SENSITIVE TRITIUM IN AIR MONITOR

Model - 357

FEATURES:
- STABLE TO 1 μCi/m³ (0.04 MBq/m³) SENSITIVITY
- RACK MOUNT
- FAST RESPONSE
- DUAL 2 LITER ION CHAMBERS, GAMMA COMPENSATED
- NO RESPONSE TO RADON
- ZERO DRIFT – BETTER THAN ±1μCi/m³
- AC OPERATED
- DIGITAL LOCAL DISPLAY
- OPTIONAL: RS232 OUTPUT; REMOTE READOUT

APPLICATION:
A cost-effective, highly sensitive tritium in air monitor designed for continuous monitoring (room air, stack, hoods, etc).

DESCRIPTION:
Model 357 is a general-purpose tritium in air monitor with dual 2 liter ionization chambers for gamma compensation. Includes everything needed for operation: pump, HEPA filter, flowmeter, local display, and an adjustable single alarm setpoint with audible and visual alarm. A variety of options can be added, including data output, remote display/alarm units, noble gas compensation, wire-grid chambers to reduce plate-out contamination, and more.

SENSITIVITY:
Sensitivity is to 1 μCi/m³ (0.04 MBq/m³).

RADON INTERFERENCE, NOISE RESPONSE:
A Radon suppression circuit and produces accurate and drift-free readings.

FAST RESPONSE:
Exceptionally rapid response is due to its unique ability to ignore Radon. The instrument has an electronic time constant.

FAST WARM UP:
After applying power, “warm up” takes less than 5 minutes.
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SPECIFICATIONS:

RANGE: Single range, 1 to 19,999 µCi/m³ or 0.1 to 1,999.9 MBq/m³
DISPLAY: Digital, 4 ½” digit LED
ACCURACY: ±10% of reading, ±1 µCi/m³, whichever is greater
STABILITY & LONG-TERM DRIFT: ±1 µCi/m³ of ambient temperature
NOISE: ±1 µCi/m³, 2 sigma, with 20 second time constant
GAMMA COMPENSATION: Second ion chamber pair of equal volumes, mounted in cruciform pattern, serves to cancel effects of external Gamma fields.
RESPONSE RATE, ELECTRONIC: two linear time constants, 30 seconds for <80 µCi/m³; 3 seconds for >80 µCi/m³
WARM-UP TIME: Less than 5 minutes for high voltage power supplies to stabilize
ALARM SYSTEM: Single alarm, with set point adjustable from 1 to 1000 µCi/m³
ION CHAMBER VOLUME: Measuring: 1600m³; Total Wetted: 2000 cm³
ION TRAP: Kanne Type, coaxial integral
PORTS: Hose barb fittings for 3/16” I.D. vinyl tubing
ENVIRONMENTAL: Storage: -40º C to 60º C (-40º F to 140º F)
Operating: 0º C to 50º C (32º F to 122º F)
Humidity: 0-95% RH non-condensing
PHYSICAL CABINET: 19” Rack mount, aluminum extrusions front and rear panels
POWER: 115 VAC or 240 VAC 50/60 Hz
DIMENSIONS: 8.8” (223mm) H x 19.0” (483mm) W x 16.0” (406mm) D
WEIGHT: 40 lbs (18.2 kg)
FLOWMETER: 0-10 lpm adjustable rotameter
DUST FILTER AND PUMP: High efficiency respirator type cartridge. Long life continuous duty oscillating piston positive displacement pump.
POWER: 115 VAC or 240 VAC 50/60 Hz
DIMENSIONS: 7.0” (178mm) H x 17.0” (432mm) W x 16.0” (406mm) D
WEIGHT: 20 lbs (9.14kg)

OPTIONS:

- Remote alarm units  
- Logarithmic output
- Remote meter displays  
- RS232 output
- Tritium gas calibrator  
- Plate-Out proof wire grid chamber
- Calibration resister  
- 4-20 mA output