



Pen Dosimeter

GAMMEX DR1897

The Gammex DR1897 Pen Dosimeter is a low-energy, direct-reading radiation-measuring device made with special low-density walls that permit the penetration and detection of diagnostic x-ray energies. The pen size instrument contains an electrometer and an ionization chamber.

To read the integrated exposure, the user looks through the dosimeter eyepiece while pointing the unit toward any external light source. The exposure is determined by the position of a hairline fiber against a graduated scale. A Dosimeter Charger is used to re-zero the dosimeter and can also be used to read the integrated exposure.

SPECIFICATIONS

Energy Response

Radiation Detected . Gamma, x-ray from 20 keV to 2 MeV

Ranges 0 to 200 mR

Energy Response . . . 160 keV to 2 MeV: $\pm 10\%$; 40 keV to 160 keV: $+20\%$, -10% ; 20 keV to 40 keV: $+20\%$, -30%

Accuracy Within $\pm 10\%$ of true exposure

Rate Response Dose rate independent for gamma and x-ray

Electrical Leakage . . Less than 0.5% of full scale for 24 hours at 50°C

Relative Humidity . . Up to 90%

Detector Fiber electrometer mounted in an electrically conducting plastic ion chamber

Material

Detector Housing . . Very low permeability plastics; hermetically sealed

Clip Glass fiber-filled, high-strength plastic

Dimensions

Size 1.5x12.4 cm (\emptyset xL) (0.6x4.5 in)

Weight 0.03 kg (0.06 lb)