

# THE QUICKY VII

- Guaranteed reliable service
- Customer selectable options
- Preferred linear geometry (simulates Scanning Geometry)
- Qualitative and quantitative analysis results in seconds
- Internal measurements
- Background monitored continuously except during count
- Fast Screening System
- Temperature stabilizing function of NaI detectors
- 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), 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 two NaI(Tl) detectors of 4"x4"x16". This instrument will perform quantitative measurements of internally deposited radionuclides.

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, 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: 230 cm
- Width: 90 cm
- Length: 115 cm
- Weight (approx): 4800 kg

### Detectors:

- 2 units of NaI(Tl) of 4"x4"x16".
- MDA (one minute counting):  
Cs-137 (662 KeV)  $\leq$  890 Bq  
Co-60 (1173,1332 KeV)  $\leq$  740 Bq
- Resolution less than 9% at 662 KeV

### Power requirements:

- 220 VAC, 60 Hz

### Shielding (Low background steel)

- 10 cm thickness
- Inside of the shield replaceable in the event of contamination

### 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
- Dose calculating software based on ICRP recommendations and approved by the Spanish Nuclear Council.

