

QUART didoSVM

# Precision Survey Dose Meter



## QUART didoSVM

Survey Meter for Beta-, Gamma- and X-Ray Source Detection



The QUART didoSVM survey dose meter is designed to detect beta, gamma and x-ray sources of very low intensity. Its modern design as well as premium technology epitomise the meter's strong performance within its scope of work.

The QUART survey meter features an unrivalled energy response to measure radiation rate and dose from x-ray, beta and gamma sources. It can therefore be utilised to detect leakage and scatter radiation around diagnostic x-ray equipment as well as in radiation therapy environments.

The detector of the QUART didoSVM is compact and light-weight, thus making handling the meter a breeze. As its technical concept is based on solid state technology, the meter provides all the advantages connected with this approach: fast response time to radiation, reproducible measurement results and accurate detection of signals against background noise. Radiation is detected from leakage, scatter beams and pinholes.



Although base unit and detector are separated, both may be combined magnetically to carry and use the meter with one hand.

The detector can be mounted on a tripod or a telescopic extension to allow measurements in heights up to approx. 3.5 meters above the ground.

The didoSVM is equipped with a backlit display to assure swift readings even in darkened environments. To provide the ability to track dose rate characteristics, the dose rate is refreshed continuously on the meter display while the measurement is running.

The meter is powered by a rechargeable battery. One charge is sufficient to last approximately 80 hours of continuous use. Recharging the meter until full takes only between 3–4 hours. A warning will appear on the display when the battery charge is running low.

#### **GENERAL FEATURES**

Dimension: Base Unit - 17 x 7.5 x 2 cm (L x W x H)

Detector - 10 x 3 x 4 cm (LxWxH)

Weight: Base unit - 200 gr. (including battery)

Detector - 220 gr. (including cable)

Special Feature: Date and real-time display (user adjustable)

Warm-Up Time: None required

Power Supply: Rechargeable battery
Battery Time: Approx. 80 working hrs.

Recharging Time: 3 – 4 hrs.

Recharging Link: Micro-B USB (to power socket or USB A 2.0 PC)

Display: LCD with backlight; colour: white

Operating Temperature:  $10^{\circ}\text{C} - 35^{\circ}\text{C}$ Storage Temperature:  $-10^{\circ}\text{C} - 60^{\circ}\text{C}$ 

System Language: English

Calibration: 2 years (recomm.)





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#### **PARAMETERS**

Air Kerma K
Air Kerma Rate K°
Ambient Dose equivalent: H\*(10)
Ambient Dose Rate equivalent: dH\*(10)/dt
Directional Dose equivalent: H'(0.07)
Directional Dose Rate equivalent: dH'(0.07)/dt

Application Area Scatter from single and mixed types of radiation

fields (X-rays, gamma and beta radiation)

**TECHNICAL SPECIFICATIONS** 

Operating Range: 15 keV – 2.0 MeV (Auto-Ranging)

Applies to scatter and indirect radiation from X-ray, gamma and beta radiation sources
Recommended for -70° to +70° relative to

Angular Response Range: Recommended for -70° to +70° relative

the reference axis (detector)

DOSE: 3 nSv - 99 SvDOSE RATE:  $0.1 \, \mu\text{Sv/h} - 10 \, \text{Sv/h}$ TIME:  $0.5 \, \text{s} - 15 \, \text{min}$ .

Uncertainty: +/- 10% (for the full dynamic range)

Response Time: < 1.0 s (for the full dynamic range)

Measuring time of approx. 10 sec. may be required for very low dose rates, i.e. in mammography

Special Feature: Detector mountable on tripod or extender/

telescopic rod (Optional accessory)

Base and detector magnetically connectable

Display: Digital numeric value refreshed every second

Analog bar graph in three divisions according to pre-defined danger levels\*:

 $3.2~\mu Sv/h -- 10~\mu Sv/h -- 3~m Sv/h$ 

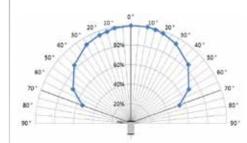
Audio Output: Signal frequency according to danger level

\* Danger Levels according to labour protection regulations: German Radiation Protection Act

German X-Ray Appliance Act.

### STANDARD SCOPE OF DELIVERY

- ✓ QUART didoSVM survey meter
- ✓ Recharging USB cable (optional power plug with connector available)
- ✓ Manual
- √ Transport Case











www.quart.de

