

LUDLUM MODEL 14C

SURVEY METER WITH END-WINDOW GM PROBE

Satisfies NRC requirements for Nuclear Medicine departments

A standard survey instrument for nuclear medicine departments, the portable Model 14C Survey Meter with End-window Probe meets the essential surveying needs of most Nuclear Medicine facilities. The end-window probe is used to check hands, clothing, packages, and other surfaces for contamination, and for background readings. For high-range gamma detection, the built-in energy-compensated GM detector with the x1000 multiplier range handles counts up to 2R/hr. The meter features a built-in speaker with ON/OFF switch, front-access calibration controls, push-button reset to zero the meter, and a toggle switch to select FAST (4 sec.) or SLOW (22 sec.) response.

SPECIFICATIONS:

Survey Meter:

Compatible Detectors: GM, Scintillation

Meter Face: 0-2 mR/hr, 0-4.2k cpm, battery test

Threshold: 30 mV \pm 10 mV

Multiplier Ranges: x0.1; x1; x10; x100 for external detector; x1000 for internal detector

Internal Detector: Energy-compensated GM, for high range gamma detection only; 2000 mR/hr

High Voltage: 900V

Response: Toggle switch for FAST (4 seconds) or SLOW (22 seconds) for 90% of final reading

Reset: Push button to zero meter after over-range exposure

Audio: Built-in unimorph speaker with ON/OFF switch

Sensitivity: 2100 cpm/mR/hr for Cs-137

Batteries: 2 each, size "D", typical life 600 hours

Construction: Painted aluminum housing

Dimensions: 3.5" w x 6.5" h x 8.5" l (9 x 16.5 x 22cm)

Weight: 3.5 lb (1.6 kg) including batteries

End-window GM Probe:

Indicated Use: Alpha, beta, and gamma surveying; sample counting

Detector: End-window halogen quenched GM

Window: 1.7 \pm 0.3 mg/cm² mica

Window Area: 6 cm² active, 5 cm² open

Efficiency (4pi): 2 % for C-14, 10% for Sr-90 and Y-90, 7% for Tc-99 and Pu-239

Gamma Sensitivity: 2100 cpm/mR/hr for Cs-137

Energy Response: Energy dependent

Operating Voltage: 900 volts

Protective Screen: 79% open, stainless steel

Housing: Anodized aluminum

Dimensions: 1.8" diameter x 5.8" l (4.6 x 14.7 cm)

Weight: 1 lb (0.5 kg)

Detector Cable: 39" (99 cm), type "C" connectors



FEATURES:

- *Monitors alpha, beta, and gamma*
- *0-2 R/hr range*
- *External end window GM probe (39" cable included)*
- *Internal energy-compensated GM detector*
- *Five counting scales (x0.1, x1, x10, x100, x1000)*
- *Alpha Efficiency – 15%*
- *Beta Efficiency – 5% for C-14, 20% for Sr-90*
- *Gamma Efficiency – 14% for Tc-99*
- *Sensitivity – 2100 cpm/mR/hr for Cs-137*

051-014 Survey Meter, Model 14C \$1,195.00
Includes Internal Energy-Compensated GM Detector, External End-Window GM Probe and mounted Check Source (Cs-137, 1.0 uCi).

Prices subject to change without notice.

www.jgravengaard.com 2009-11-02

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