

Multi-Room Tritium-in- Air Monitor

Model: 7042

Application

Tyne's Multi-Room Tritium-in-Air Monitor is a device which simultaneously monitors up to 32 remote locations or rooms for background (environmental, gamma, other isotopes) compensated tritium activity. It is suitable for use in Nuclear Power Stations, Tritium Extraction Plants, Laboratories, or any location where tritium contamination may be a possibility.

Features

- 32 Detection Points
- 2 minute minimum measurement time
- 1 $\mu\text{Ci}/\text{m}^3$ sensitivity
- Zero maintenance drier to compensate for other isotopes
- Compensates for Gamma, environmental effects, and plate out
- Microprocessor controlled
- Front End GUI (General User Interface)
- Display curves for each room
- 12 month data accumulation
- Two alarm settings
- Easy access dust filter
- Rooms and sampling frequency is selectable
- Control or transfer data over Ethernet connection



Description

The Multi Room Tritium in Air Monitor is designed to monitor up to 32 separate rooms for tritium. The system will automatically step through a user selectable sequence of room measurements with a minimum required measurement time of 2 minutes. The system uses a zero maintenance drier with dew point measurements to calculate the background contribution from gamma radiation, other radio nuclides and any offsets from the total signal ensuring that the system only measures the amount of tritium in the HTO form. With the computer control, automatic filter cleaning and zero maintenance drier the system does not require any attention through out the year of operation. All data is logged and charted and can be accessed remotely by health physics. This high tech solution for multi room tritium in air monitoring ensures that all data is recorded without any human errors involved. This system is the perfect cost effective solution for large facilities.

The entire system is housed in a compact, attractive kiosk cabinet shown in the picture. The cabinet is made of strong 12 and 14 gauge steel and its attractive 2-tone paint is durable baked-on powder coating.

Specifications

Range	1 – 1,000,000 $\mu\text{Ci}/\text{m}^3$
Sensitivity	1 $\mu\text{Ci}/\text{m}^3$
Response Time	2 minutes minimum per room
Accuracy	10 %
Number of Rooms	32
Room Selection	User settable
Detector Volume	1000 cc
Compensation Type	Other Radionuclides, gamma, electronic drift, plate out, environmental effects
Alarms	2 per room – user adjustable
Ambient Temperature	0°C to 50°C
Relative Humidity	0 to 95%
Display	17" Flat Panel Display
Data Display	Easy to read Graphs
Data Logging	12 months
Remote Control	Remote Virtual Login over Ethernet
Dimensions	79" High x 24" Wide x 20" Deep
QA	ISO9001:2000