

Model 3005

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**



Model 3005
with internally-mounted detector (2 views)
Part Number 48-4231

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 alternatively by USB connection via the optional software.

Features include a large, easily-readable LCD (liquid crystal display), piercing 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 setting adjustments, including calibration constant, dead time correction, efficiency, high voltage, high voltage current overload level, pulse threshold, response time (fast or slow), count time, operational modes (Rate, Max, or Count), and minimum/maximum display levels. Primary and Secondary units, unit alarm levels, count units, count alarm levels, and zero pulse protection time limit. An internal switch can enable or disable the front-panel setup feature.

Specifications

DETECTOR: version-dependent: internal energy-compensated GM for Models 3005 and 3005/4

ALARMS: alarm setpoints adjustable over the display range

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

LCD DISPLAY: autoranging 3-digit LCD display with large 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

DETECTOR RANGE: 1 μSv/h to 50 mSv/h (0.1 to 5000 mR/hr) (other ranges available)

ENERGY RESPONSE: 60 keV – 3 MeV (± 25%)

LINEARITY: ± 15% full range (dose rate)

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/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), dose/exposure (μSv/h, mR/h), or disintegration (dpm, Bq)

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

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 (National Electrical Manufacturers Association) 4x or IP (Ingress Protection) rating of 65

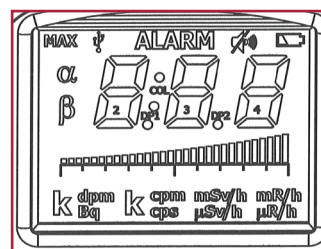
PHYSICAL: SIZE: 16.5 x 11.4 x 21.6 cm (6.5 x 4.5 x 8.5 in.) (H x W x L); **WEIGHT:** 1.06 kg (2.3 lb)

OPTIONS:

Lumic Calibration Kit: includes software and required cable [Part Number 4498-1018]

Lumic Datalog Kit: includes software and required cable [Part Number 4498-1019]

Headphone Option: provides jack and circuitry for a standard headphone plug [Part Number 4498-555]



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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: ludlum@ludlums.com

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