

THE "QUICKY" IN-VIVO COUNTER

- Guaranteed reliable service
- Customer selectable options
- Preferred linear geometry (simulates Scanning Geometry)
- Qualitative and quantitative analysis results in seconds
- Internal and external measurements simultaneously
- Background monitored continuously except during count
- Portable on wheels, easily moved
- May be used optionally with Magnetic Cards or Bar Codes, etc.
- Multi language software (English, French, Spanish, German, Dutch, Portuguese, etc.)



Helgeson "Quicky" In-Vivo Counter is designed to complement any health physics program which includes routine whole body counting. The "Quicky" is used to rapidly screen personnel or it can be used with a fixed counting time to obtain more precise results. The printed results provide the documentation for subject identification, counting time and date. Results are reported in Becquerel or Nano curies. The "Quicky" can reduce your regular counting requirements and costs significantly.

Software for the "Quicky" is "user-friendly" with a menu format which provides a variety of standard and optional operating programs. System performance software includes a Quality Assurance program which checks the electronics of both the NaI(Tl) and proportional counters, reporting any errors to the operator. An Energy Calibration program allows the gains of the individual detector-amplifier systems to be adjusted to uniformity and conformity to the design parameters.

Helgeson can provide a complete turn-key in-vivo counting system or any portion thereof, including all necessary hardware, software, operating procedures, instruction manuals, installation and training. The equipment is designed to provide the customer with a high quality, quantitative, low-maintenance in-vivo counter 24 hours a day, 365 days a year.

Description:

The "Quicky" is a high performance instrument which uses four NaI(Tl) detectors and twenty gas flow proportional counters. This instrument will perform quantitative measurements of internally deposited radionuclides as well as determining the amount and location of external contamination. A linear geometry minimizes counting errors due to weight and height differences.

The "Quicky" system features a continuous background monitoring capability which reduces counting time and increases accuracy. Electronic components are chosen for long term unattended operation and stability. The system is interfaced to a microcomputer which serves as a multi-channel pulse height analyzer, a scaler for the proportional counters, and an in vivo data processing unit, as well as a general purpose scientific computer. Various configurations are available, depending upon customer needs.

Physical Specifications:

- Height: 203 cm
- Width: 81 cm
- Length: 216 cm
- Weight (approx): 2730 kg

Detectors:

- 4 units NaI(Tl), 10x10x7.5 cm
- Model I, plastic scintillator detectors
- Model III. 20 gas flow proportional counters for hands, feet, head, front and back of body

Power requirements:

- 105-125 volts AC: 60 Hz, 10 Amp
- 200-250 volts AC: 50 Hz, 5 Amp

Environmental requirements:

- Temperature max: 16 - 40°C
- Humidity: 30%-80% noncondensing

Shielding (LEAD)

- 5-cm around the detector(s) (adjustable)
- 5-cm behind the subject (adjustable)

Software

- Data Acquisition, continuous spectral display
- Data Analysis with graphs of original data and residuals
- Calibrations: Energy vs. Channel and Efficiency
- Parameter Modification for complete control: acquisition, analysis & miscellaneous parameters
- File Maintenance
- Miscellaneous Utility Programs

