

# INSTALLED VEHICLE TRANSIT MONITOR

## 安装型车辆运输监视器

Model # VMF-TA - Model # VMF-TB - Model # VMM-TA8

### FEATURES: 产品特点

- OPERATES ON AC OR OPTIONAL BATTERY "BACK-UP"  
AC 或可选备用电池供电
- CAN ALARM AT  $7 \mu\text{R/hr}$  RISE WITHIN 1 SECOND (TA)  
每上升  $7 \mu\text{R/hr}$  , 仪器一秒钟内报警
- SEES AND CAN ALARM AT  $1 \mu\text{R/hr}$  ABOVE BACKGROUND (TB)  
对本底以上  $1 \mu\text{R/hr}$  放射线可见并报警
- COMPLETELY WEATHER PROOF METAL HOUSING  
完全防潮金属外壳
- HIGH SENSITIVITY DETECTORS (PLASTIC SCINTILLATORS  $792 \text{ in}^3$  EACH)  
高灵敏探测器 (塑料闪烁体, 每个  $792 \text{ in}^3$  )
- DYNAMIC BACKGROUND SUBTRACT  
动态本底扣除
- FAST RATE OF CHANGE DESIGN  
快速变化率设计
- CONTINUOUS OPERATION: "SET AND FORGET"  
连续工作, 一劳永逸



### DESCRIPTION: 产品描述

Model VMF-TA and VMM-TA8 is a high sensitivity Gamma Monitoring system for determining possible radiation contamination in containers or vehicles on a non-pause basis.

型号 VMF-TA 和 VMM-TA8 为高灵敏 $\gamma$ 监测系统, 在集装箱或车辆通过时检测可能存在的辐射污染物

The electronic control/alarm console plus two rugged weather proof detectors each with Plastic Scintillators  $792 \text{ in}^3$  detector.

电子控制/报警加两主机个坚固的防雨探测器, 每个带体积为  $792 \text{ in}^3$  塑料闪烁体探头。

TA

TECHNICAL ASSOCIATES

7051 ETON AVENUE \* CANOGA PARK, CA 91303 TELEPHONE (818) 883-7043 \* FAX(818) 883-6103

tagold@nwc.net www.tech-associates.com

# INSTALLED VEHICLE TRANSIT MONITOR

## 安装型车辆运输监视器

Model # VMF-TA - Model # VMF-TB - Model # VMM-TA8

Rate of change electronics with audio and visual alarms. Operates from 110/220 AC power main; optional battery back-up is available.

变化率电子学，带声光报警。AC 电源 110/220，可选备用电池

Operation for rugged outdoor use as well as indoors. Since the operation of this instrument is based on rate of change in radiation, it will reliably pick up contamination as it passes near the monitor.

室内使用或室外环境耐用，由于此仪器操作基于辐射变化率，所以当辐射物靠近监测器时将被可靠检出。

Model VMF-TB achieves greater sensitivity by stop and count approach. This system can be installed at entrance and/or exit gates, at weight stations or check points, or anywhere that cars, trucks, rail cars or pedestrians will pass by; preferably at reduced speeds for more accurate readings. Background is continually updated and subtracted thus giving net vehicle reading.

型号 VMF-TB 对于停靠并计数方式检出灵敏度更高，此系统可以被安装在出入口，计量站或监测点，或任何车辆、行人将通过的地方。要得到更精确的读数最好减速通过，本底持续更新扣除，以便给出净读数。

### SPECIFICATIONS: 规格

#### •Detectors: 探头

(Model- VMM-TA8) 4 ea. 12" x 1.5" x 44" –

(型号 VMM-TA8) 4 个，12" x 1.5" x 44"

(Model- VMF-TA & TB) 2 ea. 12" x 1.5" x 44" premium Plastic Scintillators.

(型号 VMF-TA & TB) 2 个，12" x 1.5" x 44"高级塑料闪烁体

Sensitive Volume: 792 in<sup>3</sup> per detector.\*

敏感体积：每个探头 792 in<sup>3</sup>

•Range: 1 μR/hr to 1 mR/hr. 量程：1 μR/hr 到 1 mR/hr.

•Power Requirements: Operates on 110/220 Volts AC, 50/60 Hz.

电源要求：AC 电源，110/220 v，50/60Hz

•Power Connection: Conduit or cable 6 ft. cable furnished. Three Prong grounded connector.

