-TBM-SYSTEM 型号 AIR-TBM 系统

Air Monitor • Survey Meter • Wipe Counter • also Chem or Bio Aerosols

空气监测器• 探测仪• Wipe 计数器• 生物/化学气溶胶

Gamma-source Search Tool 源搜索工具

FEATURES: 产品特点

• ALPHA, BETA-GAMMA 阿尔法 α ,
贝塔 β , 伽马 γ

• IDEAL FOR FIRST
RESPONDERS 理想的第一反应

• QUADRUPLE USE: 四种用途

- AIR MONITOR-
RADIATION
空气辐射监测

- WIPE COUNTER
Wipe 计数器

- SURFACE MONITOR
表面监测器

- PERSONAL AIR
SAMPLER
个人空气监测

• REAL TIME 实时

• PORTABLE 便携

• INTEGRATED EXPOSURE 综合曝光

• TBM STANDARD RATEMETER TBM 标准率表

• DRAWS AIR FROM ROOM 从室内抽取空气

• EASY CHANGE FILTER 易于更换滤网

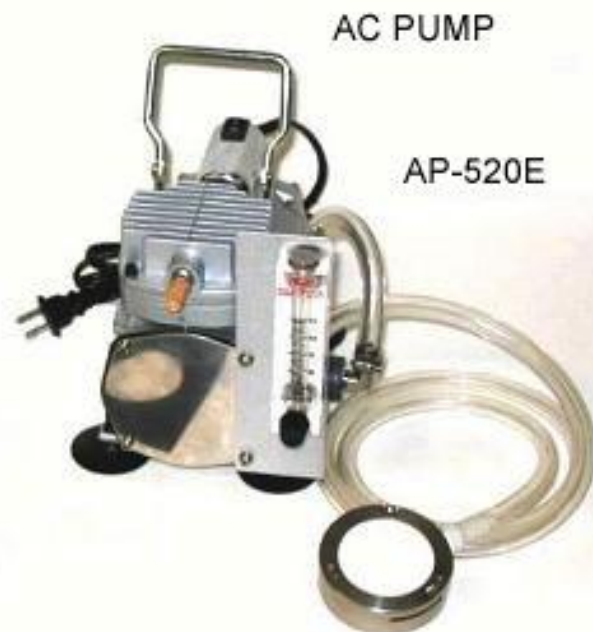
• SLIDE-ON WIPE-HOLDER 滑动式 wipe 卡托

• BATTERY POWERED SYSTEM, AC OPERATION OPTIONAL
电池供电, AC 电源可选

• GAMMA-SOURCE SEARCH TOOL



AIR TBM (e)



AIR FILTER holder WH-15

TA

TECHNICAL ASSOCIATES

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PRINCIPLE OF OPERATION:操作原理

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.

气泵将空气透过炭浸渍滤纸抽入，通过 GM 管上的一个直径 2"的薄窗和率表可持续观测过滤器。

DESCRIPTION:描述

The AIR-TBM uses standard 55-70 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 that can be extended. Wipe holder WH-15 accepts wipes from 1" diameter up to 2" diameter.

AIR-TBM 使用标准 55-70 mm 滤网捕获任意气溶胶辐射，易更换，无泄漏，通过扁平型 GM 管，过滤器被持续监测。空气被一个连续工作的泵抽进系统。此仪器完全一体，便携，空气被透过炭浸渍滤纸抽进，然后进入泵和其 3 英尺长的排风管中，管子可延长，Wipe 托架 WH-15 接受直径 1"--2"擦拭纸。

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

系统底部独特的“沟槽”允许 AIR-TBM 空气取样器和空气过滤网托架托架(型号 WH-15)与探头/率表(型号 TBM-(e))分离开来，型号# TBM-(e)本身是一款紧致的表面监测器和检测仪。MINI-AIR-SYSTEM 机型的泵可以一直开着，以便空气污染物收集不受影响。

SPECIFICATIONS:规格

• **Measures:** Airborne radioactivity including aerosol, particulate and gases - but excluding the noble gases.
测量：气溶胶辐射污染包括气溶胶，粒子，气体。但不包括惰性气体。

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• Sensitivity: 灵敏度

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 2×10^{-11} $\mu\text{Ci/cc}$ after 5 days with pump running or 1×10^{-10} $\mu\text{Ci/cc}$ after 24 hours or 3×10^{-9} $\mu\text{Ci/cc}$ 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.

收集到滤纸上检测物灵敏限 (置信度 99%) 为 1 nanoCi, (β 超过 0.1 MeV). 这是被抽进系统的全部空气累积量。相当于泵运转 5 天后结果为 2×10^{-11} $\mu\text{Ci/cc}$, 或 24 小时后的 1×10^{-10} $\mu\text{Ci/cc}$, 或泵运行一小时后的 3×10^{-9} $\mu\text{Ci/cc}$ 。这个水平低于加州安全法则 17 条 (和 NRC 第 10 条) 限值的五分之一, 即 40 小时暴露在最危险的 β 或 γ 放射物下辐射量, 不含 AC227

• Detector: 2" diameter. Thin window 1-3/4" x 1.5-2 mg/cm² pancake GM detector, Mode T-1190

探头: 直径 2" 带薄窗 1.75" x 1.5", 2mg/cm² 扁平 GM 管探头, 型号 T-1190

• Background: Typically 25 cpm

本底: 典型 25 cpm

• Flow Rate: Calibrated at factory. See chart. Positive displacement pump.

流量: 工厂校准, 见图, 容积式泵

• Filters: 滤网

Includes package of fifty filters, charcoal impregnated #CHR-55, 55mm. Or 1" dia. filters optional. Can use membrane, paper or glass fiber filters.

包含一组 50 只滤网, 炭浸渍 #CHR-55, 直径 55mm. 或 1"。滤网可选薄膜, 纸膜或玻璃纤维。

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

外箱: 电子元件装在仪器箱内, 包括提手

• Dimensions: Excluding Pump: 3" W x 5" H x 6"D

尺寸: 3" 宽 x 5" 高 x 6" 长, 不含泵

• Shipping Weight: Depends on pump ordered.

装船重量: 视是否包含泵而定

• Electronics: AIR-TBM-(e) Digital Ratemeter.

电子学: AIR-TBM-(e) 数字率表

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• **Ranges:** 0.01 to 100 mR/hr.

测量范围 : 0.01 to 100 mR/hr.

• **Meter Response Time:** 2 seconds

率表反应时间 2 秒

• **Pump Power:** 6 AA batteries- standard- AC optional. 115V, 50-60 Hz (230 V optional)

泵电源 : 6 节 AA 电池/标准 AC 选择 , 115V, 50-60 Hz(230 V 可选)

• **Options:** 可选

Flow regulator 流量调节器

Serial output 串行输出

High alarm 高报警

Flow meter 流量表

* Extended Life Pump 延长寿命灯

* Unit fitted with inlet hose to allow monitoring of hoods

适配进气软管的零件 , 以便监测排风管。

Pump	Model	#Flow Rate	Weight
Battery Operated	MINI-AIR-15	4ft ³ /hour (2 lpm)	1 lb
AC Operated	AP-5020E	.0.5ft³/minute	6 lb
AC Operated	AP-5030E	1ft ³ /minute	12 lb
AC Operated	AP-5040E	2ft ³ /minute	14 lb



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