# TOPAZ®

## OSL LENS OF EYE DOSIMETER

### Adapted to our OSLR dosimeter reader

The TOPAZ is a passive lens of eye dosimeter that measures X-rays, gamma rays and beta radiation. The MP7 OSL sensor can be easily annealed for immediate and long-term reuse.





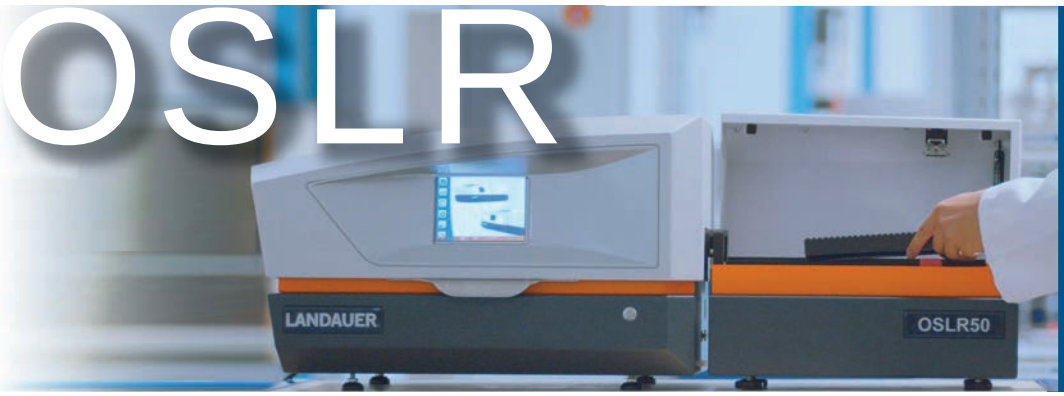
### UNIQUE COMFORT AND HYGIENE

- Multiple ways to wear it with or without PPE
- Adaptable to any support
- Laser-engraved details prevents information from washing off

### DESIGNED FOR DOSIMETRY LABS

***Functional design minimizes your set-up time***

- Easy assembly
- Clip-on parts
- Reusable
- Holder and MP7 OSL Sensor tracability with 2D barcode




## OSLR COMPATIBLE

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# OSL lens of eyes dosimeter

## Simple and practical to use

## PRACTICAL COMFORT COMBINES WITH ACCURACY

### Ergonomic lens dosimeter without blocking the field of vision.

The TOPAZ dosimeter does not affect participant's activity and view. Offered in two sizes, it is adapted to all supports: sealed glasses, visors, mob caps... Selfgripping pads ensure a maximum fit.

You can configure it for measurements behind or in front of the PPE (Personal Protective Equipment).

The cap can be rotated to fit the PPE geometry.

3 colours available for wear period identification

### Accuracy you can count on

The MP7 OSL sensor sensitivity is stable. It is not affected by repeated bleaching. The MP7 sensor is extremely robust and allows repetitive and long term use.

## GENERAL CHARACTERISTICS

| | | |
|---|---|---|
| **Energy range Photons** | ± 60° incidence angle from 24 keV to 1.33 MeV | |
| **Dose range** | 100 µSv - 10 Sv | |
| **Types of radiation measured** | Photons (X- and gamma rays) and beta | |
| **Detector** | Single MP7 OSL sensor | |
| **Sensor material** | Aluminium oxide doped with carbone, $Al_2O_3$:C | |
| **Holder material** | Polyamide | |
| **Weight** | M | 720 mg |
| | L | 770 mg |
| **Sizes** | M | 4.6 mm |
| | L | 7.6 mm |

Size M Size L

Two sizes to match with all PPE

## MEASUREMENT METHOD

This lens of eye dosimeter uses a novel tissue equivalent MP7 OSL sensor. The OSL material is made from Aluminium oxide doped with Carbon ($Al_2O_3$:C).

The dose is measured using the OSLR readers.

The read out process uses a LED (Light Emitting Diode) to stimulate the detectors. The light emitted by the OSL material is measured by a photomultiplier tube (PMT) using a high sensitivity photon counting system.
The amount of light released during optical stimulation is directly proportional to the radiation dose.

MP7 OSL sensor

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