

# BeOSL Dosimeter

## Whole Body Dosimeter



### Key Features

- Manufacturer calibrated
- Multiple readouts
- Versatile and sustainable design
- Small and light for easy handling and wearing

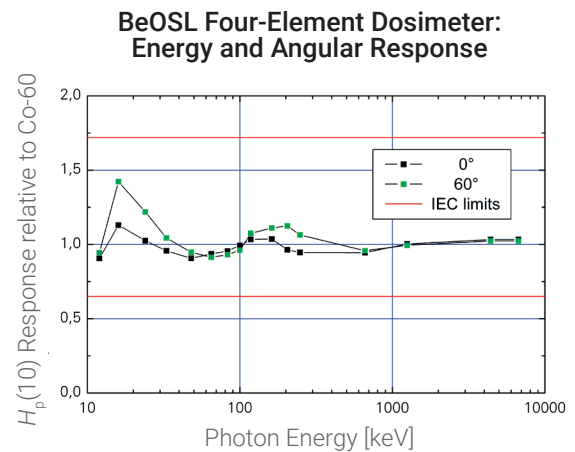
The BeOSL Dosimeter is the essential component for whole body personal dosimetry measurements. This dosimeter measures the personal dose equivalents  $H_p(10)$  and  $H_p(0.07)$  in Sievert (Sv). The detector material beryllium oxide (BeO) readout is via optically stimulated luminescence (OSL). The BeOSL Dosimeter is versatile and can be used in many applications making it the best solution for whole body dosimetry measurements.

Our cutting-edge BeOSL technology provides users with multiple dosimeter readouts (i.e., rereads) for dose result verification.

With its durable and sleek design, the BeOSL Dosimeter is custom-made and manufactured in Germany. The BeOSL Dosimeter is comprised of high quality components to ensure the most accurate readouts possible for a high rate of wearing periods. Also, its detectors are always protected against environmental influences as the detector tray is extracted from the dosimeter only inside the BeOSL Equipment.

The BeOSL Dosimeter is available in both two-element or four-element versions which means it carries either two or four BeO detectors. With its excellent ceramic tissue equivalency of the BeO material, the two-element BeOSL Dosimeter uses only one detector for each quantity ( $H_p(10)$  and  $H_p(0.07)$ ).

The two-element version covers the  $H_p(10)$  detector with a filter made of Teflon. The  $H_p(0.07)$  detector is covered by a thin plastic layer. This dosimeter version is smaller and lighter for easier handling and wearing.



The four-element dosimeter has two additional detectors; one is covered with copper and the other one with lead. These detectors receive information on energy. This means our algorithm can deliver a higher accuracy and clearer information on the irradiated radiation quality compared to other dosimeters.

As the manufacturer, we deliver only calibrated dosimeters. Also, each BeO detector in every BeOSL dosimeter is individually calibrated. Because of this, we receive exceptional dose precisions even for rereads. The BeOSL Dosimeters are designed to keep our customers' lives simple; a calibration file is delivered with all the dosimeters.

For additional information including pricing, please contact the Sales team at [sales@dosimetrics.de](mailto:sales@dosimetrics.de).

# BeOSL | Whole Body Dosimeter

## Technical Specifications

### Dosimeter Identification:

Bar Code (Code 128 C), Internal RFID Chip on Request

### Detector Material:

Beryllium Oxide

### Radiation Type:

Photon Radiation and Beta Radiation from Sr/Y-90

### Nominal Range:

$$0.1 \text{ mSv} \leq H_p(10) \leq 10 \text{ Sv}$$

$$16 \text{ keV} \leq E_{ph} \leq 7 \text{ MeV}$$

$$0^\circ \leq \alpha \leq \pm 60^\circ$$

### Mechanical Resistance:

No Effect for Drop Heights up to 2 m / 6.5 ft

### Dimensions (2-Element):

LxWxH 58x23x9 mm / 2.3x0.9x0.4 in

Weight: 10 g

### Dimensions (4-Element):

LxWxH 71x23x9 mm / 2.8x0.9x0.4 in

Weight: 16 g

## Components

Article No.	Description
1001	BeOSL Two-Element Dosimeter
1002	BeOSL Four-Element Dosimeter

