

## FOOT CONTAMINATION MONITOR

TYPE : FCM738

### Technical Data

Foot Contamination Monitor FCM 738 manufactured by NUCLEONIX SYSTEMS primarily serves as a personnel monitoring system for checking the alpha contamination of foot of radiation workers / technicians working in Nuclear Power Plants, reactors, Radiochemical plants and other similar installations. This is floor mounted design.

Start of counting is initiated by an IR source detector arrangement. Guidance to the user during monitoring is in the form of textual messages during monitoring & at the end of monitoring.

### FEATURES:

- Micro-controller based design.
- Efficiency > 20% for Am-241.
- Uses ZnS scintillator coupled to PMT of suitable dia.
- Provided with a rugged protective grill.
- 6 digit 7 segment LED display for display of counts & 16x2 LCD display for show-up configuration screens.
- Visual and audio alarms in the event of alarm condition.
- Uses interface is through a detachable keypad.
- Monitor design ensures continuous maintenance free operation in harsh atmospheric conditions in Radiochemical plants.

### SPECIFICATIONS

**Detector:** Zns (Ag) Scintillator of dimensions 140x300mm covered with Aluminized Mylar film and coupled to suitable PMT serves as the Alpha detector. It is also provided with a rugged SS grill for protection to the detection assembly.

**Foot Detection:** By an IR sensor

**Efficiency :** >20%

**Display:** 16x2 dot matrix LCD and 6 digit 7 segment LED display for configuration & display of counts respectively.

**Preset time:** 1 - 99 sec.

**Measuring Range:** 0 - 9999 counts / 0-9999 CPS / 0-99999 CPM

**Preset counts range:**  
1 - 9999 counts

**User Interface:** A 2x2 matrix detachable keypad has been provided for configuring the instrument.

**Indication:** Counting ON, Clean, Contaminated, Incomplete operation, High Background.

**Audio:** Warning audio signals for contaminated and incomplete operation.

**Data storage & transfer:** Data storage facility for last 1000 readings is provided. Each reading is stored along with time stamp. This data can be transferred through the USB port to PC.

**Power Supply :** 230V AC, +/- 10% at 50Hz.



Foot Assembly



Display Module