

Model 9-3 Ion Chamber



Ludlum Measurements, Inc.



Part No.: 48-3633

- INDICATED USE:** 5-range general purpose survey
CHAMBER CONSTRUCTION: Carbon coated acrylic
CHAMBER VOLUME: 220 cm³
WINDOW: 7 mg/cm² aluminized mylar
WINDOW AREA: 40 cm² (30 cm² open with optional 79% open screen)
BETA SHIELD: Retractable 1000 mg/cm² phenolic slide
SIDE WALL: 1000 mg/cm² aluminum and acrylic
ENERGY RESPONSE: Within plus or minus 20% of true value from 10 keV - 2 MeV
AUDIO: Built in unimorph speaker with ON/OFF switch
METER DIAL: 0 - 5 mR/hr, BAT TEST
MULTIPLIERS: X1, X10, X100, X1k, X10k
LINEARITY: Reading within 10% of true value
CALIBRATION CONTROLS: Individual potentiometers for each range; accessible from the front cover while in operational status
RESPONSE: Approximately 5 seconds for 90% of final meter deflection on the x1 and x10 scales, and 3 seconds on the x100, x1k and x10k scales
RESET: Pressing the reset button causes the chamber to discharge with a zero ($\pm \frac{1}{2}$ small division) meter reading; releasing the button will cause momentary meter fluctuation (up or down scale). Allow up to 15 seconds for the reading to stabilize
BAT: Pushbutton used to check battery capacity
ZERO ADJUST: 1 turn potentiometer
POWER: 2 each "AA" cell batteries housed in a sealed externally-accessible compartment
BATTERY LIFE: X1, X10 scales - 500 hours
X100 thru X10K scales - 100 hours
METER: 2.5" (6.4 cm) arc, 1 mA, pivot-and jewel suspension
CONSTRUCTION: Cast and drawn aluminum with beige powder-coating
TEMPERATURE RANGE: -4° to 122° F (-20° to 50° C). Temperature compensation maintains calibration within 15% of 25° C reading
SIZE: 9.2"H X 3.5"W X 8.5"L (23.4 X 8.9 X 21.6 cm) including instrument handle
WEIGHT: 3.6 lbs (1.6 kg) including batteries