MICRO-R-SURVEY METER

TYPE: UR 705



Technical Data

Micro-R Survey Meter Type: UR 705 manufactured by NUCLEONIX SYSTEMS is primarily designed to measure low level Gamma and X-radiation. This Portable Survey Meter, designed around integrally coupled 1" x 1" NaI(TI) Scintillator to a 1 1/2" PMT, will offer an optimum performance in counting Low-Level Gamma Radiation dose rate.

This unit can measure and display dose rates in the range of 0-10000 μ R/hr on a dot matrix LCD Display. Dose rates close to natural background levels can be measured accurately.

This unit is ideally suitable for Radiometric and Environmental Radiation Monitoring involving low-level radiation dose rates.

This unit employs micro-controller based design and has number of unique features. User can store up to 1000 readings at the press of a button and can recall back, for visual indication on a dot matrix LCD display. This unit is provided with a built-in micro USB port (optionally) through which the stored data can be down loaded into PC.

FEATURES:

- □ Conforms to ANSI N42.17A performance specifications for Health Physics instrumentation (portable) & **C** compliant.
- Microcontroller based design
- ☐ Compact, elegant and light weight
- ☐ User can store upto 1000 readings
- Detects Gamma and X radiation
- Measures dose rate from 0-10000 μR/hr High Range (or) 0.01 to 99.99 μSv/hr
- □ Detector: 1" x 1" x 1 1/2" Nal (TI) Detector probe assembly is built into the instrument enclosure box
- ☐ Micro USB port (built-in), Micro USB cable extra (Optional)
- Built in audio
- Works on 6V DC dry cells

SPECIFICATIONS

Detector:

(a) Nal (TI) Scintillator, 1"d x1"h coupled to a Photomultiplier Tube. Detector assembly is inside the survey meter enclosure.

(b) External unit through 1mtr cable

Calibration Accuracy:

(a) Better than +/-15% (specified with a Cs-137 standard source) from 100 μ R/hr onwards

(b) within +/-20% upto 10000 μ R/hr

Acquisition mode:

CPS: 0-50000 CPM: 0-5000

Dose Rate (mode):

 $1-10000~\mu R/hr$ or $0.01-100.00~\mu Sv/hr$

Over Range: This instrument will show over range above the 10000 uR/hr

Data Storage: Can store upto 1000 data readings. Stored data can be recalled back on to display.

Display Indication: Dot Matrix LCD display for dose rate / cum dose.

Sensitivity: $1 \mu R/hr$ or $0.01 \mu Sv/hr$

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.

User Interface : START, STOP, PROG, STORE, INC, DEC, POWER ON/OFF command buttons for setting of parameters & operation of the instrument.

Power: 6 volts DC, BPL Excell or DURACELL ULTRA, Size AA, MN1500 LR6 (4 X 1.5 Volts), Alkaline cells.

Dimensions:

106W x 196L x 95Ht in mm (Approx.)

Weight

Unit with detector (1"x1" Nal): 2kg



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