LOW BACKGROUND GAS FLOW BETA COUNTING SYSTEM
Model ~ SFM-9V

FEATURES:
- EXCEPTIONAL PLATEAU & HIGH EFFICIENCY
- PROPORTIONAL OPERATION
- INCLUDES: SAMPLE DETECTOR & GUARD DETECTOR
- SMART ELECTRONICS & COLOR MONITOR
- 1” DIAMETER SAMPLE CAPACITY
- MANUAL & PRESET COUNT TIME (OPTIONAL PRESET COUNT)
- SELECTABLE ALARM
- WINDOWLESS – STANDARD
- SERIAL RS-232 OR USB OUTPUT

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.
- It is ideal for applications in biological, physical, and chemical research, or in environmental sampling for health physics and public health services.
- The instrument includes a sample tray holder which accepts samples up to 1” in diameter.
- This instrument is designed for ease of maintenance.

DESCRIPTION:
Model SFM-9V Includes:
- Guard Detector
- Adjustable power supplies
- Preset time mode with auto-cycling capacity
- Gas flow proportional detector
- Two single channel analyzers
- On-screen scaler read-out
- All cabling & hoses included
- Presettable relays feature operating alarm, interlock, flow deflector, or other external control.
- Lead shield around detectors to reduce background

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

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

Sample Size: 1” (26mm) Diameter, Depth to 1/4” (6mm).
Sample Holder Size: Will hold Planchet Size 20-25mm
Sample Chamber: 1 1/8” diameter Low Background Gas Flow Detector Probe with Drawer.
Guard Chamber: Gas Flow Proportional Detector, used in Coincidence Mode with Sample Chamber to detect-and-reject Cosmic ray counts.
Collector: 1mil stainless steel loop.
Count Yield: Windowless:
   Betas of K-40 30% to 50%
   Gamma sensitivity is low and is inversely proportional to Gamma energy.
Background: <3 cpm
Efficiency: 30% (K-40 Beta) or better
High Voltage: 0-2500 V with adjustable potentiometer (2).
Coincidence Analyzer: Coincidence & Anticoincidence Modules
Shielding: 80mm thick Lead (2mm Al & 1mm Cu )
Display Range: 0-20,000 counts, positive & negative polarity,
   (2) on-board counters, discriminator (1V)
Dimensions: Electronics: 21”W x 12”H x 16”D
   Detectors, Drawer and Shield: 18”W x 15”H x 12”D
Power Requirements: 115V 50-60 Hz (Optional 230V 50 or 60 Hz).
Readout: 7” Color Monitor.
Needle Valve: Needle Valve for Flow Control (2)
Interface: Serial RS-232 or USB output.
Warranty: 1 year
Accessories: Shipment includes all cables and hoses for standard operation.