

Model 26 Integrated Frisker



Ludlum Measurements, Inc.

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



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.



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

Specifications

Part Number: 48-3885

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: 11% for ²³⁹Pu; Beta: 18% for ⁹⁹Tc; 32% for ³²P; 2% for ¹⁴C; 22% for ⁹⁰Sr/⁹⁰Y; 0.2% for ¹²⁵I; Gamma: 3300 cpm/mR/hr or 5.5 cps/μSv/hr (¹³⁷Cs) ≤1% for ^{99m}Tc

RESOLVING TIME: approximately 110 microseconds as defined by IEC 60325

LINEARITY: ± 10%

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

OVERLOAD: high count rate saturation protection prevents false display of lower count rates

ZERO PROTECTION: after 60 seconds of no pulses from detector, unit will flash a zero reading and the alarm audio will be triggered

DISPLAY: 3½ digit LCD with 12.7 mm (0.5 in.) digits, (k)cps, (k)cpm, low-battery indicator, MAX, ALARM

RANGE: 0.1 cps to 1.99 kcps, or 1 cpm to 99.9 kcpm

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

CLICK AUDIO: greater than 60 dB at 0.6 m (2 ft)

POWER: two "AA" batteries, approximately 1000 hours of operations (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

ENVIRONMENTAL RATING: NEMA 3 / IP 53

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

DISTANCE FROM SURFACE PLANE TO SCREEN: 0.32 cm (0.125 inch)

PHYSICAL: SIZE: 4.6 x 6.9 x 27.2 cm (1.8 x 2.7 x 10.7 in.) (H x W x L); WEIGHT: 0.45 kg (1.0 lb)

Options include

Ambient Dose Equivalent Filter Kit: includes filter and replacement screen (PN 2002-1050)

Model 26-series Exposure Filter Kit: includes snap-on filter (PN 4498-334)

Headphone Jack: standard 1/8 in. jack for headphones (not supplied) Part Number 4498-538

Ludlum Measurements, Inc. P.O. Box 810, Sweetwater, Texas 79556

Web: <http://www.ludlums.com> Tel: 800-622-0828 / 325-235-5494 / Fax: 325-235-4672 / Email: sales@ludlums.com

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

Feb 2017