



Radiation Products Design, Inc.

5218 Barthel Industrial Drive

Albertville, MN 55301

www.rpdinc.com

Phone: 800-497-2071 Fax: 763-497-2295

**RPD is an
authorized distributor**

RPD Product Information

Item Number Description

300-225-A10 * Exradin Model A10 - Planer Electron Chamber, Markus

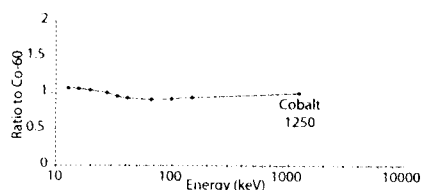
EXRADIN®

PARALLEL PLATE CHAMBERS

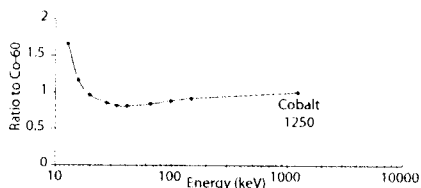
For use in routine electron beam measurements and for depth-dose studies in electron, photon, proton, and neutron beams

- Completely characterized in TG 51 & TRS-398.
- The Model 11 is inherently waterproof without any additional cap or covering. The 11TW and the A10 require waterproof caps due to their Kapton film windows.
- Fully guarded for extremely uniform field lines and negligible variation of polarizing potential, thus polarity corrections are not needed.
- Exceptionally wide 4.14 mm guard rings exceed the benefits described in TG-39 for 3 mm rings. This allows for no perturbation in field lines, even at low electron energies, ensuring precision in depth-dose measurement.
- Strong, reliable construction with homogeneous conductive plastic allows for little to no scatter when compared to other similar type chambers.
- Rigid stem allows accurate positioning of the chamber. No stem effects are present.
- The chamber vents through a flexible tube that surrounds the triaxial cable. This vent tube is sealed to the chamber body and open near the connector.
- The Model 11's larger volume is ideally suited for routine electron field measurements in a water phantom. A Cobalt-60 buildup cap is available.
- Model A10's small measuring volume allows for excellent spatial resolution. It is ideally suited for smaller electron field measurements in a water phantom for absolute electron dosimetry calibration. A 1.0 mm waterproof acrylic buildup cap for TG 51 is included.
- Model A10 is capable of measuring in zero depth in the buildup region of an electron field.
- **For detailed technical specifications see the fold-out pages at the back of this brochure.**

Model A10 Characterization Curve



Model 11 Characterization Curve



MODEL A10

Waterproof Parallel Plate Electron Markus™-Type Chamber, 0.05 cc

Centroid of Collecting Volume (from surface window)	1.0 mm
Window Collector Gap	2.0 mm
Collector Diameter	5.4 mm
Window Film	3.86 mg/cm ² Kapton
Nominal Leakage	<10 ⁻¹⁵ amps
Maximum Polarizing Voltage	1000 volts

MODEL 11 [A11, P11, T11]

Waterproof Parallel Plate Chamber, 0.62 cc

Centroid of Collecting Volume (from surface window)	2.0 mm
Window Collector Gap	2.0 mm
Collector Diameter	20.0 mm
Nominal Leakage	<10 ⁻¹⁵ amps
Maximum Polarizing Voltage	1000 volts

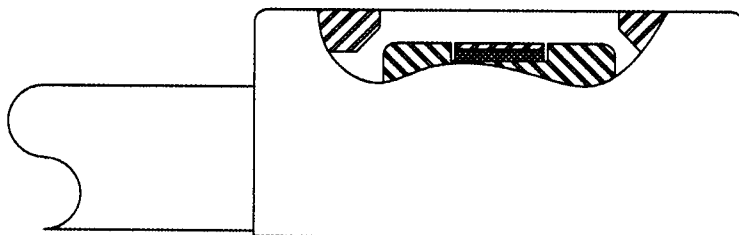
MODEL 11TW [A11TW, P11TW, T11TW]

Thin Window Parallel Plate Chamber, 0.94 cc

Centroid of Collecting Volume (from surface window)	1.5 mm
Window Collector Gap	3.0 mm
Collector Diameter	20.0 mm
Window Film	3.86 mg/cm ² Kapton
Nominal Leakage	<10 ⁻¹⁵ amps
Maximum Polarizing Voltage	1000 volts

