D LUDLUM MEASUREMENTS, INC.

Model 26 Integrated Frisker

Features

- Integrated, Lightweight Design Simplifies Frisking
- High-Impact Plastic with Water-Resistant Rubber Seals
- Employs Standard 15.51 cm² GM Pancake Detector
- Ratemeter, Peak, and Scaler Operating Modes
- Simple Two-Button Operation
- Count Rate and Scaler Alarms
- Automatic LCD Backlight Activation
- Comfortable Non-Slip Grip
- Includes Lanyard & Adjustable Wrist Strap



The Model 26 includes a comfortable, adjustable wrist cuff and clip-on lanvard.



Introduction

Frisking people and objects for alpha & beta contamination has always been a little awkward because manipulation of the cable, detector, and electronics required the use of both hands. The new cable-less Ludlum Model 26 consolidates the electronics and the detector into one ergonomic housing. This optimized configuration incorporates a standard 15.51 cm² GM pancake probe, loud audio "click" output, and large auto-ranging LCD display with automatic LCD backlighting into one convenient package, making it easier than ever to detect contamination.

Operation is simple requiring the use of just two buttons. A useful feature in the design is MAX mode, which captures the highest or peak count rate. It is particularly convenient whenever the display is not directly visible. The scaler mode, with a preset count time, allows the user to take a discrete measurement. This system also incorporates low power circuitry, delivering hundreds of hours of use with two standard "AA" size batteries. The calibrator can protect parameters (cps/cpm, response time, alarm points, & scaler time) or allow the user to adjust them.

Specifications

DETECTOR: pancake GM (Geiger-Mueller) detector, stainless steel screen (79% open)

WINDOW AREA: Active: 15.51 cm² (2.4 in²); Open: 12.26 cm² (1.9 in²)

EFFICIENCY (4π): Alpha - ²³⁹Pu: 11%; Beta - ⁹⁹Tc: 14%, ³²P: 32%, ¹⁴C: 2%, ⁹⁰Sr/⁹⁰Y: 22%; ¹²⁵I: 0.2%; Gamma - 5.5 cps per μSv/hr (3300 cpm per mR/hr) (¹³⁷Cs), ^{99m}Tc: ≤1% **DISPLAY**: 3½ digit LCD with12.7 mm (0.5 in.) digits, low-battery indicator, MAX, ALARM; Units: (k)cps, (k)cpm

RANGE: 0.1 cps to 1.99 kcps; 1 cpm to 99.9 kcpm

LINEARITY: ± 10%

BACKLIGHT: built-in ambient light sensor automatically activates low-power LED backlight, or may be configured for 'Continuous On' operations (will reduce battery life)

CONTROLS: two pushbuttons

• ON/OFF/QUIET: press to turn ON, tap to alternate between 'click' audio and QUIET, hold for OFF

• MODE: alternates between NORMAL (count rate) and MAX (captures peak rate), and SCALER (user-selectable preset count time from 0 to 20 minutes) **RESPONSE TIME**: user-selectable from 1 to 60 seconds, or Auto-Response Rate FAST or SLOW

RESOLVING TIME: approximately 110 microseconds as defined by IEC 60325

ALARMS: count rate and scaler alarm setpoints adjustable over the display range

OVERLOAD PROTECTION: high count rate saturation protection prevents false display of lower count rates, indicated by flashing display and audio alarm **LOSS OF COUNT PROTECTION**: after 60 seconds of no pulses from detector, unit will flash a zero reading and trigger alarm audio **CLICK AUDIO**: greater than 60 dB at 0.6 m (2 ft)

HV TESTPOINT: accessible by removing battery cover, allows HV measurement and pulse injection for calibration using optional cable (PN 8303-1044) **TEMPERATURE RANGE:** -20 to 50 °C (-4 to 122 °F), may be certified for operation from -40 to 65 °C (-40 to 150 °F)

ENVIRONMENTAL RATING: NEMA 3 / IP 53

POWER: two "AA" batteries, approximately 1000 hours of operation (as low as 500 hours with backlight configured for 'Continuous On'), 16-hour low battery warning

CONSTRUCTION: high-impact polycarbonate plastic with water-resistant rubber seals, separate battery compartment, and rubber overmold **DISTANCE FROM SURFACE PLANE TO SCREEN**: 0.32 cm (0.125 inch) **SIZE (H x W x L):** 4.6 x 6.9 x 27.2 cm (1.8 x 2.7 x 10.7 in.)

WEIGHT: 0.45 kg (1.0 lb)

Options include

Ambient Dose Equivalent Filter Kit: includes filter and replacement screen (PN 2002-1050) Headphone Jack: standard 1/8 in. jack for headphones (not supplied) (PN 4498-538) Part Number: 48-3885