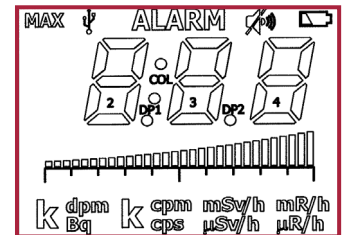


Model 3005 Series Digital Survey Meter with Internal Detector

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: 4519-865). The Model 3005 is shipped ready to use with batteries and a calibration certificate.

Configurations

Instrument	Range	Part #
3005	Background to 50 mSv/h (5 R/hr)	48-4231
3005/3	Background to 250 mSv/h (25 R/hr)	48-4281
3005/4	Background to 500 mSv/h (50 R/hr)	48-4259

Specifications

DETECTOR: Internal energy-compensated GM (see table on front for available versions)

DETECTOR RANGE: see table on front for available ranges

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

LINEARITY: within 10% of true value

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: 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

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

ALARMS: Two adjustable count rate, exposure/dose, and count alarm setpoints adjustable over the display range

OVERLOAD PROTECTION: High count rate saturation protection designed to prevent the 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 (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

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

HIGH VOLTAGE: 550 V

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

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 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 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.
- **Headphone Jack (PN 4498-555)**

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