



**RC6
GENERAL PURPOSE X-RAY MEASUREMENTS**

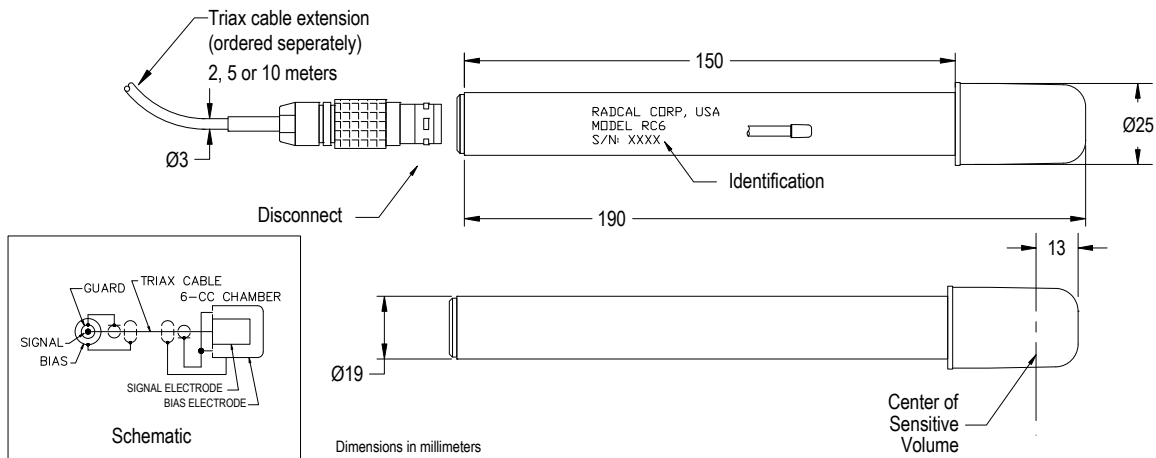
The RC6 is an unsealed cylindrical 6 cm³, general-purpose ion chamber, designed for general purpose x-ray measurements. It has excellent energy response throughout the diagnostic energy range and with an appropriate build-up cap (optional), the energy range can be extended to ⁶⁰Co.

- EXPOSURE RATE DEPENDENCE:** <5% to 150 mGy/s, up to 4 Gy/s for 10 ms pulses
- 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) concentric cylinder with polycarbonate walls and conducting graphite interior coating. Nominal 6 cm³ active volume; 0.05 kg

* cable length dependent

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
RC6	6	2.1E-10	2.1E-10	1.9E-09	1.9E-09



**RC6 Ion Chamber
Energy Dependence
(TYPICAL)**

