

SAPHYDOSE γ -i

Personal dosimeter γ / X

2.1

- Saphydose γ -i operational dosimeter measures the Hp (10) γ and X dose in real time. It can be used as an individual or in our dosimetry management systems. The dosimeter is intended for the people working in control area (nuclear power plant, fuel reprocessing plant, research center, hospital, non destructive testing service ...) or likely to be exposed (army, police, fire brigade ...).



- Exceeds CEI (6)1283 standard requirements
- Alarm and pre-alarm on equivalent dose
- Alarm and pre-alarm on equivalent dose rate
- Storage of dose and dose rate history and maximum dose rate
- Ruggedised
- Up to 8000 hours autonomy
- Individual or system version
- Hand free IR communication

➤ Technical characteristics

Operation:

- Starting, dose or dose rate mode, reset of the equivalent dose, display of personal ID and stop via 2 buttons (individual version) or via a Saphymo reader
- Alarm thresholds adjustment and worker identification number via Saphymo readers (see data sheet)

Display: 5 digits LCD

Isotropic detector: Silicon diode energy compensated.

Equivalent dose measuring range: From 1 μ Sv to 9999,9 mSv.

Equivalent dose rate measuring range: From 10 μ Sv/h to 5 Sv/h.

Energy range:

- gamma: ± 30 % from 50 keV to 6 MeV,
- beta: > 2 MeV

Linearity: Better than ± 20 % up to 5 Sv/h.

Accuracy (for 137Cs): Better than ± 10 %.

Response time:

- Alarm on equivalent dose: < 2 s,
- Alarm on equivalent dose rate : $\approx 0,3$ s at 1 Sv/h

Lifetime: Higher than 100 Sv.

Storage: up to 255 values stored

Power supply: Lithium battery (AA size).

Autonomy: 4000 hours with 1 battery and 8000 hours with 2 batteries

Operating temperature: From -25°C to $+50^{\circ}\text{C}$.

Sealing: IP 64.

Weight: 145 g approximately with 1 battery

Additional information:

- Overflow for dose rate
- Maintenance recommended display
- Dosimeter worn or not worn (optional)