

DoseReader 4

A radiochromic film reader with USB data transfer

The DoseReader4 is a small, light-weight, portable densitometer for measuring radiochromic film dosimeter response for the purpose of calculating applied radiation for sterilization of e.g. insects, blood.

The DoseReader4 measures the optical density (OD) of 10x10 mm radiochromic film dosimeters (Gafchromic, GEX B3 or FWT) at selectable four wavelengths and automatically transfers the results to a PC via a USB connection.

The reader is powered directly from the USB connection or by an external power supply if the device is not connected to a PC and automatic data transfer is not required.

Technical Data

- minimum dynamic range 0 – 3.000 OD,
- resolution 4 decimal places;
- precision is $\pm 0.2\%$;
- repeatability $\pm 0.4\%$;
- reading area in a 2 mm diameter circle centered on the 10 x 10 mm dosimeter;
- accept dosimeters up to 10 x 10 x 0.25 mm;
- four wavelength (456, 532, 590, 625 nm) readout system;
- 560nm readout wavelength for B3 dosimeter optional;
- automatic and one button blank measurement;
- automatic and one button film measurement;
- ambient temperature: 10-40 °C , humidity: 20-80%;
- automatic data transfer as ASCII coded characters terminated by a CR/LF pair to USB port. Data is transferred to the USB port immediately on taking reading without further intervention. Data transferred consists of OD at the selected wavelengths, temperature at film in Celsius (resolution 0.1 °C);
- maximum temperature of the film during reading 5°C above ambient;
- includes necessary USB drivers for recent versions of Windows (XP, Vista, 7,8,10);
- power via USB connection (5 V \pm 5%, 200 mA) or by external USB power supply
- software wedge program to capture the data at the USB port and transfer it to the keyboard buffer is included in the package;
- Weight: 850g Size: 225(L) x 200(W) x 65(H) mm.



Radiation General Ltd.

info@rad-gen.com

+36 30 313 6940