

Model 2221

General Purpose Ratemeter/Scaler

Radiation Detection for a Safer World



Ludlum Measurements, Inc.

Features

- Digital Ratemeter with Built-In Scaler
- Dual Analog Meter & Digital LCD Presentation
- Rich Array of Discrete Front Panel Controls
- Single Channel Analysis
- RS-232 Data Output
- Wide Range HV
- Overload Protection



Part Number: 48-2065

Specifications

RATEMETER: provides a four-decade analog display that is operational any time the instrument is turned on, the ratemeter can also be presented on the accompanying LCD as a digital value when the LCD is switched to the "Dig. Rate" position

SCALER: range from 0-999999 counts

TIMER: switch selectable divisions of 0.1, 0.5, 1, 2, 5, 10 minutes or CONT (continuous) for manual timing

CONCURRENT USE: scaler or digital ratemeter is active when not selected, allowing for concurrent use

SUGGESTED DETECTORS: GM, proportional, scintillation

HIGH VOLTAGE: adjustable from 400-2400 volts (can be checked on display)

THRESHOLD: adjustable from 100-1000 (can be checked on display)

WINDOW: adjustable from 0-1000 above threshold setting (can be turned on or off)

GAIN: adjustable from 1.5-100 mV at a threshold setting of 100

OVERLOAD: senses detector saturation, indicated by "----" on LCD display and meter going to full scale (adjustable depending on detector selected)

CONNECTOR: series "C" type

METER DIAL: 0-500 cpm, 50-500k cpm logarithmic scale (others available)

DIGITAL DISPLAY: 6-digit LCD display with 1.3 cm (0.5 in.) high digits

LCD BACKLIGHT: activated by LAMP switch

AUDIO: built-in unimorph speaker with volume control

AUDIO DIVIDE: toggle switch for 1, 10, or 100 events per click

AUDIO JACK: for optional headset

CONTROLS:

- Power Switch: on/off
- Scale Selector Switch: x1, x10, x100, x1K, Log
- Meter Zero Pushbutton: to zero meter
- Audio Volume Knob: adjusts volume of audio output
- Audio Divide Switch: divides audio clicks by either 1, 10, or 100
- Meter Lamp Switch: illuminates meter
- Response Switch: toggles between FAST (4 sec.) or SLOW (22 sec.) from 10% to 90% of final reading
- Window Switch: selects wide open window counts or a narrower setting for viewing a specific energy band
- Scaler Count Time Selector Switch: 0.1, 0.2, 0.5, 1, 2, 5, or 10 minutes
- Count Pushbutton: starts or resets scaler count
- Count Hold Pushbutton: stops scaler count and leaves result in the display
- Scaler/Digital Rate Switch: selects which mode is presented on the LCD
- Test Buttons: battery, high voltage, threshold, window
- Calibration Controls: recessed screwdriver adjustments with calibration cover

POWER: 4 each "D" cell batteries

BATTERY LIFE: typically 250 hours with alkaline batteries (battery condition can be checked on digital display)

SIZE: 22.9 x 10.9 x 25.4 cm (9 x 4.3 x 10 in.) (H x W x L) including handle

WEIGHT: 2.5 kg (5.5 lb) including batteries

RS-232 OUTPUT OPTION: This option facilitates exporting data to be read as output to a computer or serial printer from either the ratemeter or scaler reading. (Part No. 4261-148)

