



**RC1800
Low Dose Rate Radiation Applications**

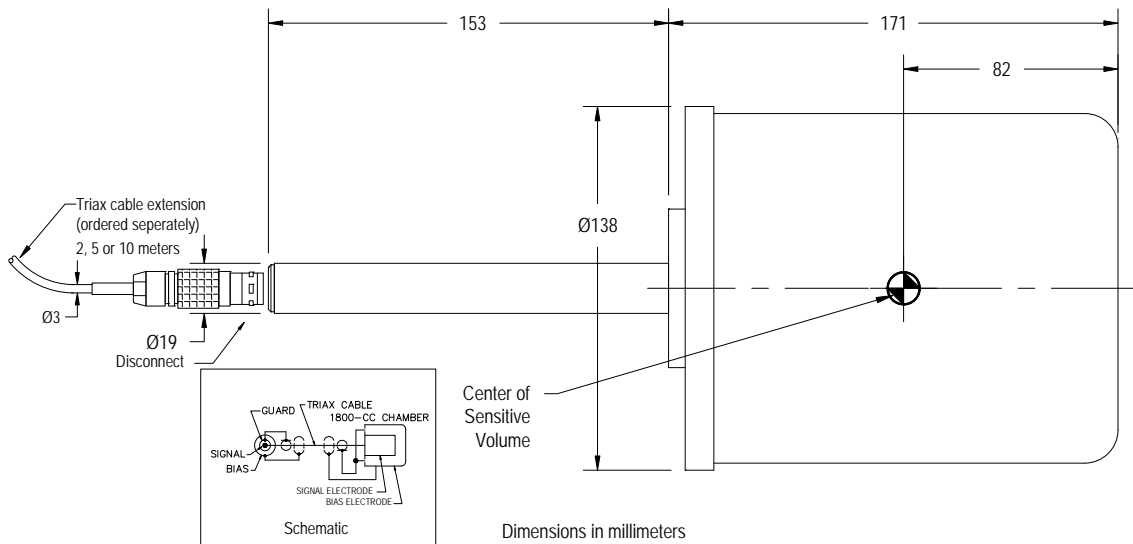
The RC1800 is an unsealed cylindrical 1800 cm³ ionization chamber intended for low dose rate radiation applications such as shielding leakage, low-level irradiator output or environmental measurements.

- 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 cm³ active volume; 0.54 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 |
|---------------|------------------------|-------------|-------------|-----------|-----------|
| RC1800 | 1800 | 6.4E-08 | 6.3E-08 | 5.6E-07 | 5.6E-07 |



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

