

PORTABLE VEHICLE TRANSIT MONITOR

Model # PVM-TA
Model # PVM-TB
Model # PVM-L/O

FEATURES:

- COMPLETELY PORTABLE
- OPERATES ON RECHARGEABLE BATTERIES or AC
- CAN ALARM AT $7 \mu\text{R/hr}$ RISE WITHIN 1 SECOND (TA)
- SEES AND CAN ALARM AT $1 \mu\text{R/hr}$ ABOVE BACKGROUND (TB)
- COMPLETELY WEATHER PROOF
- HIGH SENSITIVITY DETECTORS (PLASTIC SCINTILLATORS 792 in^3 EACH)
- DYNAMIC BACKGROUND SUBTRACT
- FAST RATE OF CHANGE DESIGN
- CONTINUOUS OPERATION: "SET AND FORGET"



DESCRIPTION: Portable control / alarm module plus two portable weather proof detectors each with Plastic Scintillators $792 \text{ in}^3/\text{detector}$. Rate of change electronics with audio and visual alarms. Operates on built-in rechargeable batteries or 110/220 AC. Operation for rugged outdoor use as well as indoors. Model **PVM-TA** is a high sensitivity Gamma Monitoring system for determining possible radiation contamination in containers or vehicles on a non-pause basis. 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. Model **PVM-TB** achieves greater sensitivity by stop and count approach. This system can be set-up at the **road side** or in a **parking lot**. It can be mounted to a fence post or at a **loading dock** or at a **roadway station**. Background is continually updated and subtracted thus giving net vehicle reading.

TA **TECHNICAL ASSOCIATES**
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\$Revision: 1.1 \$

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SPECIFICATIONS:

Detectors:	2 ea. 12" x 1.5" x 44" premium Plastic Scintillators. Area: 792 in ³ per detector.*
Range:	1 μ R/hr to 1 mR/hr.
Power Requirements:	Operates on a built in rechargeable batteries or 110/220 AC.
Power Recharge Cable:	6 ft. cable furnished. Three Prong grounded connector.
High Level Alarm:	Flashing red light and intermittent 2900 Hz tone. (90 dB)
Alarm Set:	PVM-TA internal factory set at .007 mR/hr rise per second. May be reset by user. PVM-TB internal factory set at 10% above ambient background. May be reset by user. PVM-L/O internal factory set at 2 Times Background - user settable 0 to 150% full scale.
Cases:	Weather-tight NEMA rated tough, durable, lightweight. A "tongue-in-groove" continuous "O"-ring system makes the case water, moisture, and dust tight. Plus a low profile pressure release valve.
Alarm Indicators:	Ready - OK- High Alarm.
Count Time:	1 to 20 seconds (PVM-TB only).
Energy Range:	Gamma: 40 KeV to 6 MeV. Beta: above 1 MeV, includes P ³² , Sr ⁹⁰ Y ⁹⁰ , & N ¹⁶ .
Communications:	Built-in serial port and Ethernet Node.
Dimensions:	Control Box: 16" x 20" x 10" plus alarm Beacon. Detectors 54" H x 15.5" W x 7" D.
Shipping Weight:	240 lbs. (for 2 detector units.)
Carrying Weight:	Control Box: 18 lbs. Each Detector: 95 lbs. (Wheels & Handles are Built-in.)
OPTIONAL ACCESSORIES:	
Check Source:	RAU-BGX, uranium source; license exempt.
Additional Relay:	5A SPDT to operate other circuits.
Additional Remote Alarm:	RAL-3W flasher, siren.
*Options:	220 V, 50-60 Hz. 7-day Battery Back-up. Additional detectors. Alternate detectors other size plastic scintillators, NaI(Tl) Scintillators, or BGO crystal. Specific detectors eg for plutonium or Neutron emitters or Beta emitters. Photo cell vehicle sensors(s) to initiate count or to measure vehicle speed. Wire-less operation.



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PORTABILITY:

- Battery Operation.
- Each element is housed in weather proof high impact plastic case with sturdy carrying handles.
- Detectors are shipped with built in deployment stand (Model DS-4).
- Detectors have Built in wheels plus industrial grade, easy to use, reusable straps.



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

Available as a Fixed Unit (Model # **VMF-TA**), in a Metal Housing.

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