

BETA/GAMMA AIR MONITOR

β - γ 空气监测器

MODEL # FM-7-ABGN

FEATURES: 特点

- REAL TIME ALARM
- 实时报警
- LINE OPERATED
- AC 线供电
- PORTABLE
- 便携式
- INTEGRATED EXPOSURE
- 综合暴辐
- STANDARD FM-5/7 MODULES
- 标准 FM-5/7 模块
- CAN DRAW AIR FROM HOOD, DUCT, ETC.
- 从气罩风管等中抽取气体
- QUICK CHANGE FILTER CARTRIDGE
- 快速更换滤芯
- REGULATED AIR FLOW
- 调节气流
- RS232 COMPUTER INTERFACE
- RS232 电脑接口



FM-7-ABGN

APPLICATION: The FM-7-ABGN Air Monitor assures safety against airborne radioactivity contamination by means of constant check with alarm and record capability. It provides integrated exposure information and can provide hard copy via external printer or computer. It is a complete system but may be expanded per need with modules of the FM-5/7 series. The FM-7-ABGN is the **more sensitive and versatile version** of the broadly used long time standard, the FM-5-ABGN. It may be used to monitor stack effluent down to EPA levels as well as hoods or workplace air.

应用：FM-7-ABGN 空气监测器，针对气溶胶辐射污染，通过连续检测报警记录功能，确保安全。提供综合暴辐信息，通过外接打印机或电脑提供硬拷贝，为一套完整系统，可根据需要用 FM-5/7 系列模块拓展功能。FM-7-ABGN 比用途广泛寿命长的标准版 FM-5-ABGN 更灵敏，更多功能。可以用来监测烟囱道排放物低至 EPA 标准。还可用于风罩或工作间空气测量。

DESCRIPTION: The FM-7-ABGN uses a standard filter in T/A's unique quick change, no leak holder to trap any airborne radioactivity. The filter is under constant surveillance via a thin window scintillation detector. Air is drawn by a regulated pump through a three-foot inlet hose and exhausted via a flow meter through another three-foot hose. These may be extended to allow monitoring of hoods, glove boxes, stacks, etc. Time is

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recorded by an odometer type timer wired into the pump circuit. The unit is completely self-contained and portable. Complete with 100 filters.

描述: FM-7-ABGN 使用标准 TA 独特快速更换滤网, 密封托架, 捕获任何气溶胶辐射物。滤器通过闪烁探头薄窗被连续监视。空气由调节泵通过一根 3 英尺长入气管抽进; 流经一块流量表, 通过另一根 3 英尺长软管排出。这些软管可延长以便监测风罩、手套箱、烟囱道等。时间由一个连接到泵电路的里程表式计时器记录。此装置完全一体便携。带 100 片滤纸。

SPECIFICATIONS: 规格

- **Sensitivity:** Limit of sensitivity (as Cs-137 at 70 liters/minute air flow rate) is 4×10^{-13} $\mu\text{Ci/cc}$ integrated over an 8 hour period, or 8×10^{-14} $\mu\text{Ci/cc}$ for a 40 hour period. This corresponds to 2×10^{-10} $\mu\text{c/ml}$ minute exposure which is equal to 0.6% of the California Safety Code Title 17 and USNRC Title 10 limit for 40 hour weekly exposure to most hazardous beta and/or gamma emitter in absence of Ac 227.
- **灵敏度:** 8 小时灵敏度限值为 4×10^{-13} $\mu\text{Ci/cc}$ (如 Cs-137, 在 70 升/分钟流量情况下) 为 4×10^{-13} $\mu\text{Ci/cc}$, 综合时段超过 8 小时或 40 个小时 8×10^{-14} $\mu\text{Ci/cc}$, 相当于 2×10^{-10} $\mu\text{Ci/cc}$ 每分钟操作, 这数值等于加州安全准则 17 条和 USNRC 第 10 条对于在没有 Ac277 出现情况下每周 40 小时暴露在最危险的 β γ 发射体下的 0.6%, 无 Ac 227 情况下
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- **Detector:** 2" probe, diameter thin window, thin crystal, scintillation detector, Model PGS-31.
- **探头:** 2"探头, 薄窗,薄晶体闪烁探头, 型号 PGS-31.
- **Electronic Modules Include:**
- 电子模块包括

MVR-5R Power and H.V. Bias Supply

MVR-5R 电源和 H.V.偏置电源

FIL-7DP Programmable Scaler with Integrator (Dual Display)

and RS-232 Computer Interface and Alarm Module.

可编程定标器带积分仪 (双显), 和 RS-232 电脑接口和报警模块

MGC-23 RS-232 Computer Interface (internal)

内置 RS-232 电脑接口

MAC-5 Air Control Timer; Low Flow Alarm and Flowmeter

空气控制计时器, 低流报警和流量计

MGA-5 Single Channel Analyzer

单程分析仪

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WIN-W Optional Data Logger Software.
选购数据录入软件

- **Pump:** Muffler and trap included. 115V 60Hz 2A. (230 V 50-60 Hz optional).
- **泵:** 包括消音器和托架。115V 60Hz 2A. (230 V 50-60 Hz 选购).
- **Shielding:** 1" lead about sample and detector.
- **屏蔽:** 样品和探头周围 1"
- **Range:** 1×10^{-13} to 1×10^{-7} $\mu\text{Ci/cc}$ or (Ci/m^3) .
- **量程:** 1×10^{-13} - 1×10^{-7} $\mu\text{Ci/cc}$ 或 (Ci/m^3) .
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- **Alarm:** Settable. 2000 Hz beeper and red flasher.
- **报警:** 可设定 2000 Hz 蜂鸣音和红色闪灯
- **Response Time:** Settable 1 second to 40 hours.
- **响应时间:** 可设定 1 秒-40 小时
- **Readout:** 4 digit LED for rate measurement and 6 digit LCD for integrated dose.
- **读出:** 4 位数 LED 用于辐射率测量和 6 位数 LCD 用于综合剂量
- **Power:** 115V, 50-60 Hz (230 V optional).
- **电源:** 115V, 50-60 Hz (230 V 选购).
- **Flow Rate:** Regulated. Normally set at 70 liters/min.
- **流量:** 调节, 正常设定 70L/分钟
- **Filters:** Includes package of 100 filters. Can also use membrane or glass fiber filters.
- **尘滤网:** 包括一包 100 片滤网, 还可以使用膜或保留纤维尘滤网
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- **Case:** Electronics housed in enameled aluminum carrying case; handles included or may be rack mounted.
- **箱:** 电子学封装在铝提箱内, 包括提手或安装架
- **Dimensions:**
- 尺寸
 - Excluding pump and detector assembly: 17"W x 13"H x 13 1/2" D.
 - 不含泵和探头组件: 17"W x 13"H x 13 1/2" D.
 - Detector assembly 5"W x 10"H x 6" D.
 - 探头组件: 5"W x 10"H x 6" D.
 - Pump assembly 8"W x 8"H x 14"D.
 - 泵组件: 8"W x 8"H x 14"D.
- **Accessories:** Filter: Free flowing high retention filter paper.
- **配件:** 尘滤网: 高记忆效率滤纸
- **Shipping Weight:** 84lbs.
- **装运重量:** 84lbs.

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