Model 3006
Extended Reach Gamma & X-ray Survey Meter

Features

- Large Backlit LCD
- Very Sensitive Pole-Mounted Detector
- Auto-ranging
- Rate, Max, and Count Modes
- Splash-Resistant Construction
- All-Digital Calibration
- Lightweight but Rugged
- 4-Button Intuitive Interface for Easy Operation

Introduction

The Model 3006 is a portable and versatile instrument with an extended reach used for gamma or X-ray radiation survey. A sensitive plastic scintillator detector is mounted at the end of a pole for ease of use when surveying trucks, scrap metal, or other areas of concern.

This instrument features a large, easily readable LCD (liquid crystal display), an audio warning tone, and an intuitive, user-friendly design. Splash-resistant construction allows the Model 3006 to be used outdoors. The unit body is made of lightweight, durable, high-impact plastic. The Model 3006 comes ready to be used with batteries and a calibration certificate.

Ludlum Measurements, Inc.

Specifications

Part Number: 48-4284

DETECTOR: 15.2 cm diameter x 2.5 cm thick (6 x 1 in.) plastic scintillator

SENSITIVITY: Typically 2500 cps per µSv/h (1500 cpm per µR/h) (^{137}Cs gamma)

ENERGY RESPONSE: Energy dependent

LINEARITY: Reading ±10% of true value

LCD DISPLAY: 3-digit LCD large 20 mm (0.8 in.) digits, (k)cps, (k)cpm, (µ)(m)R(/h), (µ)(m)Sv(/h), low-battery indicator, MAX, ALARM, AUDIO

DETECTOR RANGE: Background to 20 µSv/h (2 mR/hr)

BACKLIGHT: Built-in ambient light sensor automatically activates low-power LED backlight, unless internal dipswitch is set to continous-on (will reduce battery life)

USER CONTROLS:
- ON/OFF: Press to turn ON; Tap to acknowledge alarms and silence alarm tone; Press to reset Sigma Audio alarm; Hold for OFF
- MODE: Alternates between NORMAL (count rate), MAX (captures peak rate), and COUNT (user-selectable preset count time from 0 to 10 minutes)
- AUDIO: Turn "click" audio On/Off; Turn Sigma Audio beep On/Off
- UNITS: Changes the units between count rate (cpm, cps), or dose/exposure (µSv/h, mR/h)

RESPONSE TIME: User-selectable from 1 to 60 sec, or Auto-Response Rate FAST or SLOW

ALARMS: Count rate, exposure/dose, and scaler alarm adjustable set-points

SIGMA AUDIO MODE: Alarm that allows user to find small increases above the background radiation level. The instrument will beep whenever it measures a rate that exceeds a threshold rate above the measured background rate.

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

ZERO PROTECTION: After a user-settable time interval (default 60 seconds) of no pulses from the detector, unit will flash a zero reading and the alarm audio will be triggered

DEAD TIME CORRECTION: Employs first and second order corrections for extended performance

HV RANGE: 400 to 1500 Vdc

AUDIO: Greater than 75 dB at 0.6 m (2 ft), approximately 4.5 kHz

POWER: 4 alkaline or rechargeable "AA" batteries (unit does not support in-device charging)

BATTERY LIFE: Approximately 750 hours of operation (as low as 100 hours with backlight configured for continuous-on), 16-hour low-battery warning

TEMPERATURE RANGE: -20 to 50 °C (-5 to 122 °F), may be certified for operation from -40 to 65 °C (-40 to 150 °F)

ENVIRONMENTAL RATING: NEMA rating of 5 or IP rating of 53

CONSTRUCTION: high-impact plastic with water-resistant rubber seals and separate battery compartment

OVERALL LENGTH: 118 cm (46.5 in.)

OVERALL WEIGHT: 3.2 kg (7.0 lb) (without batteries)