

Exradin® A10 Plane-Parallel Ion Chamber

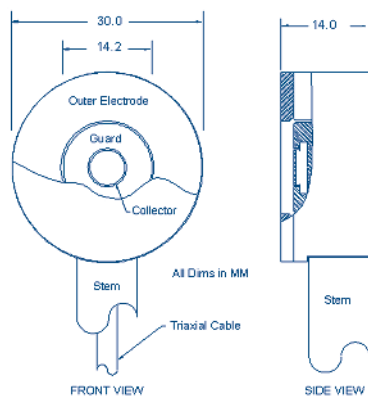
The Exradin® A10 is a vented, waterproof, plane parallel ionization chamber designed specifically for the dosimetry of electrons with energies above 100 keV, according to the Bragg-Gray principle.

The Exradin® A10 design is similar to the Markus® chamber, having the same external dimensions that allow it to fit into existing solid phantom cavities made for the Markus® chamber. The collector diameter and electrode gap are the same as found in the Markus®; therefore the collecting volume and calibration factor will be very similar.

A significant improvement was made in the width of the guard ring that greatly reduces perturbation and polarity effects. The electrode materials are made of conductive plastics for electrical continuity, eliminating troublesome conductive coatings.

The Exradin® A10 can be operated submerged in water with the waterproofing/calibration cover attached. The chamber is supplied with your choice of connectors and has a handsome, padded wooden case.

Markus® is a registered trademark of PTW Freiburg and PTW New York.



Features

- ▶ Waterproof
- ▶ Wide guard ring design for negligible polarity and perturbation effects
- ▶ 5.4 mm diameter collector
- ▶ Characterized by TG-51

Specifications

$N_{gas}/(N_{A_{ion}})$ (cGy/R).....	0.8699
K_{ecal}	0.939
Volume	0.051 cc, nominal, vented to the atmosphere
Sensitivity	0.018 nC/cGy, nominal
Leakage current	< 1 x 10 ⁻¹⁵ A
Entrance window	conductive Kapton film, 3.86 mg/cm ²
Ion collector	5.4 mm diameter, C552
Electrode separation	2 mm
Guard ring	4 mm wide, C552
Bias voltage	±300 V typical, 1000 V maximum
Waterproofing cap	acrylic, 1 mm thick
External dimensions.....	30 mm diameter x 14 mm
Cable	1 meter, low-noise triaxial, BNC male (TNC optional)

Accessories

CH-1	Cradle-type holder with 7 mm diameter stem for Markus®, PPC05, A10 and NACP chambers
3BM-F10	10 m extension cable, triax BNC, male/female with caps and chains (also available in custom lengths and/or mounted in a reel)
3BF-3TMF	Triaxial BNC to TNC adapter

Exradin® is a registered trademark of Standard Imaging, Inc.

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