## **MODEL 347**

LOW COST MONITOR FOR ULTRA SENSITIVE DETECTION OF AIRBORNE RADIOACTIVE GASES QUADRUPLE IONIZATION CHAMBERS FOR BEST GAMMA COMPENSATION

型号 347低成本监测器,用于气溶胶辐射气体超灵敏检测, 四电离室提供最佳伽马补偿

A low cost very high sensitivity general purpose monitor for reliable measurements to as low as 0.5  $\mu$ Ci/m<sub>3</sub> in the presence of significant external gamma fields.

一款低成本高灵敏一般用途的监测器,在显著外部伽马场存在的情况下可靠测量到 0.5 μCi/m³

OTC Model 347 tritium monitor will not respond to ambient radon, this instrument is fast, accurate and has long term zero stability.

OTC公司生产的型号347 氚监测器不会对环境氡反应,测量快速精确并且长期零点稳定。

This monitor is a simplified, lower cost, version of the 300 series instruments, but with a restricted number of available optional features.

这款监测器是简化了的低成本的300系列仪器里型号,但是还是有几个可选择的功能。

The quadruple chambers are Kanne type arranged in a cruciform pattern.

四电离室十字排列,Kanne型十字结构。

A separately mounted pump system with HEPA and ULPA filters assures a sample free of particulates.

单独安装的泵系统,带 HEPA 和 ULPA 滤网,确保样品无颗粒。

## TECHNICAL SPECIFICATIONS 技术规格

MEASUREMENT Tritium in Air Concentration

测量 气氚浓度

RANGES single, 0.1 to 1999.9 μCi/m<sub>3</sub> 量程 单量程, 0.1 to 1999.9 μCi/m<sub>3</sub>

DISPLAY Digital Meter, 4½" digit LED 显示 数字率表,4½"数字LED

ACCURACY ±10 % of reading, ±1 μCi/m<sub>3</sub>, whichever is greater

精度 读数 $\pm 10$  %或 $\pm 1$   $\mu$ Ci/m3,取数值较大者

STABILITY AND DRIFT LONG TERM

±1 μCi/m<sub>3</sub>, ambient temperature

稳定性和长期漂移 ±1 µCi/m<sub>3</sub>,环境温度

NOISE <1 μCi/m<sub>3</sub>, 2 sigma, with 30 second time constant

噪音 <1 μCi/m<sub>3</sub>, 2西格玛, 带30秒时间常数

## OPTIONAL EQUIPMENT AVAILABLE 可选购设备

Remote Alarm Units 遥控报警器 Remote Meter Displays 遥控读数显示

Tritium Gas Calibrator 氚气校准器 Calibration Resistor 校准电阻器

4-20 mA Output 输出4-20 mA Logarithmic Output 对数输出

RS232 Output RS232 输出接口





GAMMA second ionization chamber pair of equal volumes, mounted in cruciform

COMPENSATION pattern, serves to cancel effects of external gamma fields

伽马补偿 容量对等的第二对电离室,十字排列安装,用于抵消外部伽马场影响

RESPONSE RATE two linear time constants, 30 seconds for <80  $\mu$ Ci/m<sub>3</sub>

ELECTRONIC 3 seconds for >80  $\mu$ Ci/m<sup>3</sup>

响应率电子学 两个线性时间常数,30 秒 <80  $\mu$ Ci/m<sub>3</sub>,3 秒 >80  $\mu$ Ci/m<sub>3</sub>

WARM-UP TIME less than 5 minutes required for high voltage power supplies to stabilize

预热时间 小于5分钟要求高压电确保稳定

ALARM SYSTEM single alarm, with set point adjustable from 1 to 1000 μCi/m<sub>3</sub>

报警系统 单报警, 带调节设定点, 1-1000 μCi/m<sub>3</sub>

IONIZATION CHAMBER measuring: 2900 cm<sub>3</sub> VOLUME total wetted: 4000 cm<sub>3</sub>

电离室容量 测量: 2900 cm<sub>3</sub>, 总湿量4000 cm<sub>3</sub>

ENVIRONMENTAL Storage Temperature: -40° C to +60° C

Operating Temperature: 0° C to +50° C

Humidity: 0 to 95 % RH non-condensing

湿度 0-95% RH, 无冷凝

PHYSICAL CABINET Bench top, frame constructed of aluminum extrusions, front and rear panel

机柜 台式,铝合金型材,前后面板框架构建

POWER 115 VAC or 240 VAC 50/60 Hz 电源 115 VAC 或 240 VAC 50/60 Hz

DIMENSIONS 8.8" [223mm] H x 19.0" [483mm] W x 16.0" [406mm] D

尺寸

WEIGHT 45 lbs [20.4 kg]

重量

FLOW METER 0 -10 LPM adjustable rotameter 流量 0 -10 LPM可调节转子流量计

DUSTFILTER & PUMP separately mounted

过滤器和泵 分开单独安装

POWER 115 VAC or 240 VAC 50/60 Hz

电源

尚7.0 [178mm] x 氪 17.0 [432mm] x 泳 16.0 [4

WEIGHT 20 lbs [9.1 kg] 重量 20 磅(9.1 千克)

