



**RC1800**

**Low Dose Rate Radiation Applications**

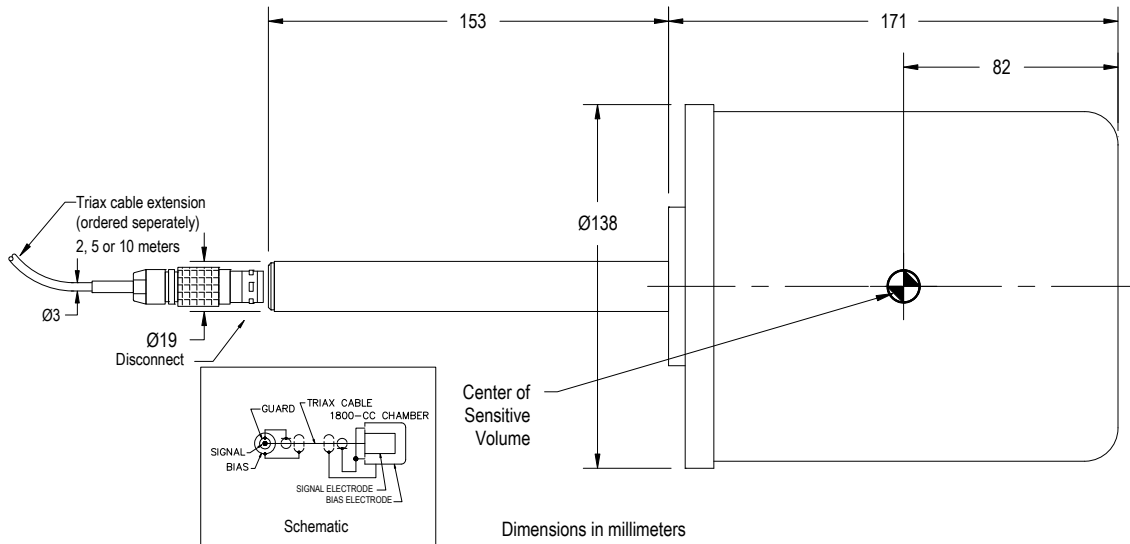
The RC1800 is an unsealed cylindrical 1800 cm<sup>3</sup> ionization chamber intended for low dose rate radiation applications such as shielding leakage, low-level irradiator output or environmental measurements.

- EXPOSURE RATE DEPENDENCE:** <5% to 50 uGy/s, <10% to 160 uGy/s (bias +300 VDC)
- ENERGY DEPENDENCE:** ±5%, 33 keV to 1.33 MeV
- BIAS:** Nominal +300 VDC (max +600 VDC)
- ELECTRICAL LEAKAGE:\*** <1e-14 A with +300 VDC bias, using 2m triax cable extension
- CONSTRUCTION:** Guarded (3-terminal) parallel plate, polycarbonate walls and electrode; conducting graphite interior and exterior coating; nominal 1800 cm<sup>3</sup> active volume; 0.54 kg

\*cable length dependent

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

Chamber Model	Volume cm <sup>3</sup>	C/mGy 20 °C	C/mGy 22 °C	C/R 20 °C	C/R 22 °C
RC1800	1800	6.4E-08	6.3E-08	5.6E-07	5.6E-07



**RC1800 Ion Chamber Energy Dependence (TYPICAL)**