电源连接：包括 6 英尺长缆线，3 个叉接地连接器

•High Level Alarm: Flashing red light and intermittent 2900 Hz tone. (90 dB)

高水平报警：闪烁红灯和间歇 2900 Hz 报警音

#### •Alarm Set: 报警设定

VMF-TA and VMM-TA8 internal factory set at .007 mR/hr rise per second. May be reset by user.

VMF-TA 和 VMM-TA8 工厂内部设定每秒上升.007 mR/hr，用户可自设定

VMF-TB internal factory set at 10% above ambient background. May be reset by user.

**TA**

**TECHNICAL ASSOCIATES**

7051 ETON AVENUE \* CANOGA PARK, CA 91303 TELEPHONE (818) 883-7043 \* FAX(818) 883-6103

tagold@nwc.net www.tech-associates.com

## INSTALLED VEHICLE TRANSIT MONITOR

### 安装型车辆运输监视器

Model # VMF-TA -Model # VMF-TB - Model # VMM-TA8

VMF-TB 内部工厂设定周围本底以上 10%报警，用户可自设定

•Housing: Weather-tight NEMA rated tough metal housing; water, moisture, and dust tight.

外壳：坚固的，符合标准 NEMA 的防雨金属外壳，防水、防潮、防尘。

•Alarm Indicators: Ready - OK- High Alarm.

报警指示：准备-运行-高报警

•Count Time: 1 to 20 seconds (VMF-TB only).

计数时间：1-20 秒（仅限 VMF-TB）

•Energy Range:能量范围

Gamma: 80 KeV to 6 MeV.伽马射线 80 KeV- 6 MeV

Beta: above 1 MeV, includes P32, Sr90, & N16.贝塔射线 1 MeV 以上，包括 P32, Sr90, & N16

•Communications: Built-in serial port and Ethernet Node.

通信：内置端口和以太网网点

•Dimensions:尺寸

Control Box: 16" x 20" x 10" typical plus alarm Beacon.

控制箱：16" x 20" x 10"，加报警灯

Detectors 54" H x 15.5" W x 7" D.

监测器：54" 高 x 15.5" 宽 x 7" 深

•Shipping Weight: 410 lbs. (for 2 detector units.) 850 lbs for (4 detector units)

装船重量：410 磅（两台探测器）850 磅（4 台探测器）

### OPTIONAL ACCESSORIES:可选配件

•Check Source: RAU-BGX, uranium source; license exempt.

检测源：RAU-BGX，铀源，免许可

•Additional Relays: 5A SPDT to operate other circuits.

附加继电器：5A SPDT，以操作其它电路

•Additional Remote Alarm: RAL-3W flasher, siren.

附加遥控报警：RAL-3W 闪光器，警报器

•\*Options:可选

Hard Copy Printer.硬拷贝打印机

7-day Battery Back-up.7 天备用电池

Additional detectors.额外探头

**TA**

**TECHNICAL ASSOCIATES**

7051 ETON AVENUE \* CANOGA PARK, CA 91303 TELEPHONE (818) 883-7043 \* FAX(818) 883-6103

tagold@nwc.net www.tech-associates.com

## INSTALLED VEHICLE TRANSIT MONITOR

安装型车辆运输监视器

Model # VMF-TA - Model # VMF-TB - Model # VMM-TA8

Alternate detectors other size plastic scintillators, NaI(Tl) Scintillators, or BGO crystal. Specific detectors eg for plutonium or Neutron emitters or Beta emitters.

替代探头，其它尺寸塑料闪烁体，掺铊碘化钠闪烁晶体或锗酸铋晶体，检测钚、中子和贝塔辐射物的专用探头。

Photo cell vehicle sensors(s) to initiate count or to measure vehicle speed.

光电传感器以启动计数或测量车速

Cables to fit users needs.

用户需要的缆线

Wire-less operation.

无线操作

VMF-L/O uses the same detectors as the other VMF models, but has simplified LAM-10L "Alarming Ratemeter" electronics, Instead of "Rate of Charge" electronics.

VMF-L/O 和其它 VMF 型号使用同样探头，但用简化了的 LAM-10L“报警率表”电子学，替代“变动率”电子学

**TA**

**TECHNICAL ASSOCIATES**

7051 ETON AVENUE \* CANOGA PARK, CA 91303 TELEPHONE (818) 883-7043 \* FAX(818) 883-6103

tagold@nwc.net www.tech-associates.com