



## RC<sub>60</sub>

## X-Ray Beam Measurements

The RC60 is an unsealed thin cross-section, parallel plate 60 cm<sup>3</sup> ion chamber suitable for x-ray beam measurements with low to intermediate dose rates. It has excellent energy response throughout the diagnostic energy range and with the application of appropriate build-up materials, the energy range can be extended to <sup>60</sup>Co.

EXPOSURE RATE DEPENDENCE: <5% to 30 mGy/s

ENERGY DEPENDENCE: ±5%, 30 keV to 1.33 MeV (with build-up material)

BIAS: Nominal +300 VDC (max +600 VDC)

ELECTRICAL LEAKAGE:\* <5e-15 A with +300 VDC bias, using 2m triax cable extension

CONSTRUCTION: Guarded (3-terminal) parallel plate, with polycarbonate walls;

conductive graphite interior and exterior coating; nominal 60 cm<sup>3</sup>

active volume, 0.5 m low-noise triax cable; 0.13 kg

\*cable length dependent

The chamber assembly shown in the image above depicts the chamber with the Radcal Model 8230M chamber support,

4500045 - RC60.wpd 5/16/24 REV:C

optional, ordered separately.

## Nominal Chamber Volume and Sensitivity (±10%)

Chamber	Volume	C/mGy	C/mGy	C/R	C/R
Model	cm³	20 °C	22 °C	20 °C	22 °C
RC60	60	2.1E-09	2.1E-09	1.9E-08	1.9E-08



