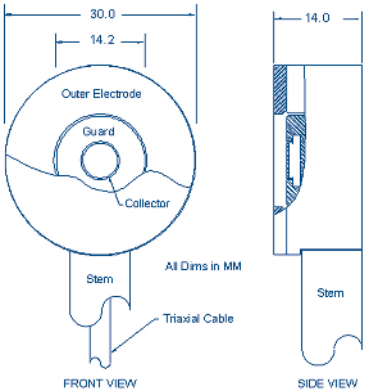
Model A10
Plane-Parallel Ion Chamber

The Model 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 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 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

$N_{gas}/(N_x A_{Ion})$ (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/cm²
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

865 Easthagan Drive, Nashville, Tennessee 37217 USA
phone 615 391 3076 800 635 2662 fax 615 885 0285 www.cnmcco.com