

10 Liter Spherical Ionization Chamber



Spherical ionization chamber for radiation protection level and low level measurement

Features

- ▶ Vented sensitive volume of 10 liters
- ▶ Suitable for survey meter calibration and low level measurements
- ▶ Superior energy response, reproducibility, directional dependence and long-term stability

Superior features make the chamber suitable as a standard chamber for calibration purposes. It fulfills the requirement for excellent reproducibility and long-term stability of the sensitive volume. The spherical construction ensures a nearly uniform response to radiation from every direction. The energy response is very flat within $\pm 1.3\%$ in the energy range from 45 keV to 1.3 MeV. This is achieved by the thin layer of aluminum on the inner wall surface, which provides for an increased photoelectric yield to compensate for the absorption of soft X-rays. The chamber wall is made of graphite coated polyoxymethylene (Delrin) with 3 mm thickness.

Model 32003 is designed for the low level range from 10 $\mu\text{Sv/h}$ to 30 mSv/h . The outer chamber diameter is 276 mm. The spherical electrode, made of graphite-coated polystyrene, has a diameter of 100 mm.

The chamber is supplied in a custom built case of 650 mm x 335 mm x 320 mm external dimensions to protect them.

Ordering Information

Spherical chamber with BNT, TNC or M connector
32003 Spherical 10 liter chamber LS-10

Option

T48001 Radioactive check source holding device

- ▶ UNIDOS Dosemeters *pages 13 and 138*
- ▶ Radioactive Check Device *page 23*