

PORTABLE TRITIUM MONITOR

便携式氚监测器

Model # VAP-X-(H3)

型号 VAP-X-(H3)

FEATURES: 特点

- USER SETTABLE UNITS - PicoCi/ml or Bq/m³ etc.
用户可预设单位 PicoCi/ml 或 Bq/m³
- WIDE RANGE - DIGITAL ACCURACY
宽量程-数字精度
- PROGRAMMABLE DIGITAL READOUT
可编程的数字读数器
- SENSITIVE FOR OCCUPATIONAL EXPOSURE
对职业性辐射暴露敏感
- DYNAMIC BACKGROUND COMPENSATION
动态本底补偿
- BATTERY OPERATION OR AC OPERATION
电池或交流电供电
- BUILT-IN HIGH LEVEL ALARM
内置高水平报警
- BUILT-IN LOW FLOW ALARM
内置低水平报警
- BUILT-IN RS-232 COMPUTER INTERFACE
内置 RS-232 计算机接口



DESCRIPTION: Technical Associates VAP-X-(H3) Tritium Monitor is a sensitive, rugged, portable instrument for detection and measurement of airborne tritium. Its' subtractive balanced chamber electrometer circuit decreases background effects to negligible levels and its deionized and filtered intake reduces to negligible levels spurious effects from smoke, dust and existing ionization in the air. It is line operated and it maybe left on permanently without fear of "running out of battery". Optional inlet and outlet hoses allow monitoring interiors of fume hoods, exhaust stacks, etc. The PTG-9 will measure airborne tritium as free hydrogen or as volatile chemicals in concentrations as low as 1×10^{-5} uCi/cc of air. (370 KBq/m³)

描述: TA 公司 VAP-X-(H3)氚监测器是一款检测和测量气溶胶氚的敏感、坚固、便携的仪器。消减平衡室静电计电路把本底的影响减少到可以忽略的水平, 它的去电离并过滤了的进气将烟雾、粉尘和空气中现有的电离等杂散影响减少到可以忽略的水平, 它电线供电, 永远不用担心“用完电池”。可选购进出气软管, 以监测排风罩、烟囱道等内部。PTG-9 将气溶胶氚作为游离氢或不稳定化学物测量, 浓度低到 1×10^{-5} uCi/cc(370 KBq/m³)

All instruments are calibrated at the factory. Calibration check may be performed in the field with a microCurie level Beta or Gamma source. Background chamber may be disconnected to check linearity of response on a gamma calibration range. User friendly calibration controls are provided.

所有仪器工厂校正, 校正检测可用微居里水平的 β 或 γ 源现场完成。本底室可能断开以检查 γ 校正范围的线性反应。提供用户友好校正控制。

TA

TECHNICAL ASSOCIATES

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SPECIFICATIONS:规格

- Ranges: Compact, easy to read digital LCD readout. 1×10^{-6} to 1.0 uC/ml (37 KBq/ml to 3.7×10^{10} Bq/ml.)
量程：紧凑，数字 LCD 读数器容易读数， 1×10^{-6} 到 1.0 uC/ml (37 KBq/ml 到 3.7×10^{10} Bq/ml.)
- Background: Essentially eliminated by subtractive balanced chambers.
本底：消减平衡室根本上消除本底
- Smoke, Dust and Ion Elimination: Filter and deionizer reduce effects to negligible level.
烟雾，粉尘和电离消除：滤网和去离子装置将影响减低到可以忽略的水平
- Circuit: Electrometer circuit amplifies net difference between 0.7 liter tritium internal chamber and a sealed background chamber of similar configuration.
电路：静电电路扩大了 0.7 升氚内室和具有同类似结构密封本底室净差
- Alarms: Low Air Flow, Alarm High Level Alarm: Red Lamp and Audio Alarm.
报警：低流量报警，高水平报警：红灯和音频报警
- Controls: Power, Pump On/Off, Battery Check, Set (calibration aid), Zero Adjust, Meter Programming (Two buttons).
控制：电源，泵开关，电池检测，设定（校正帮助），零点调整，仪表程序（两个按钮）
- Calibration: Can calibrate internally with tritium gas, or on a calibration course, or (at a single point) with optional beta or gamma source.
校正：可以氚气体内部校正，或进行过程校正或选购 $\beta - \gamma$ 源
- Computer Port: RS-232 serial port is built in (fully addressable).
计算机端口：内置 RS-232 串口（全寻址）
- Portability: PTG-9 is provided with carrying handle.
便携性：PTG-9 带提手
- Case: Deep drawn aluminum case, with handle and gasketed lid, easily cleanable anodized finish.
外箱：深铝箱，带把手和带衬垫盖，容易清洗的电镀表面
- Dimensions
尺寸 Instrument Case (Including handle): 7"W x 11"L x 7" Tall.
 仪器外箱（包括把手）7"宽 x 11"长 x 7" Tall 高。
 Front Panel: 11" Long x 7" Wide.
 前板：11" 长 x 7" 宽
- Battery: 9V rechargeable sealed. Battery Life: 20 hours between charges. Battery charger is built-in.
电池：9V 可充电密封电池，电池寿命：每 20 小时充电。充电器内置
- Weight: 12 lbs. Shipping weight 15 lbs (Including batteries and charger)
重量：12 磅，装船重量 15 磅（包括电池盒充电器）

