

Saphydose γ_i

Personal dosimeter γ / X

- **Saphydose γ_i** operational dosimeter measures the Hp (10) γ and X dose in real time. It can be used individually or as part of our dosimetry management systems.

The dosimeter is aimed for people working in a controlled area (nuclear power plant, fuel reprocessing plant, research centre, hospital, non destructive testing service ...) or likely to be exposed (army, police, fire brigade ...).



➤ Technical characteristics

Display : LCD 5 alphanumeric characters allowing worker's name display
Detector : 2 silicon diodes, 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 : 50 keV to 7 MeV
Linearity : Better than $\pm 20\%$ from 0.5 μ Sv/h to 5 Sv/h
Accuracy (for 137Cs) : Better than $\pm 10\%$
Angular response : Conform to CEI 61526 at 662keV and 60 keV. Isotropic in air with ^{60}Co on 360°.
Surcharge : Up to 10 Sv/h.
Response time : - Equivalent dose alarm : < 2 s
 - Equivalent dose rate alarm :
 ≈ 1 s above 3.6 mSv/h and ≈ 6 mn at 10 μ Sv/h
Life time : Higher than 25 Sv
Autonomy : 4000 h with 1 battery. 8000 h with 2 batteries. Low-battery alarm
Dimensions and Weight : 98 x 68 x 25 mm , 143 g (1 battery included)
Operating temperature : from -25°C to +50°C
Sealing : IP 64
EMC : - Compliant with level 4 in radiation regarding the standard CEI NF 61000-4-3
 - Conform to level 4 in electrostatic discharge regarding the standard CEI NF 61000-4-2
 - Conform to level 4 in magnetic field regarding the standard CEI NF 61000-4-8
Additional information :
 - overflow for dose and dose rate
 - detection of dosimeter worn or not worn
 - display of « maintenance recommendation »
Additional function :
 - zone management through IR communication

- Exceeds CEI 61526 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
- Rugged
- Up to 8000h autonomy
- Individual or system version
- Hand free IR communication