Parallel Plate Electron Chamber Model A10

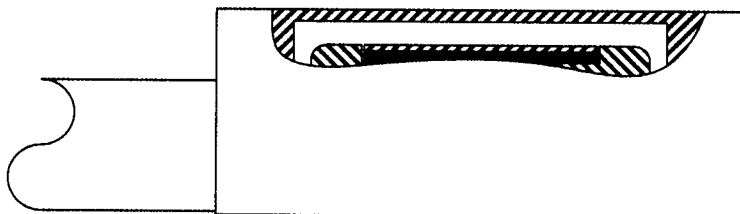
Collecting Volume: 0.05 cc
Nominal Calibration Factor: 60 R/nC (TG-21)
Nominal Calibration Factor: 527.4 Gy/ μ C (Air Kerma)



Centroid of Collecting Volume: 1.0 mm from window surface
Collector Diameter: 5.4 mm
Window-Collector Gap: 2.0 mm
Window: Conductive Kapton film, 3.86 mg/cm²
Window Support Rings, Collector and Guard Material:
A10 – C552 Shonka air-equivalent plastic
Stem: 8.9 mm OD black polycarbonate one-piece 7.6 cm long; not removable
Waterproof: Yes, waterproofing cap required to seal window
Venting: Through Tygon® PVC tubing secured to chamber body and running the full length of the triaxial cable; cable is inside tubing.
Waterproofing Cap included with Chamber: 1.0 mm acrylic cap, TG-51 compliant
Buildup Caps Available: Co-60 cap made of black delrin (3.5 mm thick), also acts as waterproofing cap
Options: None available

Spokas Parallel Plate Chamber Model A11, P11 or T11

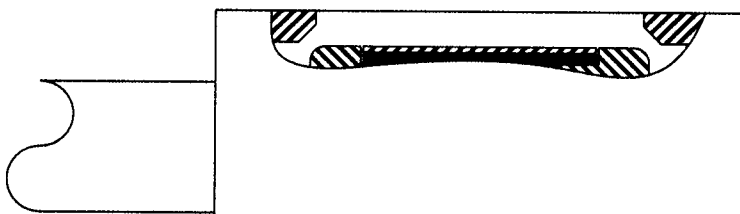
Collecting Volume: 0.6 cc
Nominal Calibration Factor: 5.5 R/nC (TG-21)
Nominal Calibration Factor: 48.3 Gy/ μ C (Air Kerma)



Centroid of Collecting Volume: 2.0 mm from window surface
Collector Diameter: 20.0 mm
Window-Collector Gap: 2.0 mm
Window Thickness: 1.0 mm
Window, Collector and Guard Material:
A11 – C552 Shonka air-equivalent plastic
P11 – D400 polystyrene-equivalent plastic.
T11 – A150 Shonka tissue-equivalent plastic
Stem: 11.1 mm OD black phenolic two-piece 10.1 cm + 12.7 cm long; removable; others available upon request
Waterproof: Yes, as furnished; no sheath required
Venting: Through Tygon® PVC tubing secured to chamber body and running the full length of the triaxial cable; cable is inside tubing.
Buildup Caps Available: Co-60 thickness; same material as chamber window
Options: CRS stem

Thin-Window Parallel Plate Chamber Model A11TW, P11TW or T11TW

Collecting Volume: 0.94 cc
Nominal Calibration Factor: 3.4 R/nC (TG-21)
Nominal Calibration Factor: 29.9 Gy/ μ C (Air Kerma)



Centroid of Collecting Volume: 1.5 mm from window surface
Collector Diameter: 20.0 mm
Window-Collector Gap: 3.0 mm
Window: Conductive Kapton film, 3.86mg/cm²
Window Support Rings Material: C552
Collector and Guard Material:
A11TW – C552 Shonka air-equivalent plastic
P11TW – D400 polystyrene-equivalent plastic.
T11TW – A150 Shonka tissue-equivalent plastic
Stem: 11.1 mm OD black phenolic two-piece 10.1 cm + 12.7 cm long; removable; others available upon request
Waterproof: Yes, waterproofing cap required to seal window
Venting: Through Tygon® PVC tubing secured to chamber body and running the full length of the triaxial cable. Cable is inside tubing.
Waterproofing Cap included with Chamber: 1.0 mm acrylic cap, TG-51 compliant
Buildup Caps Available: Co-60 thickness; same material as chamber shell; others available upon request
Options: CRS stem