LUDLUM MEASUREMENTS, INC.

Model 26-2
Integrated Frisker with Timed Frisk

Features

- Integrated, Lightweight Design Simplifies Frisking
- High-Impact Plastic with Water-Resistant Rubber Seals
- Employs Standard 15.51 cm^2 GM Pancake Detector
- Ratemeter, Peak, and Timed Frisk Operating Modes
- Simple Two-Button Operation
- Automatic LCD Backlight Activation
- Comfortable Non-Slip Grip, IncludesLanyard & Adjustable Wrist Strap
- Daylight-Visible Green & Red status LEDs

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 26-2 consolidates the electronics and the detector into one ergonomic housing. This optimized configuration incorporates a standard 15.51 cm^2 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 kept extremely simple through the use of just two buttons. A useful feature employed in the design is the MAX mode, which captures the highest or peak count rate. It is particularly convenient whenever the display is not directly visible. The timed frisk mode, with a preset time, allows the user to frisk for a fixed time interval. This instrument incorporates low power circuitry, delivering hundreds of hours of use with just two standard "AA" size batteries. The calibrator can protect parameters (cps/cpm, response time, alarm points, & frisk time) or allow the user to adjust them.

Specifications
Part Number: 48-4044

DETECTOR: pancake GM (Geiger-Mueller) detector, stainless steel screen
WINDOW AREA: Active: 15.51 cm^2 (2.4 in^2); Open: 12.26 cm^2 (1.9 in^2)
EFFICIENCY (4π) (surface plane): Alpha - ^{239}Pu: 11%; Beta - ^{99}Tc: 14%, ^{32}P: 32%, ^{14}C: 2%, ^{90}Sr/^{90}Y: 22%, ^{125}I: 0.2%; Gamma - 5.5 cps per µSv/hr (3300 cpm per mR/hr) (^{137}Cs), ^{99m}Tc: ≤1%
DISPLAY: 3½ digit LCD with large 12.7 mm (0.5 in.) digits, low-battery indicator, MAX, ALARM; Units: (k)cps, (k)cpm
RANGE: 0.1 cps to 1.99 kcps, or 1 cpm to 99.9 kcpm
LINEARITY: ± 10%
LEDs: Daylight-visible green LED for "OK", 3 red LEDs for 3 levels of alarm.
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 TIMED FRISK (user-selectable preset count time from 0 to 20 min.)

RESPONSE TIME: user-selectable from 1 to 60 seconds, or Auto-Response Rate FAST or SLOW
RESOLVING TIME: approximately 110 µs as defined by IEC 60325
ALARMS: up to three count rate 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 250 hours of operation, 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)