

Model 2224-1 Scaler/Ratemeter



Ludlum Measurements, Inc.

INDICATED USE: Simultaneous alpha, beta counting and discrimination
COMPATIBLE DETECTORS: Proportional and dual phosphor scintillation detectors

CONNECTOR: Series "C" (others available)

AUDIO: Dual- or single-tone click-per-event (beta only) through a built-in speaker with an adjustable volume control located on front panel; headset jack located on the instrument "can"

METER: 1 mA, with pivot-and-jewel suspension, 8.3 cm scale, 250 degree

LCD: 6 digit direct-driven with 6.4 mm characters, a counter overflow arrow, and colons for indicating a count in process

RANGES: Four linear range multiples of X1, X10, X100 and X 1000; used in combination with the 0-500 CPM meter dial providing an overall range of 0-500 kcpm

LINEARITY: Reading within $\pm 10\%$ of true value for the analog ratemeter, within 2% for the LCD

SCALER: 6 digit LCD display with 0.25"(0.64cm) digits, overflow arrow, and colons to indicate when a count is in process

COUNT: Pushbutton to initiate scaler count

COUNT TIME: Internally selected times of 0.1, 0.5, 1, or 2 minutes

SELECTOR SWITCH: Toggle switch to select alpha and beta, alpha only, or beta only

HIGH VOLTAGE: Externally adjustable from 200 - 2000 Vdc

THRESHOLD: Beta threshold (βT) is adjustable from 2-10 millivolts (mV); Alpha threshold (αT) is adjustable from 50-150 mV

WINDOW (Beta only): Internal control allows adjustment from beta threshold up to the alpha threshold setting (from 20-40 mV)

OVERLOAD: Senses detector saturation. Indicated by red lamp on meter and meter going to full scale (*adjustable depending on detector selected*)

RESPONSE: Will vary according to number of counts present. Typically 2 - 11 seconds from 10% to 90% of final reading

POWER: 2 each "D" cell batteries (*housed in sealed compartment that is externally accessible*)

BATTERY LIFE: Greater than 350 hours with alkaline batteries (*battery condition can be checked on meter*)

CONSTRUCTION: Cast and drawn aluminum with computer-beige powder-coating

TEMPERATURE RANGE: -14° F (-10° C to 50° C) to 122° F()

May be certified for operation from -40° F (-40° C) to 150° F (65° C)

SIZE: 4.2"(10.67cm)H X 3.5"(8.9cm)W X 8.5"(21.6cm)L

WEIGHT: 3.5 lbs(1.6kg) including batteries



Part No.: 48-2628