RADIATION SURVEY METER

TYPE: RM 703E

Technical Data

Radiation Survey Meter Type RM 703E is a latest addition to the NUCLEONIX range of Radiation Survey Meters, designed around a microcontroller chip. It is a compact battery powered, hand-held general purpose Gamma alarming Survey Meter.It measures both Gamma Dose Rate and X-ray Contamination. It has an external G.M. Detector probe connected through a cable.

This unit has preset alarm facility which can be set throughout the range of the instrument.

The most important feature of the unit is, that it has a memory to store 1000 readings both in dose rate / CPS mode. User can recall back stored readings and display them. Also the readings can be downloaded into PC.

SPECIFICATIONS

FEATURES

- Compact, elegant & light weight and the unit is provided with an external measuring probe.
- Microcontroller based design.
 Measures both Gamma Dose Rate and X-ray Contamination.
- Dose Rate range upto 10R/hr and contamination upto 99999 CPS/CPM.
- Accuracy within +/- 15% with Cs-137.
- Works on 6V (4x1.5V) dry batteries.
- RTC for time stamp of each reading.

Radiation Detected:

X-ray & y-ray

Detector: GM Counter Type

Detector Probe: Detector is housed in a cylindrical probe which has a shutter arrangement for Beta/ Gamma selection.

Measurement unit:

mR /h / μ Sv /h /cpm /cps.

Measurement Ranges:

a. Dose Rate: 0 - 10R/h (or) 0 - 100mSv/h.

b. Count rate : 0 - 99999 CPM/

Range selection: Automatic.

Display Indication: 16x2 backlit LCD display for showing dose rate / countrate apart from configuration textual screens during.

Response Time : <5 sec

Preset Alaram Range :

0-10000mR/hr (or) 0 - 100 mSv/h (or) 0 - 99999 cps (or) 0 - 99999 cpm.

Audio: Built-in piezo buzzer provides beeps for every detected pulse and alarm o/p for preset alarms

User Interface User

interface through 6 control buttons START, PROG, STOP, STORE. INC & DEC.The above buttons allow the user to & program operate the different modes. instruments in Apart from powering unit ON/OFF.

Data storage memory:

Stores readings in built-in E²PROM. Stored data can be recalled on the display or transmitted to PC through USB port.

RTC: Real time stamp is recorded along with each reading.

Serial Port (optional):

Built-in micro USB port facilitates data down loading into PC. Data Communication Software with Micro USB connecting cable can be provided at extra cost as an additional option.



Fault Diagnostics : Low battery indication is provided on the display.

Power: 6Volts, DC, size AA, MN1500 LR6 (4 X 1.5 Volts), Alkaline cells.

Dimensions:

106W x 196L x 100Ht in mm (approx).

Head of the Dept.

R.V. Ramesh

Approved By

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