

LOW BACKGROUND GAS FLOW BETA COUNTING SYSTEM

低本底流气式 β 计数系统

Model ~ SFM-9V

FEATURES: 特点

- EXCEPTIONAL PLATEAU & HIGH EFFICIENCY
- 极好的坪区和高效率
- PROPORTIONAL OPERATION
- 正比计数
- **INCLUDES: SAMPLE DETECTOR & GUARD DETECTOR**
- 包括: 样品探测器&防御探测器
- SMART ELECTRONICS & COLOR MONITOR
- 智能电子学&彩屏
- 1" DIAMETER SAMPLE CAPACITY
- 直径 1"样品容量
- MANUAL & PRESET COUNT TIME (OPTIONAL PRESET COUNT)
- 菜单&预设计数时间 (可选预设计数)
- SELECTABLE ALARM
- 选择性报警
- WINDOWLESS – STANDARD
- 无窗-标准型
- SERIAL RS-232 OR USB OUTPUT
- 串口 RS-232 或 USB 输出



SFM-9V ELECTRONICS



SFM-9V PROPORTIONAL DETECTOR

APPLICATION:

- Model SFM-9V Low Background Gas Flow Counting System is engineered to produce high counting efficiencies where extremely low levels of Beta radioactivity are being measured.
- 型号SFM-9V低本底流气式计数系统设计为高计数率测量极低 β 辐射。
- It is ideal for applications in biological, physical, and chemical research, or in environmental sampling for health physics and public health services.
- 理想应用于生物、物理和化学研究或保健物理和公共健康服务中的环境样品测量
- The instrument includes a sample tray holder which accepts samples up to 1" in diameter.
- 仪器包括样品托, 接受直径1"样品
- This instrument is designed for ease of maintenance.
- 仪器设计容易维护



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Model ~ SFM-9V

DESCRIPTION: 描述

Model SFM-9V Includes: 此型号包括

- Guard Detector
- 防护探测器
- Adjustable power supplies
- 可调节电源
- Preset time mode with auto-cycling capacity
- 预设时间模式带自动循环功能
- Gas flow proportional detector
- 流气式正比探测器
- Two single channel analyzers
- 两个单道分析仪
- On-screen scaler read-out
- 屏载读数器
- All cabling & hoses included
- 包括所有缆线和管子
- Presettable relays feature operating alarm, interlock, flow deflector, or other external control.
- 预设继电器报警、连锁、导流片或其它外置控制
- Lead shield around detectors to reduce background
- 探头周围铅屏减少本底影响

The combination of the full 2π detectors and the precision collector wires provide the key to the high counting efficiency.

全 2π 半球探测器与精密收集器电路结合成就了MGS-5AB流气式计数器模块的高计数效率

Discriminator mode & Dual Single Channel Analyzer module have built in pre-amplifiers for Beta counting.

甄别器模式&两个单道分析仪模块已安装在前置放大器中用于 β 计数。

SPECIFICATIONS: 规格

- Sample Size:** 1" (26mm) Diameter, Depth to 1/4" (6mm).
样品尺寸: 直径1" (26mm), 高1/4" (6mm).
- Sample Holder Size:** Will hold Planchet Size 20-25mm
样品托尺寸: 容下20-25mm大小的圆片
- Sample Chamber:** 1 1/8" diameter Low Background Gas Flow Detector Probe with Drawer.
样品室: 直径1 1/8"低本底流气式探测器, 带抽屉
- Guard Chamber:** Gas Flow Proportional Detector, used in Coincidence Mode with Sample



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Chamber to detect-and-reject Cosmic ray counts.

防护室:	流气式正比探测器, 使用符合模式与样品室探测并剔除宇宙射线产生的计数
Collector:	1mil stainless steel loop.
收集器:	1毫米不锈钢环路
Count Yield:	Windowless: Betas of K-40 30% to 50% Gamma sensitivity is low and is inversely proportional to Gamma energy.
计数效率:	无窗: K-40 β 30% - 50%, γ 灵敏度低, 与 γ 能量成反比
Background:	<3 cpm
本底:	
Efficiency:	30% (K-40 Beta) or better
效率:	
High Voltage:	0-2500 V with adjustable potentiometer (2).
高压:	0-2500 V, 带可调节电位计 (2个)
Coincidence Analyzer:	Coincidence & Anticoincidence Modules
符合分析仪:	符合&反符合模块
Shielding:	80mm thick Lead (2mm Al & 1mm Cu)
屏蔽:	80毫米厚铅 (2mm铝&1mm 铜)
Display Range:	0-20,000 counts, positive & negative polarity, (2) on-board counters, discriminator (1V)
显示量程:	0-20,000 计数, 正负极
Dimensions:	Electronics: 21"W x 12"H x 16"D Detectors, Drawer and Shield: 18"W x 15"H x 12"D
尺寸:	电子学: 21"宽 x 12"高 x 16"深 探测器, 抽屉和屏蔽: 18"W x 15"H x 12"D
Power Requirements:	115V 50-60 Hz (Optional 230V 50 or 60 Hz).
电源要求:	
Readout:	7" Color Monitor.
读数屏:	7寸彩屏
Needle Valve:	Needle Valve for Flow Control (2)
针型阀:	针型阀用于流量控制 (2个)
Interface:	Serial RS-232 or USB output.



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- 接口:** 串口RS-232 或 USB 输出
- Warranty:** 1 year
- 保修:**
- Accessories:** Shipment includes all cables and hoses for standard operation.
- 配件:** 随机带所有缆线、管子用于正常操作。



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