

# ON- LINE WALL MOUNTED AIR BORNE TRITIUM MONITOR QTY –

02 Nos.

## 1- General Specification and features.

- i) **Detector;** Ion Chambers or Non gas flow type detectors are preferable
- ii) **Beta & gamma Compensation;** On line detection of only tritium ( ${}^3\text{H}$ ) i.e. with compensation radio isotopes other than Tritium present in sampling air ( i.e facility of gamma, Beta & alpha radiations compensation other than Beta of tritium).
- iii) **Pump;** Long running & reliable suction pump for continuous 24 hrs operation with specification and maintenance literature and essential spare parts list & price.
- iv) **Output:** 4-20 mA output facility and threshold contacts for remote display.
- v) **Measuring Range;**  $1\mu\text{Ci}/\text{m}^3$  to  $1\text{Ci}/\text{m}^3$
- vi) **Measuring Units;** in  $\text{Bq}/\text{m}^3$  as well as option of  $\mu\text{Ci}/\text{m}^3$ ,  $\text{mCi}/\text{m}^3$  etc.
- vii) **Alarms;** Audible and visual alert and alarm signals in field as well as in control room.
- viii) **Event history;** Provision of event history record for measuring activity in graphical form as well any failure at least for one week or more through software.
- ix) **Calibration:**  
Calibration source with certificate and detailed calibrating procedure and Literature may be provided with system.
- x) **Dust & water proof cabinet.** Electronic set up must be assembled in dust / water proof as well as wall mountable cabinet.
- xii. **Aerosols pre-filter;** must be provided with complete specification & easily replaceable with price.
- xi) **Spares parts:** Essential spare parts like Detector, pump electronic card, modules, connectors and other along with replacing procedures must be quoted
- xii) **Documentation.**
  - a. **Language;** English
  - b. **Operational Manual;** Comprehensive Operational procedure and functional description & specification of each component.
  - c. **Maintenance manual;** Detailed maintenance& replacing procedures of each component including detailed circuit diagrams.
  - d. **Description, Function and detailed specification of each component.**
- xiii) **Software;** Software for operation, parameter setting and maintenance must be provided.
- xiv) **Factory Test Report.** Factory test report with calibration procedures with certificate of the equipment in English language must be provided with consignment.

## 2- Electrical and Environmental Specification.

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| i) <b>Main Power Supply -</b>  | 220/230V AC 50/60 Hz, 100/150 W<br>$\pm 15\%$ (For recharging battery) |
| ii) <b>Storage Temperature</b> | 0 to 65 °C.  |
| iii) <b>Operational Temp.</b>  | +5 to 55 °C.   |
| iv) <b>Humidity</b>            | Max 95% Non-condensation   |