

Best Medical Canada

RT Dose (MOSFET): the Best Dosimeter for All Your Needs

Best Medical Canada has been the pioneer of MOSFET *in-vivo* dosimetry for radiotherapy, brachytherapy, and radiology applications for over 20 years. BMC MOSFETs (TN-502RD) are real-time dose readout detectors when connected to the wireless and battery-operated **mobileMOSFET** reader system (TN-RD-70W), controlled remotely from a computer. The advanced features of the software allow for dose verification in comparison to target dose, and electronic dose reporting with data transfer to R&V systems. The newly designed and hand-held **Portable Dosimeter** system allows for cost-effective MOSFET dosimetry, and portability during clinical use, at uncompromised accuracy. BMC MOSFETs, based on patented dual-MOSFET technology, are the only *in-vivo* dosimeters with unmatched dosimetric characteristics such as independence on temperature, gantry angle, dose rate, energy, and with good linearity at full dose range.

FEATURES & SPECIFICATIONS	ONE DOSE SICEL	RT Dose (MOSFET) Best Medical Canada
Surface/Skin Dose Measurements	YES	YES
Depth-Dose Measurements (Dmax) w/ Build-up for radiotherapy	NO. Limited	YES for all Photon and Electron Energies using Brass and Solid Water Caps
Reusable Dosimeter	NO. Single Use	YES. Multiple use
Number of Dose Fractions per Dosimeter	1 fraction	100 to 200 fractions
Cost per Dose Fraction	~15 \$	< 1 \$
Dosimeter Size	6 mm wide	1 mm & 2 mm options MicroMOSFET fits inside 5 or 6 Fr catheter
Dose Points in Real-Time	1 dose point off-line	Up to 40 dose points on-line in real-time
Dose Readout Mode	Single read mode	Single or Continuous readout mode at variable time intervals
Energy Dependence	NO	NO
Isotropic for 360 °	NO 2% at 0°-45°*	YES ±2% for 360°
Accuracy	±5% typical	±2% on High Setting
Temperature Dependence	YES "Accuracy only within ±5 C variance"*	NONE 0.5% from 20 to 40 C

877 668 6636

www.rtdose.com
www.bestmedicalcanada.com



Best Medical Canada

RT Dose (MOSFET): the Best Dosimeter for All Your Needs

FEATURES & SPECIFICATIONS	ONE DOSE SICEL	RT Dose (MOSFET) Best Medical Canada
Calibration	Factory Calibrated to Co ⁶⁰ . "Other conditions require the application of user correction factors."*	Determined by physicists to match their settings Calibration files stored in PC and easily applied during procedures
Wireless and On-line Readout System	NO Manual readout	YES Data transfer using Bluetooth™ technology and on-line readout from a remote PC
LAN Connectivity	NO	YES System accessible through network
Software	Basic	Advanced Real-time dosimetry and reporting at console room
Dose Report for Patient Files	Basic	Advanced patient reports in MSWord, Excel and PDF to R&V systems
Power	9V Replaceable Battery*	Rechargeable Battery
Clinical experience and validation	Fairly recent with less than 20 refereed journal publications	Over 120 refereed journal publications in over 20 years of clinical use
Commercial availability	Unreliable supply and shortages do occur	Highly reliable supply over 20 years, as dosimeters are manufactured and sold by BMC – Canada at unmatched quality
Distributor Network	Uncertain	Worldwide with good service quality

877 668 6636

www.rtdose.com
www.bestmedicalcanada.com



Best Medical Canada

RT Dose (MOSFET): the Best Dosimeter for All Your Needs

APPLICATIONS	ONE DOSE SICEL	RT Dose (MOSFET) Best Medical Canada
Skin Dosimetry /Total Body Irradiation (TBI)	YES	YES
Routine In-Vivo:	Limited	YES
- IMRT	•	YES
- Tomotherapy	•	YES
- Brachytherapy HDR/LDR	•	YES
- Radiosurgery/ Gammaknife	•	YES
- Intraoperative radiotherapy	•	YES
- Radiology - CT	•	YES
- Fluoroscopy	•	YES
Clinical Phantom compatibility	•	YES

*Source: "One Dose Specifications"

877 668 6636

www.rtdose.com
www.bestmedicalcanada.com

