Model 30
Digital Survey Meter

Features

- **Compact Meter Attaches Directly to Detector for Significant Weight Reduction**
- **Easy One-Handed Operation with Intuitive Interface**
- **Large, Informative Display has Adjustable Viewing Angle**
- **Simple Green, Yellow, and Red Status Indicators**
- **All-Digital Calibration with Lock-Out Feature**
- **Robust Construction with Water-Resistant Seals**
- **Available in Stretch Scope Configuration**

Part Number: 48-4108

Introduction

The Ludlum Model 30 is a versatile instrument used with an external detector for alpha, beta, or gamma radiation survey. Three modes of operation – RATE, MAX, and COUNT – are available for the user. Measurements can be collected in two sets of units (primary and secondary) for RATE and MAX modes in cps, cpm, Bq, dpm, rem/hr R/h, or Sv/h units. In COUNT mode units include cps, cpm, c (counts), Bq, dpm, d (disintgetrations), rem/h, or rem.

The user can switch between two sets of chosen units by simply pressing the Units button. An internal switch is used to enable or disable the front-panel setup feature to protect desired settings from inadvertent modification. Setup is also available via software available from Ludlum Measurements.

Features include a large, easily-readable LCD (liquid crystal display), piercing audio warning tone, and easy, intuitive, user-friendly design. Splash-resistant construction allows the Model 30 to be used outdoors in a variety of configurations, including stretch scope versions. The unit body is made of lightweight, durable, high-impact plastic. The Model 30 is shipped ready to use with batteries and calibration certificate.

Specifications

DETECTOR: may be Geiger-Mueller (GM), scintillator, or proportional; default "C" connector (others available)

HIGH VOLTAGE: 400 V to 1500 V

THRESHOLD: 2 to 120 mV

ALARMS: count rate, exposure/dose, and scaler alarm setpoints adjustable over the display range

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

LOSS OF COUNT ALARM PROTECTION: after preselected time interval (default 60 seconds) of no pulses from detector, audible and visual alarms will be activated

LCD DISPLAY: 3 digit LCD with large 13.4 mm (0.53 in.) digits, (k)cps, (k)cpm, (k)Bq, (k)dpm, $(\mu)(m)R(/h)$, $(\mu)(m)Sv(/h)$, $(\mu)(m)$ rem(/h), low-battery indicator, MAX, ALARM, MUTE

DISPLAY RANGE: 0.0 cps to 99.9 kcps; 0.00 cpm to 999 kcpm; 0.00 Bq to 99.9 kBq; 0.00 dpm to 999 kdpm; 0.00 µR/hr to 999 R/hr; 0.00 rem/hr to 999 rem/hr; 0.00 µSv/h to 999 Sv/h. Display range can be set to limit display to calibrated range

BACKLIGHT: built-in ambient light sensor automatically activates low-power LED backlight, unless internal dipswitch is set to continuous-On (will reduce battery life). Alarm light intensity varies based on ambient light levels.

USER CONTROLS:
- ON/OFF/ACK - press to turn ON, tap to acknowledge alarms and silence alarm tone, press to reset Sigma Audio alarm, turn "click" audio On/Off, turn Sigma Audio beep On/Off, 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). Number of modes can be reduced in setup.
- UNITS - changes the units between count rate (cpm, cps), dose/exposure (µSv/h, mR/rem/hr), or disintegration (dpm, Bq)

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

AUDIO: greater than 75 dB at 0.6 (2 ft), approximately 4 kHz

POWER: two alkaline or two rechargeable "AAA" batteries

BATTERY LIFE: approximately 100 hours of operation, 24-hour low battery warning

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

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 (National Electrical Manufacturers Association) rating of 3x or IP (Ingress Protection) rating of 52, with audio hole seal option (hole seal option will reduce maximum volume by approximately 10 dB)

SIZE: 8.5 x 8.0 x 4.8 cm (3.4 x 3.1 x 1.9 in.) (H x W x L)

WEIGHT: 174 g (0.38 lb)

OPTIONS: Stereo Headphone Option: PN 4498-697; Audio Hole Seal Option (will reduce audio volume output): PN 4498-913; Lumic Calibration Software Kit: PN 4498-1020; Telescoping Fiberglas Pole Assembly (2.4 m / 8 ft): PN 4498-865

Ludlum Measurements, Inc.