

PORTABLE IODINE MONITOR

便携式碘监测器

Model # FR-PIB Total Airborne Activity

型号 FR-PIB 总气溶胶辐射

Model# FR-P11 and FR-P11-PB Iodine or PET

型号 FR-P11 和 FR-P11-PB 碘或 PET

FEATURES:特点

- DETECTS 6×10^{-11} uCi/cc in 30 minutes
30 分钟检测 6×10^{-11} uCi/cc
- USER FRIENDLY
用户容易操作
- BUILT-IN TIMER
内置计时器
- LINE OPERATED
电线供电
- INTEGRATED EXPOSURE
综合辐射曝露
- CAN DRAW AIR FROM HOOD or ROOM
可从通风罩或房间抽进空气
- QUICK CHANGE FILTER
快速更换滤网
- OPTIONAL: RS-232 COMPUTER AND/OR
DATALOGGER INTERFACE
选购：RS-232 计算机和/或数据录入器接口

APPLICATION:应用

The FR Series Air Monitor assures Safety against airborne radioactivity contamination by means of constant check and optional record capability. It provides integrated exposure information. The FR Series is sensitive and versatile. Although designed as an industrial workplace and hospital breathing air measurement system, it may be used to monitor fume hoods and stack effluent down to EPA levels..

FR 系列空气监测器通过持续检测气溶胶辐射污染物和可选购的记录功能，以确保安全。此系统综合曝辐信息，敏感、多用途，尽管为工厂车间和医院呼吸测量系统设计，还可以用于监测通风柜和烟囱道排放物，达到 EPA 标准

DESCRIPTION:

描述

The FR-P Series uses standard charcoal filters in TA's unique quick change, no leak holders to trap any airborne radio-iodine. The filter is under constant surveillance via a GM (FR-PIB) or scintillation (FR-P11) detector. Air is drawn by a high volume pump through a flow meter and exhausted



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through a short three-foot hose. An Inlet and outlet hose may be attached to allow monitoring of hoods, glove boxes, stacks, etc. Time is controlled by a timer wired into the pump circuit. The unit is completely self-contained and portable. Complete with 10 filters.

FR-P 系列使用标准炭滤器，TA 公司独有的快速更换特色，无泄漏托架，捕获任何气溶胶辐射碘。通过一个 GM 管（FR-PIB）或闪烁探测器（FR-P11）探头，滤网被持续监测。空气由一个高容量泵，通过率表抽进，由一根短的 3 英尺长的软管排出。出入管可以连接到通风柜，手套箱，烟囱道等等以便进行监测。时间由一个电路连接到泵的定时器控制。此装置完全一体便携。带 10 个滤网。

SPECIFICATIONS:

规格

Electronics:

PRS-5 Scaler/Timer with Energy Analyzer (See PRS-5 Spec Sheet or FIL-7 Programmable Scaler/Timer Spec Sheet).

电子学：PRS-5 定标器/计时器带能量分析器（见 PRS-5 规格一页或 FIL-7 可编程的定标器/计时器规格页）

Pump:

High Flow Pump and Filter holder.

泵：高流量泵和滤网卡托

Power: 115 V 50-60 Hz 2A (Optional: 230 V 50-60 Hz).

电源：115 V 50-60 Hz 2A（可选购 230 V 50-60 Hz）。

Range: 1×10^{-13} to 1×10^{-7} $\mu\text{Ci/cc}$ (or Ci/m^3) (Depends on count time)

范围：： 1×10^{-13} 到 1×10^{-7} $\mu\text{Ci/cc}$ (或 Ci/m^3)（视计数时间而定）

Readout: 6 Digit LCD - PRS-5, or 6 digit LED - FIL-7D.

读出：6 位数，LCD-PRS-5，或 6 位数 LED-FIL-7D

Flow Rate: 227 liters/min

流量：227 升/分钟

Filters: Includes package of 10 charcoal filter papers or 10 silver activated charcoal filter cartridges for Model FR-P11-PB only. (Can also use membrane, paper or glass fiber filters for particulates only.)

滤网：包括 10 包炭滤纸或 10 个银活性炭过滤器墨盒（仅限型号 FR-P11-PB），（也可使用滤膜，滤纸，玻璃纤维滤网，仅限粒子检测）

SPECIFICATIONS: 规格

Case: Electronics housed in enameled aluminum housing; handle included.

外箱：电子学带镀漆铝外罩，包括把手

Dimensions: Excluding pump and detector assembly: 17"W x 13"H x 13 1/2"D.

尺寸：17"宽 x 13"高 x 13.5"深，不包含泵和探头装配



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Detector Assembly: 5"W x 10"H x 6"D.

