

GUN MONITOR

SALIENT FEATURES

- ION CHAMBER DETECTOR • DESIGNED FOR β , γ & X-ray DOSE RATE MEASUREMENT •
- THREE FULL SCALE RANGES 50, 500 & 5000mR/hr • QUICK RESPONSE • GOOD STABILITY • LIGHT WEIGHT & BATTERY OPERATED



INTRODUCTION

Gun Monitor type - GM-125 is designed for accurate measurement of beta, gamma & X-ray dose rate. The unit is ideal for use in radioactive laboratories or areas where fairly strong radiation fields are encountered. It is also suitable for checking leakage from certain x-ray machines. An ionization chamber based detector & solid-state electrometer pre-amplifier circuit gives accurate & linear response to dose rate.

TECHNICAL SPECIFICATIONS

Radiation Detected	: β (beta), γ (gamma) & X rays
Detector	: Ionisation chamber 600milli-litres of air
Measurement Range	: Three linear ranges 0 to 50mR/h, Resolution ± 1 Division 0 to 500mR/h, Resolution ± 1 Division 0 to 5000mR/h Resolution ± 1 Division
Accuracy	: $\pm 15\%$ of rdg. ± 1 div. Calibrated with Cs-137 at humidity $< 55\%RH$ & at room temperature & pressure
Note	: 1) Being air ION chamber detector accuracy also depends on the ambient temp & pressure. Hence calibration factor to be applied to Observed readings.

2) Note: If Zero is out (reading at the natural background) then you are advised to warm the instruments above 40 °c for half an hour approx. by using table lamp to keep the instrument free from humidity as this instrument is quite sensitive to humidity & may not be usable in humid environment. After warm up you have to set zero if it is out .

Response time

: Less than 2 sec.

Display

: Analogue panel meter with 65mm wide linear scale with 50 divisions

Energy Response

: $\pm 15\%$ from 100kev to approx. 3Mev, with the end window closed.

Responsive to quantum energies below 100kev with the end window open (i.e. 1mg/cm² aluminized mylar window is exposed) to allow low energy beta/gamma/X-ray radiation detection.

Battery

: 1.5V x 2 type 'D' Alkaline dry cells

Battery Life

: >12 Hrs.

Battery Check

: provided

Dimensions

: 315mm x 270mm x 102mm

Weight

: 1.75Kg. approx.

* Though the instrument will respond to energy as low as 100KeV, the calibration holds good for the above mentioned energy range only.

CAT.NO. GM125 / 0416

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