

DIGITAL CONTAMINATION MONITOR (MICRO) TYPE : CM 710P

CE Technical Data

Digital Contamination Monitor (Micro) Type CM 710P designed, manufactured and supplied by Nucleonix Systems is a state-of-art, microcontroller based unit which essentially serves as a low level alarming survey meter cum Beta contamination monitor.

It measures contamination in CPS or CPM mode and low level gamma dose rate in mR/hr / μ Sv/h

It has lot of unique features which include user interface, through a set of four command buttons & the visual indication to the user is on 16x2 LCD dotmatrix display module. This unit has preset alarm facility which can be set throughout the range of the instrument. Unit can store upto 1000 readings and stored data can be downloaded into PC using data communication software, through built-in RS232 serial port.

FEATURES :

- Conforms to ANSI N42.17A performance specifications for Health Physics instrumentation (portable) & CE compliant.
- Microcontroller based design.
- Compact, Elegant and light weight.
- External probe with cover for Beta / Gamma selection.
- Measures dose rate in mR/hr / μ Sv/h & countrate in cps / cpm.
- Accuracy +/-10% with Cs-137.
- Unit works on 7.5V, dry cells (5x1.5V).
- RTC for time stamp of each reading.

SPECIFICATIONS

Detector :

Type : Pancake GM detector
Dimension : 50mm dia
Sensitivity (Approx) : 60 cps/mR/h

Detector Probe : This consists of Pancake GM detector housed inside a cylindrical housing with handle. Probe is fixed into a side clamp on one side of the instrument. This housing is provided with cap for Beta/Gamma selection.

Radiation detected : Beta & Gamma

Measurement Unit :
mR/h / μ Sv/h / cps / cpm

Measuring ranges :

- (a) Dose rate : 0 - 200 mR/h (or)
0 - 2000 μ Sv/h
- (b) Count rate : 0 - 99999 cps (or)
0 - 99999 cpm

Preset alarm range : 0 - 200 mR/h (or) 0 - 2000 mSv/h (or) 0 - 99999 cps (or) 0 - 99999 cpm.

Over range : Senses over range & shows on display.

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

Time Constant (TC) : User has a choice of three TC's LO (2 sec), MED (4 sec) & HI (8 sec).

Accuracy : +/- 10% with Cs-137.

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

Data Storage : Can store upto 1000 readings. Stored data can be recalled back on to display or transmitted to PC through serial port.

Serial port / data communication: Built-in serial port facilitates data downloading into PC. Data communication software with connecting cable can be provided at extra cost .

User Interface : START, STOP, PROG, STORE, INC & DEC are the six control buttons provided on the instrument. The above buttons allow the user to program and operate the instruments in appropriate manner.

RTC : Real time stamp recorded with each reading.

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



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

Type test compliance :

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

Dimensions :

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