

Model 3001-3RK2 Emergency Response Kit

Features

- Ready-to-Go Response Kit
- Ergonomic Survey Meter with 4 Selectable and Configurable Detector Settings
- Measures Alpha, Beta, and Gamma Contamination
- Convenient In-Field Detector Switching
- Includes
 - Model 3001 Multi-Detector Survey Meter
 - Model 133-6 Gamma Detector
 - Model 44-9 Alpha/Beta/Gamma Detector
 - Model 44-2 High Energy Gamma Detector
 - Check Source, Stick-On Source Holder,
 - Cable, Batteries, Transport/Carry Case

Model 3001 Multi-Detector Survey Meter

ALARMS: two adjustable count rate, exposure/dose, and scaler alarm setpoints adjustable over the display range

OVERLOAD: high count rate saturation protection prevents false display of lower count rates

LOSS OF COUNT PROTECTION: after preselected time interval (default 60 seconds) of no pulses from detector, audible and visual alarms will be activated

LCD DISPLAY: 3 digit LCD with 20 mm (0.8 in.) digits, (k)cps, (k)cpm, (k)Bq, (k) dpm, (μ)(m)R/h, (μ)(m)Sv/h, low-battery indicator, MAX, ALARM, AUDIO

DISPLAY RANGE: 0.0 cps to 99.9 kcps; 0.00 cpm to 999 kcpm; 0.00 Bq to 99.9 kBq; 0.00 dpm to 999 kdpm; 0.00 μR/h to 999 R/h; 0.00 μSv/h to 999 Sv/h. Max Display can be set to limit display to calibrated range

BACKLIGHT: built-in ambient light sensor automatically activates LED backlight, unless internal dipswitch is set to continuous-On (will reduce battery life)

USER CONTROLS:

- ON/ACK: Extra-long press to turn ON; Short press to adjust audio level acknowledge alarms; long press to reset mode, extra-long press plus 3 seconds to turn OFF
- MODE: Short press alternates between available modes: RATE (display count rate), MAX (captures peak rate), and COUNT (captures rate or dose readings for a user-selectable preset count time from 0 to 10 minutes)
- DETECTOR: Short presses to change between available detector
- UNITS: Short press changes the units between count rate, dose/exposure, or disintegration, an extra-long press to change count time in COUNT mode
- LOG: Short press to log current display (requires Lumic Data Logger Kit), or initiate count in COUNT mode

RESPONSE TIME: selectable from 1 to 60 seconds, or Auto-Response Rate FAST or SLOW

AUDIO: approximately 4.5 kHz, click audio greater than 65 dB at 0.6 m (2 ft), alarm audio greater than 72 dB

POWER: four alkaline "AA" batteries

BATTERY LIFE: 500 hours (as low as 60 hours with backlight configured for continuous-on), 16-hour low battery warning

CONSTRUCTION: high-impact plastic with water-resistant rubber seals and separate battery compartment

ENVIRONMENTAL RATING: NEMA (National Electrical Manufacturers Association) rating of 5x or IP (Ingress Protection) rating of 53

PHYSICAL: 16.5 x 11.4 x 21.6 cm (6.5 x 4.5 x 8.5 in.); 0.7 kg (1.6 lb) (excluding detectors and clips)



Model 44-9 Alpha/Beta/Gamma Detector

DETECTOR: pancake-type, halogen-quenched GM

EFFICIENCY (4π): 5% for ¹⁴C; 22% for ⁹⁰Sr/⁹⁰Y; 19% for ⁹⁹Tc; < 1% for ^{99m}Tc, 32%-³²P; 1% for ²³⁹Pu

SENSITIVITY (¹³⁷Cs gamma): 3300 cpm/mR/hr

ENERGY RESPONSE: energy dependent

BACKGROUND: 60 cpm

DEAD TIME: 80 microseconds

OPERATING VOLTAGE: 900 Vdc

PHYSICAL: 4.6 x 6.9 x 27.2 cm (1.8 x 2.7 x 10.7 in.); 0.5 kg (1 lb)

Model 44-2 Gamma Detector

DETECTOR: scintillator, 2.5 x 2.5 cm (1 x 1 in.) NaI(Tl)

EFFICIENCY: ¹²⁵I for 7%; ⁵⁷Co for 10%; ¹³⁷Cs for 3%; ⁶⁰Co for 3%

SENSITIVITY: typically 175 cpm/μR/hr (¹³⁷Cs gamma)

ENERGY RESPONSE: energy dependent

BACKGROUND: 1900 cpm

OPERATING VOLTAGE: 500 to 1200 volts

PHYSICAL: 5.1 x 18.5 cm (2 x 7.3 in.); 0.5 kg (1 lb)

Model 133-6 Gamma Detector

DETECTOR: energy-compensated GM, 30 mg/cm² stainless steel (halogen quench)

LINEAR RANGE: 40 μSv/h to 400 mSv/h (4 mR/hr to 40 R/hr)

SENSITIVITY: 1.8 cpm/μSv/h (18 cpm/mR/hr) (¹³⁷Cs gamma)

BACKGROUND: 1 cpm or less

ENERGY RESPONSE: within 15% of true value (60 keV to 3 MeV)

DEAD TIME: typically 50 microseconds

PHYSICAL: 2.3 x 10.2 cm (0.9 x 4.0 in.); 0.090 kg (0.20 lb)