

Highly sensitive real-time X-Rays dosimeter

- Instant dose display
- Highly adaptative on patient, medical or any exposed staff
- High efficiency/cost ratio

KEYWORDS

Real-time X-Rays dosimetry

High sensitivity Scintillating

optical fibre technology Photon

charged particules and neutron detection

PATENTS

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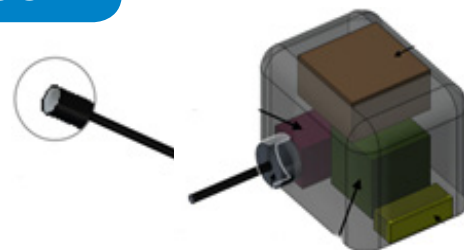
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TECHNOLOGY

- Plastic scintillators transmitting the signal by optical fibres
- Signal treatment by TCSPC (Time Correlated Single-Photon Counting)
- Measure of a wide range of X-rays (10 keV to 300 MeV)
- Dose rate from 0.1 $\mu\text{Gy/s}$ up to $>2\text{mGy/s}$
- Can also measure charged particles & neutrons



Components of the dosimeter including a scintillator, an optical fibre, a slit, a photomultiplier and a counting system.

APPLICATIONS

- Real-time dosimetry in medical imaging and radiotherapy
- Real-time dosimetry in industrial, military and space applications
- All types of radiations detection

INNOVATION ADVANTAGES

- Very high sensitivity and radiation resistance
- Spot metering
- Easiness to use and to handle
- Total adaptability to needs

DEVELOPMENT STATUS

- Proof of concept demonstrated on an in-house system with X, gamma, proton, ion and neutron rays.

Partnership: Technology available for an exclusive licence worldwide (PCT application to be filed soon)

