

# Model 2241

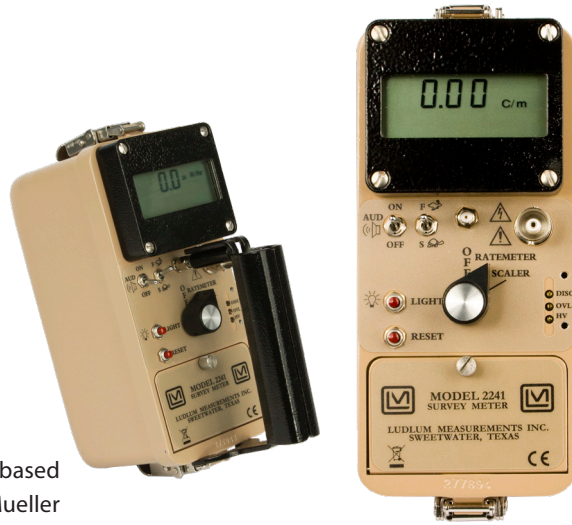
## General Purpose Ratemeter / Scaler



Ludlum Measurements, Inc.

### Features

- Digital Ratemeter with Built-In Scaler
- Auto-Ranging
- Adjustable Audible and Visual Alarms
- Wide Range HV
- Overrange & Overload Protection
- For Use with GM, Proportional & Scintillation Detectors



### Introduction

The Model 2241 is a portable, rugged, microprocessor-based instrument designed for use with scintillation, Geiger-Mueller (GM), and proportional type detectors. It is constructed of cast-and-drawn aluminum with beige powder coating that aids in the decontamination of its surfaces, and is suitable for indoor or outdoor use. Parameters may be programmed either manually, or by computer through the RS-232 port. Free PC Data Logging Software and a Data Logging Data Sheet are available online.



### Specifications

Part Number: 48-2444

**DETECTORS:** Geiger-Mueller (GM), proportional, and scintillation

#### ALERT/ALARM:

- indicated by annunciation on display
- built-in speaker for audible tone
- set at any range
- speaker volume control available as an option

**DISPLAY:** 4-digit LCD display with 1.3 cm (0.5 in.) high digits, 2 additional 0.5 cm (0.2 in.) digits for overflow counter, (SCALER mode) and exponential powers (parameter setup); separate annunciators for display units, ALERT, ALARM, low battery, detector OVERLOAD, counting OVERFLOW, and scaler COUNTING

**BACKLIGHT:** pushbutton activates LCD backlight for a pre-programmed time

**RATEMETER:** can display in R/hr, Sv/h, cpm, or cps when selector switch is in RATEMETER position

**DISPLAY RANGE:** auto ranging from 0.0  $\mu$ R/hr – 9999 R/hr; 0.000  $\mu$ Sv/h – 9999 Sv/h; 0 cpm – 999 kcpm; or 0 cps – 100 kcps

**SCALER:** adjustable from 1 – 9999 seconds (in 1-second intervals)

**SCALER ALARM:** adjustable from 1 – 999999 counts

**DETECTOR DEAD TIME COMPENSATION (DTC):** adjustable from 0 to 9999 microseconds

**LINEARITY:** within 10%

**ADJUSTABLE PARAMETERS (via Removable Switchboard):** Backlight "ON" time, set minimum Display, RS-232 data dump mode, RS-232 Detector Setup mode, Baud rate, detector dead time compensation (DTC), Calibration Constant, display Units, display Range, Time Base (seconds or minutes), Auto Divide, Response Time (variable or fixed), Ratemeter Alert/Alarm, Scaler Alarm, Scaler Count Time

**AUDIO:** built-in unimorph speaker with AUD ON/OFF switch and volume control potentiometer

**HIGH VOLTAGE:** 400 to 2400 volts (regulated within 0.2 % at 1000 Vdc; maximum load of 50  $\mu$ A)

**DISCRIMINATOR/INPUT SENSITIVITY:** adjustable from 2–100 mV; negative pulse response

**POWER:** 2 "D" cell batteries housed in externally accessible sealed compartment

**BATTERY LIFE:** typically 200 hours with alkaline batteries (Low Battery warning icon on LCD)

**SIZE:** 16.5 x 8.9 x 21.6 cm (6.5 x 3.5 x 8.5 in.) (H x W x L)

**WEIGHT:** 1.6 kg (3.5 lb), including batteries

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

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