



POCKET DOSIMETER and Charger



Product Description

The Direct-Reading Dosimeters are rugged, precision instruments. They are designed to measure and directly read, at any time accumulated dose of gamma and x-ray radiation exposure. The Direct-Reading Dosimeter is designed to satisfy military specifications for the IM-Series RADIAC METER and ANSI N13.5 and N322 requirements. The sturdy metal clip attaches the dosimeter to a pocket or any object to monitor total radiation exposure. They are hermetically-sealed and immersion proof.

Features

- The Direct-Reading Dosimeter is a pocket-size, carbon-fiber electroscope with an ion chamber for detecting and indication of integrated exposure to Gamma and X-Ray radiation.
- It has a thin wall which permits the penetration and detection of radiation.
- This model comes with a hardened sapphire window that won't scratch even in the toughest of conditions.
- Dosimeters are extremely sensitive instruments. Although they are constructed for rugged use, they should receive the same care as a wristwatch.
- Since dosimeters are hermetically sealed at the factory, they cannot be repaired or adjusted in the field.
- Dosimeters may be maintained in operating condition simply by cleaning the eyepiece lens and the charging switch insulator with clean water and a cloth that is free of lint and grit.

CHARGER Description

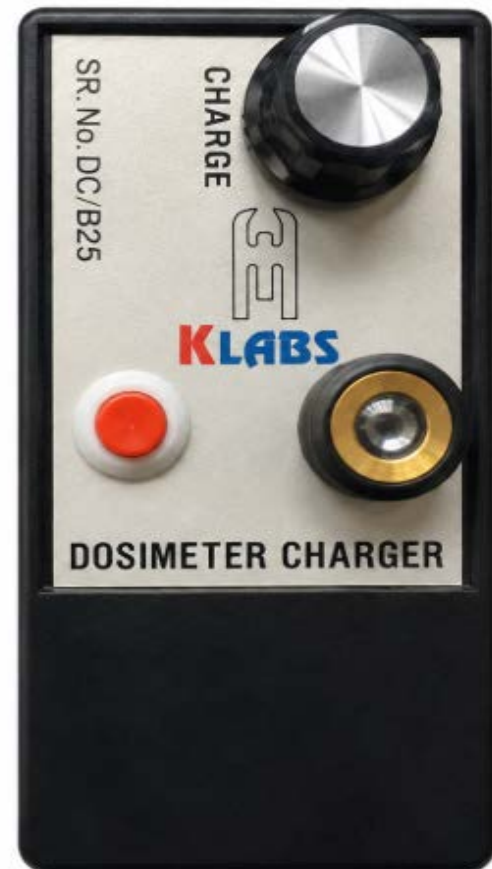
- To read a dosimeter, place it on the charging contact and switch on the light. Do not press harder than necessary to avoid loss of reading.
- To charge a dosimeter, press it down on the charging contact with sufficient force to bring the dosimeter body in contact with the charging assembly. The charger charging contact is spring loaded and has a positive mechanical stop. This design feature makes it virtually impossible to damage dosimeters through excessive charging force. This will provide sufficient force to actuate the charging switch in the dosimeter. Now read the dosimeter and adjust the control Knob until the dosimeter indicates zero. Remove the dosimeter from charging contact.
- When the dosimeter charger is not in use, remove the batteries, clean the batteries contacts if they appear corroded prior to further use.

Features

- Capable of charging any pen type pocket dosimeter
- Conforms to ANSI, N42.6-1980
- The Radiological dosimeter charger supplies the voltage required to charge or zero quartz fiber dosimeters. A transistor oscillator converts the direct current from a flashlight battery to alternating current so that the transformer can step up the battery voltage 3v to 220v required by the dosimeter. A voltage regulator is used to adjust the output voltage to the exact value required to bring the dosimeter to read zero.

Technical Specifications

| Parameter | Specification |
|--------------------|------------------------------------------------------------------------------|
| Product Name | Pocket Dosimeter |
| Model Number | KPDD-200 |
| Radiation Detected | Gamma and X-Ray from 16 keV to 6 MeV |
| Range | 0-200mR |
| Detector | Fiber-Electrometer mounted in an Electrically Conductive Plastic Ion Chamber |
| Detector Housing | Very low permeability plastics - Hermetically-Sealed |
| Accuracy | +/- 10% of true exposure |
| Rate Response | Dose rate independent for Gamma and X-Ray |
| Electrical Leakage | Less than 1.0% of full scale for 24 hours at 50 C |
| Temperature Range | -20 degrees C to +50 degrees C |
| Relative Humidity | Up to 90% |
| Dimensions | 4.5" (12.4 cm) Length X .6" (1.5 cm) Diameter |
| Weight | 1.0 oz. (25 grams) |
| Finish | Natural Matte Black with a Metal Clip |
| Shelf Life | 20 Years |
| Specifications | ANSI N13.5 and ANSI N322-1997 |



| Parameter | Specification |
|----------------------|----------------------------|
| Product Name | Dosimeter Charger |
| Model Number | KDCH-220 |
| Size | 65 X 25 X 130 mm |
| Weight | 130 gram |
| Controls | One Turn Potentiometer |
| Construction | ABS Plastic |
| Operating Conditions | 0- 50° C 90% Humidi |
| Battery | AA Alkaline Battery 2 No's |