Model 2360
Alpha/Beta Data Logger

Radiation Detection for a Safer World
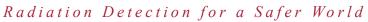
Features

- Scaler/Ratemeter/Data Logger
- Simultaneous Alpha & Beta Measurements with Audio Discrimination
- Logs 550 Data Points
- Analog & Digital Display
- Six Separate Alarms
- Overload Protection
- RS-232 Port

Part Number 48-2872

Ludlum Measurements, Inc.

Specifications

SUGGESTED DETECTOR: dual phosphor scintillation and gas proportional detectors

LINEARITY: reading within 10% of true value

HIGH VOLTAGE: adjustable from 200–2000 volts (can be read on meter)

OVERLOAD: senses detector saturation, indicated by red lamp on meter and meter deflecting to full scale (internally adjustable)

RESPONSE: will vary according to number of counts, typically 2–11 seconds from 10%-90% of final reading

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

COUNT TIME RANGE: 0.1–60 minutes with capability to preset user-programmed value

DATA LOGGER: capable of storing up to 550 individual data points with the following identifiers for each point: (all data is stored in non-volatile memory allowing batteries to be removed without loss of data)
- alpha and beta sample counts
- sample number
- date/time stamp
- scaler count time
- 10-character location identifier (can be set by ASCII terminal or PC)

HEADER INFORMATION: 6 lines of user defined memory at the beginning of the stack for storing user name, survey name, serial numbers, etc. (information is dumped with logged data)

RS-232 PORT: located on the can, this allows the instrument to be connected to a PC for dumping of data, and setup of parameters

LOGGING FUNCTION CONTROL: internal selection that enables the pushbutton to log a ratemeter reading, initiate a scaler count and log the resulting reading, log both the scaler and ratemeter reading, or disable the logging function

ALARM: has alarm capabilities on both the scaler and ratemeter, both circuits allow for independent alarm settings of the alpha channel, beta channel, and the alpha/beta channel, the scaler alarm setpoints can be set at any point from 0–999999 counts, the ratemeter alarms can be set at any point from 0–999999 cpm, alarm points can be set via the keypad, or PC

CONTROLS:
- RESET/READ HV: a two-position, momentary action switch to allow for the meter to be reset or a reading of the HV setting
- COUNT TYPE: toggle switch to select alpha+beta or "alpha", only, or "beta" only
- AUDIO VOLUME: rotary knob volume control, greater than 60 dB at 61 cm (2 ft), full volume, selectable dual or individual click-per- event for alpha and beta counts and divisions of 1, 10, 100, or 1000 events per click (beta counts only)
- INSTRUMENT: 6-position rotary knob for instrument off, battery check, range multipliers: x1, x10, x100, x1000
- COUNT TIME: switch selectable times of 0.1, 0.5, 1, 2, 5, 10, 60 minutes, or PC to allow for a specific count time to be set from a PC
- LOGGING PUSHBUTTON: located in handle; used to activate scaler and/or log a count

CALIBRATION DUE DATE: an internal date that disables the instrument if the required calibration interval has been missed

METER DIAL: 0–500 cpm, 0–2 kV, BAT OK, OL (overload); others available

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

TEMPERATURE RANGE: -20 to 50 °C (-4 to 122 °F), may be certified for operation from -40 to 65 °C (-40 to 150 °F)

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