



## RC6M

## **LOW ENERGY X-RAY MEASUREMENTS**

The RC6M is an unsealed parallel plate 6 cm<sup>3</sup> ion chamber specifically designed for low-energy x-ray measurements. It has a thin entrance window and is suitable for x-ray energies in the range of 10 to 40 keV.

EXPOSURE RATE DEPENDENCE: <5% to 90 mGy/s

ENERGY DEPENDENCE: ±5%, 10 keV to 40 keV

BIAS: Nominal +300 VDC (max +600 VDC)

ELECTRICAL LEAKAGE:\* <5e-15A with +300 VDC bias, using 2m triax cable extension

CONSTRUCTION: Guarded (3-terminal) parallel plate, with 0.7 mg/cm<sup>2</sup> metalized

polyester window; polyacetal exterior; nominal 6 cm<sup>3</sup> active

volume; 0.08 kg

Note: Remove red protective cap prior to exposure.

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

	Nomina	al Chamber Volui	me and Sensitivity	y (±10%)	
Chamber Model	Volume cm³	C/mGy 20 °C	C/mGy 22 °C	C/R 20 °C	C/R 22 °C
RC6M	6	2.1E-10	2.1E-10	1.9E-09	1.9E-09
Ø3	Triax cable extension (ordered seperately) 2, 5 or 10 meters  Disconnect		RADCAL CDRP, USA MDDEL RC6M S/N: XXXX  Identifi  — 197	Center of Sensitive Volume	Ø44
SIGNAL BIAS SIGNAL ELEC	I-CC CHAMBER 019			Volume Centerline	9
Schematic	Dimens	ions in millimeters			
	1.10	Energy De	n Chamber ependence ICAL)		

<sup>\*</sup>cable length dependent