探头装配: 5"宽 x 10"高 x 6"深.

Pump Assembly: 11"W x 13"H x 11"D.

泵装配: 11"宽 x 13"高 x 11"深.

Shipping Weight: 84 lbs.

装船重量: 84 磅

Options: Shielding - Detector shielding.

选购: 屏蔽-探头屏蔽

Alarm - Settable 2000 Hz beeper and red flasher.

报警-预设 2000Hz 蜂鸣音和闪烁红灯

Interface - RS-232 (Model MCC-23).

接口-RA-232 (型号 MCC-23).

Serial Printer.

串口打印机

Model 型号	FR-PIB FR-PIB	FR-P11 FR-P11	FR-P11-PB FR-P11-PB
Portability: 便携性	Portable 便携	Portable 便携	Portable 便携
Detector: 探头	T-1190GM Tube T-1190GM 管	PGS-31 PGS-31	PGS-3 PGS-3
Size/Material 尺寸/材料	2" dia. Pancake 直径 2"扁平管	1"x0.8" Nal (TI) 1"x0.8" Nal (TI)	1"x1" Nal(TI) 1"x1" Nal(TI)
Window: 窗	Mica 1.5-2.0 mg/cm ² 云母 1.5-2.0 mg/cm ²	Aluminum 5mil 5 毫英寸铝	Aluminum 10-20mil 10-20 毫英寸铝
Detector: 探头	Beta, Gamma Removal of Alpha Shield allows detection of Radon Alphas. 移除 β - γ 的 α 屏蔽, 允许探 测氡 α	Low + Middle Gamma. 低+中 γ	Gamma γ
Iodine: 碘	I-131 I-131	I-125, I-129, I-131 I-125, I-129, I-131	I-131 I-131
Detects Particulates: 检测粒子	Yes 是	Optional 选购	Optional 选购
Detects Aerosol & Reactive Gases*: 检测气溶胶&辐射气 体	Yes 是	Yes 是	Yes 是



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Filter: 滤器	Charcoal Filter Paper 2" dia. 直径 2"炭滤纸	Charcoal cartridge 2.5" dia. 直径 2.5"炭滤芯	Charcoal Filter Paper 2.5" dia. 直径 2.5"炭滤纸
Iodine Sensitivity: (30 min) 碘灵敏度 (30 分钟)	5×10^{-11} $\mu\text{Ci/cc}$ 5×10^{-11} $\mu\text{Ci/cc}$	1×10^{-10} $\mu\text{Ci/cc}$ 1×10^{-10} $\mu\text{Ci/cc}$	5×10^{-12} $\mu\text{Ci/cc}$ 5×10^{-12} $\mu\text{Ci/cc}$
Public Release (1×10^{-10} $\mu\text{Ci/cc}$) 公共排放 (1×10^{-10} $\mu\text{Ci/cc}$)	1/2x Public Release 1/2x 公共排放	Public Release 公共排放	1/20x Public Release 1/20x 公共排放
Weight: 重量			
Electronics 电子学	4 lbs 4 磅	4 lbs 4 磅	4 lbs 4 磅
Detector + Filter: 探头+滤器	2 lbs 2 磅	4 lbs 4 磅	5 lbs 5 磅
Pump: 泵	20 lbs 20 磅	20 lbs 20 磅	20 lbs 20 磅
Shielding: 屏蔽	None 无	None 无	1/2" lead-Pb 0.5" 铅
Electronics: 电子学	PRS-5 PRS-5	PRS-5 PRS-5	FIL-7D FIL-7D

Easy Procedure for Use:

程序简单易用

Flow-rate and air sample time have been preset (user can change those if desired).

流量和采样时间已经被预设 (用户可改变, 如需要)

1. Turn on instrument. 打开仪器
2. Put in clean filter. 放进干净滤网
3. Make Test Count (pump Off). 测试计数 (泵关闭)
4. Turn on Pump and start counter. 打开泵并开启计数器
5. Come back in 30 minutes. (pump and counter have automatic timer SHUT-OFF)
30 分钟后返回。(泵和计数器有自动计时“关闭”功能)
6. Digital display reads out the airborne I-131 that has deposited on the filter
数字显示读出积累在滤网上的气溶胶 I-131 辐射
 - A. Filter must be clean at start of each new air sample.
每次开始空气新样品滤网必须干净
 - B. User can change sample time and/or flow-rate but must enter new scale factor.
用户可以改变样品时间和/或流量, 但必须输入新标度因数
 - C. User can change readout units. 用户可以改变读出单位

