

An *ex vivo* dosimeter has been developed that is easy to use, accurate, and disposable. The device uses a MOSFET radiation dosimeter that is mounted on a plastic tab, which is attached to an adhesive strip. The adhesive assures tight contact with the skin surface during use. Each disposable device is calibrated and this information is stored in non-volatile memory on the device. The device is polled by a hand-held reader, which then writes the dose and a time stamp back to memory. Thus, a permanent record is created in the dosimeter itself and it may be stored as a part of the patient's record. The dosimeter is inherently temperature-compensated and is accurate to 3.5% for doses of 30-200 cGy. Build-up caps are available for the device so that estimates of sub-surface values can be measured and recorded. The device is designed for measurements of single fields or short arcs, but remains isotropic up to 60° away from normal incidence. This dosimeter is particularly useful when considering routine checks of dose during the first day of therapy or after a field change. It presents a practical alternative to TLD and diode devices as part of a regular QA program.