

Model 3000 Digital Survey Meter

Features

- Large, Backlit, Easy-To-Read LCD Screen
- Auto-Ranging
- RATE, MAX, and COUNT Modes
- Splash-Resistant Construction for Outdoor Use
- All-Digital Calibration
- Lightweight Yet Ruggedly Built
- Simple 5-Button Interface



Model 3000
with 44-9
optional
Model 44-9
detector



Model 3000
with 44-2

Introduction

The Model 3000 is a durable, lightweight instrument that is used with an external detector for alpha, beta, and gamma radiation survey. It features a large, easy-to-read LCD screen and audible alarms and is controlled using a simple five-button interface. The unit body is made of high-impact plastic and splash-resistant construction allows the instrument to be used outdoors.

Three modes of operation are available – RATE, MAX, and COUNT – which can be selected by pressing the MODE button. Measurements can be collected in two sets of units (primary and secondary) for RATE and MAX modes in cps, cpm, Bq, dpm, mR/h or $\mu\text{Sv/h}$ units. The user can switch between the two sets of units by pressing the UNITS button. When enabled with the optional Lumatic Data Logger Kit (PN: 4498-1019), data can be logged in any of the operational modes using the LOG button on the handle. Up to 1000 data points can be stored internally.

Instrument setup can be done either through the front-panel controls or via the Lumatic Calibration Kit (PN: 4519-865). The Model 3000 is shipped ready to use with batteries and a calibration certificate.

Ludlum Measurements, Inc. P.O. Box 810, Sweetwater, Texas 79556

Web: <http://www.ludlums.com> Tel: 800-622-0828 / 325-235-5494 / Fax: 325-235-4672 / Email: sales@ludlums.com

Note: specifications subject to change without notification. We are not responsible for errors or omissions.

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Specifications

Part Number: 48-4035

COMPATIBLE DETECTORS: GM, scintillation, or proportional

DISPLAY: 3 digit auto-ranging LCD with large 20 mm (0.8 in.) digits.

Units: (k)cps, (k)cpm, (k)Bq, (k)dpm, (μ)(m)R/h, (μ)(m)Sv/h.

Indicators: bar graph, MAX, ALARM, USB, audio, low battery.

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 μ R/h to 999 R/h
- 0.00 μ Sv/h to 999 Sv/h

NOTE: Operational display ranges are dependent on the detector and dead time configuration. The minimum and maximum display can be set to limit the display to the calibrated range.

LINEARITY: within 10% of true value

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

USER CONTROLS:

- ON/OFF: Extra-long press to turn ON; short press to acknowledge alarms; Extra-long press plus 3 seconds to turn OFF
- UNITS: Short press changes the units between count rate, dose/exposure, or disintegration; Extra-long press to change count time in COUNT mode
- AUDIO: Short press to adjust audio level
- MODE: Short press alternates between available modes: RATE (displays 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)
- LOG: Short press to log current display (requires Lumic Data Logger Kit) or initiate count in COUNT mode

DATA LOGGING: Can store up to 1000 data points internally. Requires Lumic Data Logger Kit (PN: 4498-1019)

RESPONSE TIME: User-selectable from 1 to 60 seconds, or auto-response rate FAST or SLOW

ALARMS: Two count rate, exposure/dose, and count alarms set-points adjustable over the display range

OVERLOAD PROTECTION: High count rate saturation protection prevents false display of lower count rates. "OL" will appear on the display and an audio warning will be triggered.

LOSS OF COUNT PROTECTION: After a user-settable time interval of no pulses from detector (default 60 seconds), unit will flash a zero reading and the alarm audio will be triggered

OVERRANGE: If reading exceeds the predefined detector range, the instrument will flash a maximum reading and trigger an audio warning.

DEAD TIME CORRECTION: Employs first and second order corrections for extended performance

HIGH VOLTAGE: 400 to 1500 Vdc

THRESHOLD: -2 to -100 mVdc

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: Approximately 750 hours of operation (as low as 100 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

TEMPERATURE RANGE: -20 to 50 °C (-5 to 122 °F), may be certified for operation from -40 to 65 °C (-40 to 150 °F)

ENVIRONMENTAL RATING: NEMA rating of 5 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)

Options

Lumic Calibration Kit (PN 4519-865): Includes software and required cable. Lumic Calibration Software allows reading and writing of important instrument parameters via a USB port.

Lumic Data Logger Kit (PN 4498-1019): Includes software and required cable. Lumic Data Logger Software is required to use instrument data logging features.

Bluetooth® Option (PN 4498-1024): Wirelessly connects the instrument with an Android or iOS mobile device.

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