

Survey Meter SM 8 D

Portable survey meter for the detection of low intensities of alpha, beta, X and gamma radiation

Product Characteristics

Model number: SM 8 D

- Wide energy range for photons (10 keV ... 1.3 MeV)
- Qualitative detection of Alpha and Beta activities
- Large graphical display with a high resolution
- Measurement of equivalent dose and equivalent dose rate
- Audible and visual detection indications
- USB port with data acquisition and evaluation software (optional)
- Adjustable alarm thresholds
- Switchable measured variable: dose rate ($\mu\text{Sv/h}$), dose (μSv), counts per second (cps), area activity (Bq/cm^2)
- Wide range of accessories (e.g. energy compensation filter, sample cup, positioning frame)



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Areas of application

- Medicine, Life-Sciences, Industry, research and development facilities
- Measurement of pulse rates in mixed alpha, beta and gamma radiation fields
- Measurement of equivalent dose rates and area activities
- Evaluation of workplaces
- Fast investigations of solid and liquid food regarding of radioactive contamination

Due to the high sensitivity of the meter and its broad detection range the unit is ideally suited for use as a broad range survey meter.

Optional Equipment:

- Energy compensation filter
- Sample cup for solid and liquid
- Positioning frame
- USB cable for interface to the optional data acquisition and evaluation software



Technical Specifications

- Model:** SM 8D
- Measuring range:** Pulse rate 0 to 1999.9 cps
(measurement range overflow indication)
Timer/Impulse 1 to 119940 counts
Measuring time adjustable (10 sec, 30 sec, 60 sec)
Local dose rate of photon radiation 0.1 $\mu\text{Sv/h}$ to 299 $\mu\text{Sv/h}$ (calibrated with Co-60) (signal at overflow)
- Sensitivity:** 6 cps / $\mu\text{Sv/h}$ (referring to Co-60)
- Energy range:** Photons: 10 keV to 1.3 MeV
Beta: qualitatively, energies > 60keV
Alpha: > 2 MeV
- Radiation detector:** End window Geiger-Mueller tube (area mass density < 2 mg/cm^2), not energy compensated, effective diameter 44.5 mm
- Display :** Large graphical display with a high resolution, background lighting
Audible and optical impulse signalization
- Outputs :** USB-port, Evaluation software (optional)
- Power supply:** Batteries 2 x LR 6 Type AA 1.5 V
Battery lifetime approx. 100 hrs (at background radiation level)
- Operating conditions:** Temperature- 0°C to + 50°C or 32°F to 122°F
Rel. Humidity- approximately 75 % (at 30°C or 86°F)
- Weight:** \leq 400 g, or (0.9 lbs)
- Dimensions:** 152 x 83 x 35mm (L x W x H), or 6 x 3.3 x 1.4 inches