



**RC3CT
CT X-Ray Beam Measurements**

The RC3CT is an unsealed cylindrical, 10cm pencil ion chamber with a 3 cm³ volume. It is designed specifically for CT x-ray beam measurements, either free-in-air or mounted in a head or body phantom. It has excellent energy and partial volume response along its entire 10 cm length.

- EXPOSURE RATE DEPENDENCE: <5% to 350 mGy/s
- ENERGY DEPENDENCE: ±5%, 3-20 mm Al hvl
- 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) 10 cm long cylindrical, with C552 air-equivalent walls and electrode; polyacetal exterior cap; nominal 3 cm³ active volume; 1.5 m, low-noise triax cable; 0.11 kg

*cable length extension

Nominal Chamber Volume and Sensitivity (±10%)

Chamber Model	Volume cm ³	C/mGy 20 °C	C/mGy 22 °C	C/R 20 °C	C/R 22 °C
RC3CT	3	1.1E-10	1.1E-10	9.3E-10	9.3E-10

