

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**



**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 Lumic 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 Lumic Calibration Kit (PN: 4498-1018). The Model 3000 is shipped ready to use with batteries and a calibration certificate.

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

Max. display can be set to limit display to calibrated range

LINEARITY: within 10%

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: Press to turn ON; Tap to acknowledge alarms and silence alarm tone; Press to reset sigma audio alarm; Hold for OFF
- UNITS: Changes the units between count rate (cpm, cps), dose/exposure (Sv/h, R/h), or disintegration (dpm, Bq)
- AUDIO: Turn "click" audio ON/OFF; Turn sigma audio beep ON/OFF; Toggle volume between HI, LO, and OFF
- MODE: Alternates between RATE (count rate), MAX (captures peak rate), and COUNT (user-selectable preset count time from 0 to 10 minutes)
- LOG: Press to store meter reading (requires Lumic Data Logger Kit)

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: Audible and visual indicators for count rate, exposure/dose, and scaler alarms. Set-points are adjustable over the display range.

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

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

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

HIGH VOLTAGE: 400 to 1500 Vdc

THRESHOLD: -2 to -100 mVdc

AUDIO: Greater than 75 dB at 0.6 m (2 ft), approximately 4.5 kHz

POWER: Four alkaline or rechargeable "AA" batteries (instrument does not support in-device charging)

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: 0.9 kg (2.0 lb)

Options

Lumic Calibration Kit (PN 4498-1018): 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.

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

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