

# LUDLUM MEASUREMENTS, INC.

## Model 3001-2RK

### Emergency Response & NORM Kit

#### Features

- Ready-to-Go 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 44-9 Alpha-Beta-Gamma Detector
  - Model 44-2 High Energy Gamma Detector
  - Check Source, Cable, Batteries, Transport & Storage Case

Model 3001 display and control buttons



Part Number: 48-4178

#### 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 rating of 5x or IP rating of 53

**SIZE (H x W x L):** 16.5 x 11.4 x 21.6 cm (6.5 x 4.5 x 8.5 in.)

**WEIGHT:** 0.7 kg (1.6 lb) (excluding detectors and clips)

**Introduction** The Model 3001-2RK is composed of two dependable, high-quality detectors matched with the versatile Model 3001 survey meter and packaged in a rugged transport and storage case. The Model 3001 can be configured with up to four detector setups, enabling the user to quickly exchange detectors in the field. Once the detector system is configured, a user can select a detector's parameters with a press of a button and choose the desired measurement units and operation mode. The kit includes the Model 44-9 alpha-beta-gamma detector for general survey measurements and the Model 44-2 high-sensitivity gamma detector for locating the source of high readings. The case is cushioned with dense foam padding, and has a large, comfortable grip, a manual pressure relief valve, and padlockable hasps. The kit also includes a 1 μCi (137Cs) check source, check source holder, cable, and batteries, making this kit ready-to-go for emergency response or NORM applications.

#### 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%

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

#### 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 232Th

32% for 32P; 1% for 239Pu

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