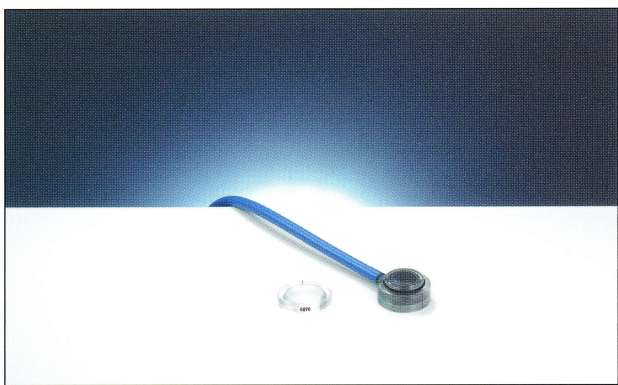


Advanced Markus[®] Electron Chamber



Plane parallel ion chamber for high-energy electron measurements in water and solid state phantoms

Features

- ▶ Vented sensitive volume of 0.02 cm³
- ▶ Same outer dimensions as the classic Markus chamber
- ▶ Wide guard ring design
- ▶ Suitable for relative and absolute electron dosimetry
- ▶ The chamber is waterproof when used with protective cap

The Advanced Markus chamber¹ is a further development of the classic Markus chamber, featuring a wide guard ring design to avoid perturbation effects by reducing the influence of scattered radiation from the housing. Since the outer shape is identical with the Markus chamber, all existing Markus chamber phantom plates and adapters can be used with the Advanced Markus chamber. The small sensitive volume makes the chamber ideal for dose distribution measurements in a water phantom, giving a good spatial resolution. The chamber features a flat energy response within the nominal energy range from 2 MeV to 45 MeV. With the very thin membrane of only 0.03 mm polyethylene, the chamber is suitable for use in solid state phantoms. The chamber comes with a protective acrylic cover of 0.87 mm thickness (1 mm water equivalence) for use in water. A calibration certificate with a ⁶⁰Co calibration factor given in absorbed dose to water is included. Air density correction is required for each measurement. A radioactive check device is available as an option. The chamber cable length is 1.05 m.

¹ The Advanced Markus chamber was developed in cooperation with Prof. Rosenow, Göttingen University, Germany

Ordering Information

Markus chambers, connecting system BNT, TNC or M:
34045 Advanced Markus electron chamber, 0.02 cm³
23343 Classic Markus electron chamber, 0.055 cm³

- ▶ Therapy Dosemeters *page 13f.*
- ▶ Radioactive Check Devices *page 23*
- ▶ Calibration Service *page 150*