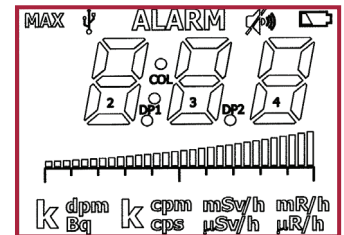


Model 3005 Series Digital Survey Meter with Internal Detector

Features

- Internal GM Detector
- 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 Rugged
- Simple 5-Button Interface



Introduction

The Model 3005 is a durable, lightweight instrument with an internal energy-compensated GM detector for 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, 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: 4498-1018). The Model 3005 is shipped ready to use with batteries and a calibration certificate.

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 on previous page for available versions)

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

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

LINEARITY: within 10%

DISPLAY: 3-digit auto-ranging LCD with large 20 mm (0.8 in.) digits. Units: (k)cps, (k)cpm, (μ)(m)R(/h), (μ)(m)Sv(/h).
Indicators: bar graph, MAX, ALARM, USB, audio, low-battery.

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; Hold for OFF
- UNITS: Changes the units between count rate (cpm, cps), or dose/exposure (μ Sv/h, mR/h)
- AUDIO: Turn "click" audio On/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

RESOLVING TIME: Approximately 5 μ s as defined by IEC 60325

ALARMS: Alarm setpoints adjustable over the display range

LOSS OF COUNT 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)

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.