Model 3000 Digital Survey Meter

**Features** 

- Large backlit LCD for Ease of reading
- Auto ranging
- Rate, max and count modes of operations
- Splash-resistant construction for outdoor use
- 4-Button intuitive interface for easy operation
- All-digital calibration
- USB port
- Lighter weight and ruggedly built



The DMS-3000 is a versatile, lightweight, ergonomically-designed 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, mR/hr, or µSv/h units. 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. User-adjustable settings include calibration constant, dead time correction, efficiency, high voltage, pulse threshold, response time (fast or slow), count time, operational modes, HV current overload level, operational mode (Rate, Max, or Count), and minimum and maximum display levels. The user may also set Primary and Secondary units, unit alarm levels, count units, count alarm levels, and zero pulse protection time limit.

This instrument features a large, easily-readable LCD (liquid crystal display), a piercing audio warning tone, and easy, intuitive, user-friendly design. Splash-resistant construction allows the Model 3000 to be used outdoors. The unit body is made of lightweight, durable, high-impact plastic. The Model 3000 is shipped ready to use with batteries and calibration certificate.

Compatible Detectors: GM, Scintillator or Proportional

LCD Display: 3 digit LCD with large 20 mm (0.8 in.) digits, low-battery indicator, MAX, ALARM, AUDIO

(k)cps, (k)cpm, (k)Bq, (k)dpm, ( $\mu$ )(m)R(/h), ( $\mu$ )(m)Sv(/h) Units:

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/h to 999 R/h; 0.00 µSv/h to 999 Sv/h

Max Display can be set to limit display to calibrated range

Built-in ambient light sensor automatically activates low-power LED backlight, Backlight:

unless internal dipswitch is set to continuous-On (will reduce battery life)

Press to turn ON, Tap to acknowledge alarms and silence alarm tone, On/Off/ACK:

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)

Number of modes can be reduced in setup.

Controls:

Audio: Turn "click" audio On/Off, Turn Sigma Audio beep On/Off

Changes the units between count rate (cpm, cps), dose/exposure (µSv/h, mR/h) or disintegration (dpm, Bq) Units:

Response Time: User-selectable from 1 to 60 seconds, or Auto-Response Rate Fast or Slow

Count rate, Exposure/Dose and Sclaer alarm setpoints adjustable over the display range Alarms:

Loss of Count

Alarm Protection: After preselected time interval (default 60 seconds) of no pulses from detector,

audible and visual alarms will be activated

High Voltage: 400 to 1500 Vdc

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

Audio:

< 75 dB at 0.6 (2 ft), approximately 4.5 kHz -20 to 50 °C (-5 to 122 °F), may be certified for operation from -40 to 65 °C (-40 to 150 °F) Temperature Range:

Environmental Rating: NEMA (National Electrical Manufacturers Association) rating of 4x or IP (Ingress Protection) rating of 53 Four alkaline or four rechargeable "AA" batteries (instrument does not support in-device charging) Power: Approximately 750 hours of operation (as low as 100 hours with backlight configured for continuous-on), Battery Life:

16-hour low battery warning

High-impact plastic with water-resistant rubber seals and separate battery compartment 6.5 " H x 4.5" W x 8.5" L Construction:

Size:

2.0 lb Weight:

> Probe Not Included. See page 111 DSM-3000 Digital Survey Meter

Check Source With Stick On Source Holder, 1.0 uCi Cs-137 051-198

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