

ACCU-PRO™



RADIATION MEASUREMENT SYSTEMS

For Radiography, Fluoroscopy,
Mammography, CT, Dental, and Survey.

Increased Productivity

- Intuitive use, quick setup, small footprint, convenient portability.
- **Ion chambers** for critical acceptance testing and dose diodes for QA consistency tests.
- Flash HVL with fluoro mode, beam hardness, scatter and leakage, invasive and non-invasive mAs.

Accuracy and Confidence

- “Gold Standard” ion chambers for correct measurement of AEC fluoro systems, and more.
- Auto-ranging, hardness corrected FFT kV. Accurate kVp for AMX4+ and AMX 700 portables.

Value

- Basic and advanced function choices add utility at no extra cost. Transforms into survey meter.
- Backward compatibility with 10x5 and 10x9 series Radcal ion chambers.
- Radcal designed for durability: 35+ years of know-how.

ACCU-DOSE™

Accepts

- Radcal Ion Chambers
- Dose Diodes

ACCU-PRO™

Accepts

- Radcal Ion Chambers
- Dose Diodes
- kV Sensors
- mA/mAs Sensors

ACCU-kV®

Accepts

- kV Sensors
- mA/mAs Sensors

See **back page** for plug-and-play sensors for the above systems.

All specifications subject to change. Radcal 03/24 Printed in U.S.A.

Ion Chamber Dose Sensors

Calibration Accuracy ± 4 %, Energy Dependence ± 5 %. Plug-and-play.

10X6-6 - ✓ The General Purpose Ion Chamber **A**

A well documented wide dynamic range chamber with many dose and rate applications.

10X6-6M - The Dedicated Mammography Chamber **B**

A world standard for mammography, ready for any track-filter combination

10X6-60 - ✓ The 'Service' Chamber **C**

The thin profile makes it ideal for low input dose at an image receptor and many other uses.

10X6-3CT - The Chamber for Computed Tomography Dose Index (CTDI) **D**

Another industry standard sensor.

10X6-180 - The Leakage and Low Level Measurements Chamber **E**

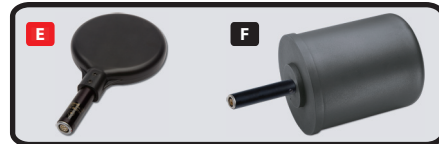
For leakage and very low dose to image receptor. FDA cross-section of 100 cm².

10X6-1800 - The Radiation Protection Chamber **F**

For very low-level radiation measurements such as shielding, leakage, and environmental. Superior to typical survey meters for accuracy.

10X6-0.6 and 10x6-0.18 Ion Chambers Available (see: www.radcal.com)

✓ Recommended for starter kit configuration.



Diode Dose Sensors

Calibration Accuracy ± 5%, Energy dependence and Filtration dependence: see below.

DDX6-W - The Diode Dose Sensor for Diagnostic range measurements **G**

Energy dependence ± 5 %, 40-150 kV at 2.5 mm Al. Filtration dependence + 5 % to -10 % for 2.5 to 23 mm Al.

DDX6-M - The Diode Dose Sensor for Mammographic range measurements **H**

Energy dependence ± 5 %, 20-40 kV, 25-35 μm Mo. ± 5 % 25-35 kV 30 μm Mo + 2mm Al. ± 10 % 22-40 kV, 30 μm Mo + 2mm Al.



FFT kV Sensors with Flash HVL

Calibration Accuracy: Diagnostic, ± 1 kV or ± 1 % whichever is largest; Mammo ± 0.5 kV.

40X12-W Accu-kV - ✓ The sensor for Diagnostic range (40 kV to 160 kV) measurements **I**

Auto compensation for beam hardness (add ± 1 % when on). Inherently correctly reads AMX4+ and AMX700 portables. Flash HVL: ± 0.3 mm Al and ± 10 % of reading, 1-23 mm total equivalent thickness Al, 40-160 kVp.

40X9-M Accu-kV - The Sensor for Mammographic range measurements **J**

This sensor is specifically designed for Mo-Mo mammographic beams.

✓ Recommended for starter kit configuration.



mA, mAs Sensors

Calibration Accuracy: see below and see web page for complete specifications.

90M9 Invasive Sensor **K**

mA accuracy at dc ± 0.2 %; mAs accuracy (1-s pulse) ± 5 μAs or ± 0.2 % of reading.

90M10 Non-Invasive for mA, mAs sensors **L**

mA accuracy at dc ± 4 %; mAs accuracy (1-s pulse) ± 4 %. Noise limited below 15 mA/mAs.



Measurement Functions

Built-in digital display or computer display with optional XLPRO software.

Dose, R or Gy

Auto Dose
Dose Accumulate/Hold
Last Dose

Dose Rate, R or Gy

Dose Rate
Max Dose Rate
Dose / pulse (Fluoro)

kV

kV peak, kV average, kV practical for:
pulse (single exposure), fluoro, and
dental.

Time

Seconds
Minutes
Hours

mA

mA
mAs

Beam Quality

Filtration (Al and Cu equivalents)
HVL

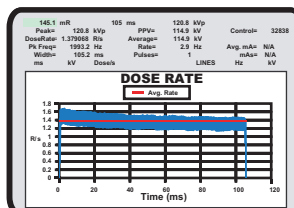
Other Features

Multiple use configurations, XLPRO software, and Portability.

An ACCU-PRO™ configuration: ion chamber with digitizer, mini-positioner, and kV sensor. More configurations available.



XLPRO software for auto data capture, waveforms, modifiable templates and remote control.



ACCU-PRO™ cases afford convenient and easy portability especially for the air traveler.

