

# Model 3005 Series

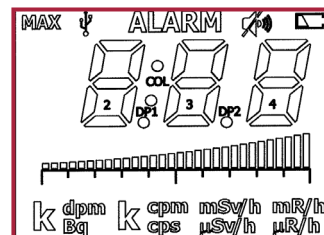
## Digital Survey Meter with Internal Detector



Ludlum Measurements, Inc.

### Features

- Large Backlit LCD for Ease of Reading
- Autoranging - Hands Free
- Easy to Use
- Light Weight and Ruggedly Built
- Splash-Resistant Construction for Outdoor Use
- 4-Button Intuitive Interface for Easy Operation
- USB Port for All-Digital Calibration
- Rate, Max, and Count Modes of Operation



### Introduction

The Model 3005 is an ergonomically-designed, light-weight digital survey meter used for measurements of radiation levels using an internal detector. This instrument's alarm set points can be designated through Setup Mode using the onboard keypad, or by USB connection via the optional software.

Features include a large, easily-readable LCD (liquid crystal display), audio warning tone, and intuitive design. Splash-resistant construction matched with a unit body made of durable, high-impact plastic enables this instrument to be used indoors or outdoors. The handle is shipped pre-configured for datalogging operations with the built-in logging push button and warning light, making the device ready if the customer chooses to acquire the optional datalog software.

Operators can access setup parameters via the front panel. An internal switch can disable the front-panel setup feature.

### Available Versions

Instrument	Range	Part #
3005	0.1-5000 mR/hr or 0.001-50 mSv/h	48-4231
3005/3	0.1-25,000 mR/hr or 0.001-250 mSv/h	48-4281
3005/4	1-50,000 mR/hr or 0.001-500 mSv/h	48-4259

### Specifications

Part Number: 48-4231

**DETECTOR:** Internal energy-compensated GM (see table above for available versions)

**DETECTOR RANGE:** 0.001 to 50 mSv/h (0.1 to 5000 mR/hr) (see table above for other available ranges)

**ENERGY RESPONSE:** 60 keV to 3 MeV ( $\pm 25\%$ )

**LINEARITY:**  $\pm 15\%$  full range (dose rate)

**LCD DISPLAY:** Autoranging 3-digit LCD display with large 20 mm (0.8 in.) digits, (k)cps, (k)cpm, ( $\mu$ )(m)R/h, ( $\mu$ )(m)Sv/h, low-battery indicator, MAX, ALARM, AUDIO

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

#### USER CONTROLS:

- **ON/OFF/ACK** - Press to turn ON; Tap to acknowledge alarms and silence alarm tone; Hold for OFF
- **MODE** - Alternates between NORMAL (count rate), MAX (captures peak rate), and COUNT (user-selectable preset count time from 0 to 10 minutes)
- **AUDIO** - Turn "click" audio On/Off

**UNITS** - Changes the units between count rate (cpm, cps), or dose/exposure ( $\mu$ Sv/h, mR/h)

**RESPONSE TIME:** User-selectable from 1 to 60 sec, or Auto-Response Rate FAST or SLOW; < 1 sec up to 10 mSv/h, < 2 sec above 10 mSv/h

**RESOLVING TIME:** Approximately 5  $\mu$ s as defined by IEC 60325

**ALARMS:** Alarm setpoints adjustable over the display range

**ZERO PROTECTION:** After a user-settable time interval (default 60 seconds) of no pulses from the detector, 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:** 550 V

**THRESHOLD:** -4 to -100 mV, typically set to -35 mV for GM detectors

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

**POWER:** Four alkaline or four 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 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:** 1.06 kg (2.3 lb)

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

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