

Model AT-138S

Pencil Dosimeter, 0 to 2 mSv

Radiation Detection for a Safer World



Ludlum Measurements, Inc.

Features

- Sensitive to Gamma and X-ray
- 0–2 mSv
- Lightweight
- Hermetically Sealed
- Sturdy Pocket Clip
- Meets ANSI N13.5 & N322-1997
- Responds Well to Fast Pulse X-Rays
- Low Leakage, Measures Background



Part Number: 51-2937

Introduction

This direct reading dosimeter is a ruggedly constructed precision instrument for measuring and directly reading accumulated dose of gamma and X-ray radiation up to 2 mSv. Applications include personal and environmental monitoring. The

low-energy feature has hospital applications including fluoroscopy, portable radiography, and angiography. A hardened sapphire end window provides clean, scratch-proof viewing of measurements. This pocket sized instrument is lightweight and has a sturdy clip to attach to an individual's pocket for constant use.

Specifications

RANGE: 0–2 mSv

ENERGY RESPONSE: 16 keV to 5 MeV

RADIATION DETECTED: gamma and X-ray from 16 keV to 6 MeV

DETECTOR: fiber electrometer mounted in an electrically conducting plastic ion chamber

DETECTOR HOUSING: very low permeability plastic, hermetically sealed

FINISH: barrel and end caps: natural matte black; clips: color coded plastic (color signifies range) or metal clips

ACCURACY: within 10% of true exposure

RATE RESPONSE: dose rate independent for gamma and X-ray radiation

ELECTRICAL LEAKAGE: less than 1.0% of full scale for 24 hours at 50 °C (122 °F)

TEMPERATURE RANGE: -20 to 50 °C (-4 to 122 °F)

RELATIVE HUMIDITY: up to 90%

DIMENSIONS: 1.5 x 12.4 cm (0.6 x 4.5 in.) (Dia x L)

WEIGHT: 25 g (1.0 oz)

WARRANTY: 2 year limited warranty

QUALIFICATIONS: meets ANSI Specifications N13.5 and N322-1997

Options

Model AT-138: same as Model AT-138S, but has a Range of 0–200 mR Part Number 51-2936

Model AT-725: same as Model AT-138S, but has a Range of 0–5 R Part Number 51-2939

Model AT-909: a compact, lightweight charger for direct reading dosimeters, uses two “AA” cell batteries, capable of recharging thousands of dosimeters Part Number 51-2938

Model The_Charger: a compact, lightweight piezoelectric generator that can zero a variety of quartz and carbon fiber dosimeters, no batteries required Part Number 51-2940

Dosimeter Light: LED light that attaches to dosimeter permitting it to be read in low-light conditions Part Number 51-2956