

PTW Farmer[®] Ionization Chambers



Thimble chambers for measuring high-energy photon and electron radiation in air or in phantom material

Features

- ▶ Vented sensitive volumes of 0.6 cm³
- ▶ Suitable as therapy chambers for use in solid phantoms
- ▶ Flat energy response
- ▶ A variety of different versions is available

The 0.6 cm³ PTW Farmer chambers are designed for absolute photon and electron dosimetry with therapy dosimeters. Three chamber types for measurements in air or in solid state phantom material are available:

- ▶ Type 30010 is the standard chamber. The wall material is graphite with a protective acrylic cover, and the electrode is made of Al. The nominal photon energy range is from 30 kV to 50 MV.
- ▶ Type 30011 with graphite wall and graphite electrode is used for therapy dosimetry, where a completely graphite-built chamber is required. The nominal photon energy range is from 140 kV to 50 MV.
- ▶ Type 30012 is used for therapy dosimetry, where a chamber with graphite wall and Al electrode is required. The nominal photon energy range is from 60 kV to 50 MV.

The electron energy range of all chambers is from 6 MeV to 50 MeV. The chambers type 30011 and 30012 with their graphite caps are of delicate construction and should be handled with extreme care. The guard rings of all chamber types are designed up to the measuring volume. An acrylic build-up cap for in-air measurement in ⁶⁰Co beams is included with each chamber, as well as a calibration certificate.

Ordering Information

PTW Farmer chambers with connecting system BNT, TNC or M (only 30010) and a cable length of 1 m or 10 m:

30010 PMMA/Al Farmer chamber

30011 Graphite/graphite Farmer chamber

30012 Graphite/Al Farmer chamber

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