Portable Liquid Scintillation Counting System

Model Series - SSS-22

SSS-12P-1, SSS-22P, SSS-22-MCA, SSS-22-PAL, SSS-22-PAL-ID, SSS-22-LR

Gamma Background Radiation Rejection Features

- Energy analyzer window rejects pulses with energies outside the window setting
- Optional Lead Shielding around detector

Counting Assembly Features

- Excellent repeatability
- Fully light tight system
- Fail safe interlock to protect PM tubes
- High transmission optical coupling to PM tube

PM Tube and Pre-Amp Noise Elimination Features

- Coincidence Verification with High quality Dual PM tubes and preamps.
- Fully adjustable energy analyzer window rejects low energy pulses.
- SSS-12P-1: 1 Vial Capacity 1 PM Tube
 SSS-22P: 3 Vial capacity for faster thru
 - 3 Vial capacity for faster thru-put and easy comparison of sample to calibration standard or to the background 2 PM Tubes
- SSS-22P and SSS-22-LR:
- 3 Vial capacity provides less wait time for dark adaption of phosphor

Data Analysis and Presentation

- Scintillation counts detected by PM tubes are processed by a fully adjustable single channel analyzer which is centered on the energy peak of the isotope being measured. This deletes both higher energy pulses from background radiation and lower energy counts from the PM tube or circuit noise. The pulses feed to a digital scaler and optional digital printer.
- This process allows long count times for measurement of very minute samples.
- USB interface to computers or data stations.

Specifications

| H-3 Gross Efficiency: | >50% Gross, Coincidence efficiency >10% Verified. |
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| H-3 Gross Efficiency: | >20% Gross, Coincidence efficiency >10% Verified (SSS-22-LR) |
| H-3 Sensitivity: | 20,000pCi/l in 30 minutes; Below 10,000 pCi/l in 3 hours (SSS-22-LR) |
| Count Times: | 1 sec. thru 99 sec. (1 sec. increments), and 1 min. thru 99 min. (in 1 min. increments). |
| Voltage: | 0-1500 Volts - fully user settable. |
| Readout: | Digital - 6 digit LCD, (LED optional). |
| Outputs: | Standard: Serial pulse output and R-232. |
| Power: | Rechargeable Lithium batteries and AC adapter |
| Sample Size: | Accepts standard Liquid Scintillation vials 20-25 ml. |
| SSS-22 PAL Case: | Weather-tight NEMA rated tough, durable, lightweight. |
| | A "tongue-in-groove" continuous "O"-ring system makes the case water, moisture, |
| | and dust tight. Plus a low profile pressure release valve. |
| Optional: | SSS-22P and SSS-22-LR: Accepts 6-7 ml vials with Optional adapter. |
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Scintillation Fluors: Accepts most scintillation fluors. Perkin-Elmer Ultima Gold-LLT is recommended for H-3 counting



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