

**MICRO-R-SURVEY METER
TYPE : UR 709**



Technical Data

Micro-R-Survey meter Type UR709 designed, manufactured and supplied by Nucleonix Systems is a state of art micro-controller based low level gamma survey meter.

This meter designed around integrally mounted 1"X 1" NaI (TI) scintillator coupled to suitable PMT will offer optimum performance in counting low level Gamma Radiation dose rate.

This equipment finds use in carrying out environmental survey, low level radiation measurements and also in steel industry for carrying out contamination checks of incoming/ outgoing materials.

This unit will be additionally used in measuring radiation levels around Nuclear installations, Radiochemical plants, reprocessing plants, etc.

This unit can measure and display doserates in the range of 0 - 9.99 mR/h or 0 - 99.99 μ Sv/h in 4 linear ranges. It also measures countrate in the range of 0-99999cps.

It has a lot of unique features which includes user interface through a set of four command buttons & the visual indication to the user is on a large analog LCD display. Data visualization is provided on both linear analog scale & direct digital display.

FEATURES :

- Conforms to ANSI N42.17A performance specifications for Health Physics instrumentation (portable) & CE compliant.
- Micro-controller based design.
- Compact, Elegant and light weight.
- Measures gamma dose rate in R/h or Sv/h
- Dose rate accuracy of +/- 10% with Cs 137
- User large area custom LCD display for dose rate visualization.
- Preset alarm facility for generation of audio / visual alarms.

SPECIFICATIONS

Radiation detected : X and Gamma rays

Detector : Na(I) scintillator , 1"d X 1"h coupled to a suitable PMT is housed inside the unit.

Measurement Unit : CPS / R/h / Sv/h

Measurement Range:

Dose Rate :
0.0 mR/h to 9.99mR/h or 0.00 μ Sv/h to 99.99 μ Sv/h in four linear ranges

Count Rate : 0- 99999 CPS in 5 linear ranges.

Accuracy : Within +/-10% with Cs¹³⁷

Range Selection : Manual

Over Range : Senses over range and shows on display.

Time constant : Floating time constant of 4 sec / 8 sec.

Present Alarm Range:

0-9999 μ R/h or
0-99.99 μ Sv/h or 0-9999 cps

Audio : Built-in piezo buzzer for generating audio chirps for radiation events and alarm O/P for preset alarms.

User Interface : FN, RANGE, \blacktriangle & \blacktriangledown are the four control buttons provided on the instrument. The above buttons allow the user to program and operate the instruments in appropriate manner for configuration and measurement.

Indication (Visual) : Analog bar scale visualization along with direct digital indication on custom backlit LCD display.

Power : 7.5 Volts, DC, size AA, MN1500 LR6 (5 X 1.5 Volts), Alkaline cells.

Battery Indication : Battery low indication is provided on LCD display.

Type test compliance :

- a) Conforms to ANSI N42.17A performance specifications for Health Physics instrumentation (portable)
- b) CE compliant



Dimensions : 106 W X 196L X 100H (mm).