THORIUM MOLTEN SALT REACTOR AIR & STACK MONITOR

Model ~ MSTR-A9

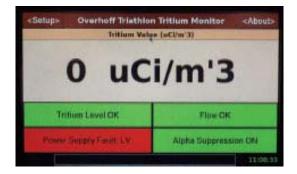
FEATURES:

- SENSITIVE TO:
 - THORIIUM 232
 - H-3 10⁻⁷ μCi/cc
- READS DIRECTLY IN µCi/cc or Bq/I
- VISUAL & AUDIO ALARM
- DATA LOGGING STANDARD
- HARD COPY PRINTER (optional)
- DYNAMIC BACKGROUND COMPENSATION
- CAN ACTUATE REMOTE CONTROLS
- CAN OPERATE IN PRESENCE OF OTHER RADIOACTIVE GASES
- MICRO PROCESSOR OPERATION
- USB and ETHERNET PORTS
- DIGITAL ACCURACY



APPLICATION:

The TA-OVERHOFF Thorium Air & Stack Monitor is a sensitive, rugged stack monitor designed and built for Thorium Molten Salt Nuclear Power Plant use. Other versions are available for research labs, room air, glove boxes and other applicable uses.









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DESCRIPTION:

- Optional Radon Rejection decreases background effects to negligible levels. •
- The deionized and filtered intake reduces to negligible levels spuriosity based on smokes, • dusts, and existing ionization in the air.
- Inlet and outlet hoses allow the return of monitored air to source: interiors of fume hoods • and exhaust stacks, etc.
- All instruments are calibrated at the factory. Calibration check may be performed in the • field with a license exempt µCurie level beta source.

Thorium-Tritium Air & Stack Monitor Isotope Identification Guide

AIRBORNE ACTIVITY	MSTR-A9	
	CHEMICAL FORM	
Tritium H3	T ₂ , HTO, T ₂ O	YES
Inorganic Organic	CO ₂ Various	OP
Particulate	Alpha – Thorium 232	YES
Particulate	Beta	YES
lodine		OP
Noble Gas:	Gross/All Argon Xeon Radon	YES OP OP RX

Number of Channels: **YES** = Measures Separately

RX = Rejects

OP = Optional







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Measurement Ranges of Optional Detectors	From	4 Decade Model	6 Decade Model
Alpha – Thorium 232- Particulate	5 x 10 ⁻⁸	10 ⁻⁴	µCi/cc
Tritium	10 ⁻⁷	10 ⁻³	10 ⁻¹ μCi/cc
Inorganic C-14	10 ⁻⁸	10 ⁻⁴	10 ⁻² µCi/cc

SPECIFICATIONS:

Background:	Elimination by subtractive balanced chambers.	
Smoke, Dust & Ion Elimination:	Filter and deionizer reduce effects to negligible levels.	
Circuit:	Electrometer circuit amplifies net difference between internal chamber and a background chamber of similar size and configuration.	
Output:	USB Port is standard ethernet port is optional.Optional 0-5 volt or 4-20 mA.	
Alarm Set Point:	User settable	
Alarm:	High Level: Red flashing light plus warbling sound;System Fault Alarm: White steady light.	
Remote Alarm:	3 Relays	
Data-logging:	Serial port or on-board logging	
WEIGHT & DIMENSIONS:		
Dimensions:	23" wide x 66" high x 36" deep.	
Shipping Weight:	635 lbs.	

OPTIONS:

- MODEL RDX-8 Remote alarm (audible & visual) (including standard 25" of cable).
 - Can be used to 500 feet. 4-20 mA output.
- ✤ Hard Copy Printer.