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Uses: 用途

- Pin-points the source of a leak 精准定位泄漏源
- Map of underground plume 地下羽状图
- Locate edge of plume 标出羽状图边际
- Locate problem areas 确定问题区域

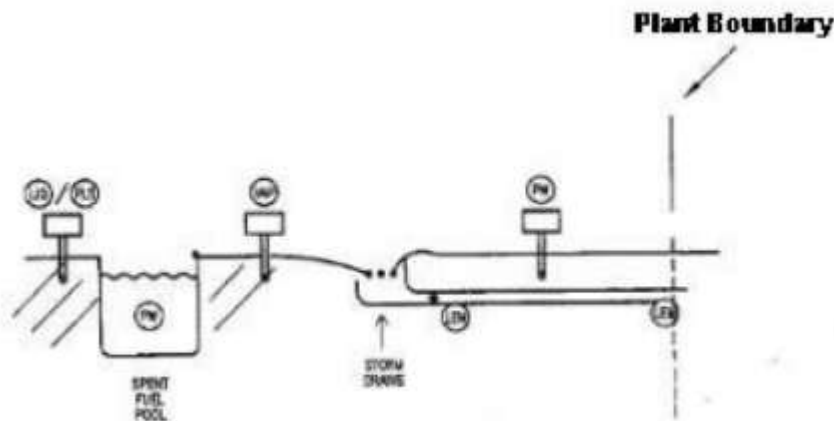
Advantages: 优点

- Allows user to chase down source 允许用户追捕源
- Optional SR-90 detection or detection for other nuclides 可选购 SR-90 检测或其它核素检测

Situation: 情形

Sometimes you need to extract vapor from the soil at a series of points in order to track down a radiation leak or map a spreading plume. There may be some useful existing holes or wells but you need data from additional points at different depths. Model VAP-X-(H3) is designed specially to help you accomplish this task. (Graph not shown)

有时客户需要从许多地点的土壤中抽取气体，以寻踪辐射泄漏或标出蔓延的羽状图，即使可能有一些有用的现成的洞或井，但是你需要来自其它的不同深度的点的数据。型号 VAP-X-(H3) 就是特别设计来帮助您完成这些任务的。



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<u>TASK</u>	<u>TOOL</u>	<u>MODEL</u>	<u>INCLUDED</u>
任务	工具	型号	包括
MAKE HOLE	cone penetrometer	CP-VAP	optional
凿洞	锥探仪	CP-VAP	选购
	coring tool	CT-VAP	optional
	取芯器	CT-VAP	选购
	auger-drill	AD-VAP	optional
	螺旋钻	AD-VAP	选购
VAPOR COLLECTION			
气体收集			
Push Tube	Hollow push-tube with	PUSH-1	YES
推管	closed-end and side-hole	PUSH-1	是
	air-intakes		
	带包端和侧孔进气的中空推管		
Vapor Build-up		VAP-BUC	optional
气体累积		VAP-BUC	选购
Chamber			
气室			
PUMP	Air Pump	built-in	YES
泵	气泵	内置	是
FILTER	Coarse filter in push-	built-in	YES
滤器	tube fine filter at detector inlet	内置	是
	探头入口处, 推管精滤网里的粗滤器		
Particulate filter		built-in	YES
粒子滤网		内置	是
MEASUREMENT DEVICE			
测量仪器			
Tritium	Tritium concentration meter	PTG-9PM	YES
氚	氚浓度仪表	PTG-9PM	是
REJECTION FEATURES			
抑制功能			
Gamma Background	Dual chamber design	built-in	YES
γ 本底	双室设计	内置	是
Radon Rejection		MOD-400PM	recommended
氡抑制		MOD-400PM	推荐
DETECTION OF OTHER NUCLIDES			
检测其它核素			

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SR-90, Cs-137, etc.
SR-90, Cs-137, 等
SR-90, Cs-137, 等

Mini-Air-Vap
Mini-Air-Vap
Mini-Air-Vap

Submit list of
nuclides of concern
提交 所关注核素清单

DATA TRANSMISSION

数据传输

A-Serial	Serial RS-232	RS-232	Choose A, B, and/or C when ordering 订购时选择 A、B 和/或 C
A-系列	系列 RS-232	RS-232	
B-Ethernet-wired B-有线网络	Ethernet wired 以太网有线	EW EW	
C-Ethernet-wireless C-无线网络	Ethernet wireless 以太网无线	EW-LS EW-LS	

DATA STORAGE

数据存储

Hardware and software 硬件和软件	Palm data logger 掌上数据录入器	P-LOG P-LOG	optional 选购
Software and cable 软件和数据线	Store data to your laptop 储存数据到手提电脑	WIN-W WIN-W	optional 选购

DATA NETWORK

数据网络

Universal, easy ORO Network for all kinds of sensors 通用, 易用 ORO 网络, 适用各种传感器	ORO NET ORO 网络	YES 是
	Overdrive 超速	YES 是

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