

MICRO-R-SURVEY METER

TYPE: UR 705A

Technical Data

Micro-R Survey Meter Type:UR705A manufactured by NUCLEONIX SYSTEMS is primarily designed to measure low level Gamma and X-radiation. This Portable Survey Meter is designed around integrally mounted 1" x 1" Plastic Scintillator to a 28 mm 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 0-20,000 µR/hr on a dot matrix LCD Display and has auto ranging facility. 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 microcontroller based design and has number of unique features. User can store upto 1000 readings and can recall back, for visual indication on a dot matrix LCD display. This unit also has a Micro USB port through which the stored data can be down loaded into PC.

FEATURES :

- Microcontroller based design.
- Compact, elegant and light weight .
- User can store upto 1000 readings.
- Detects Gamma and X radiation.
- Measures dose rate from (0-20,000µR/hr).
- Detector : 1" x 1" PlasticScintillation detector probe assembly (Internal to enclosure).
- Micro USB port (Optional).
- Built in audio.
- Works on 7.5V DC dry cells.
- RTC time stamp for each reading.

SPECIFICATIONS

Detector : PlasticScintillator, 1"d x1"h coupled to a Photomultiplier Tube. Detector assembly is inside the survey meter enclosure. Energy response is as per H*(10).

Energy Range: 50KeV to 3MeV.

Accuracy: Better than +/-15% with Cs-137

Dose Rate: 1nSv/hr to 2000µSv/hr.

Range Changeover: Automatic.

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

Alaram Range : Configuration audio/visual alarms.

RTC : Real time stamp recorded along with each reading.

Display Indication : Dot Matrix LCD display for dose rate / cum dose. Instrument is supplied with shoulder strap.

Sensitivity : 1 micro-R/hr , 10nSv/h

Time Constant (TC) : Adjustable from 2-8 secs.

Audio Output:
Built-in piezo electric buzzer.

Serial Port / Data Communication:
USB to UART PCB facilitates data down loading into PC. Data Communication Software with connecting cable can be provided at extra cost as an additional option.

User Interface: i) Power ON/OFF switch. ii) START, STOP, PROG, PROG, INC, DEC command buttons for setting of parameters & operation of the instrument.

Power : 7.5 volts DC, BPL Excell or DURACELL ULTRA, Size AA, MN1500 LR6 (5 X 1.5Volts), Alkaline cells.

Dimensions:
106W x 196L x 100Ht in mm.

Weight: (Approx.)Weight : 1.5kg .

Type Test Compliance : Er1/Erc compliance as per IEC61000-4-3.