



RC180

Low Dose Rate X-Ray Beam or Scatter Measurements

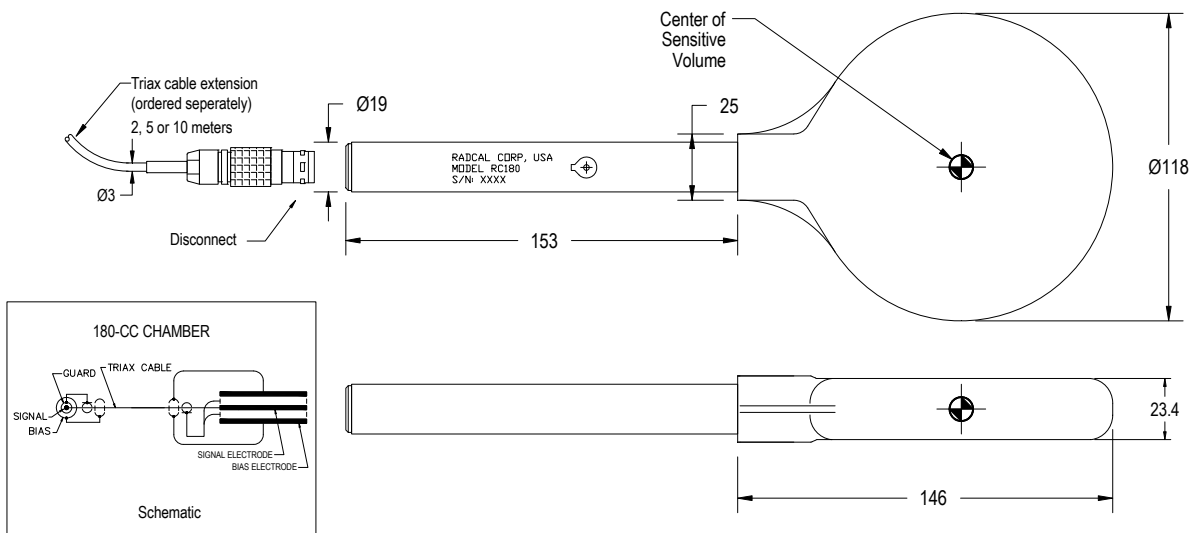
The RC180 is an unsealed parallel plate 180 cm³ ion chamber suitable for low dose rate x-ray beam or scatter measurements. It has an effective cross section of 100 cm³ and has excellent energy response throughout the diagnostic energy range. With the application of appropriate build-up materials, the energy range can be extended to ⁶⁰Co.

- EXPOSURE RATE DEPENDENCE: <5% to 5 mGy/s
- ENERGY DEPENDENCE: ±5%, 33 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 and electrode; conducting graphite interior and exterior coating; nominal 180 cm³ active volume; 0.11 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
RC180	180	6.4E-09	6.3E-09	5.6E-08	5.6E-08



Dimensions in millimeters

RC180 Ion Chamber Energy Dependence (TYPICAL)

