FEATURES:

- Gamma detection in water pipes
- Portable
- Quick installation with adjustable straps
- Installs anytime anywhere
- No penetration, no downtime
- Sensitivity independent of flow rate
- Battery operated
- Read out mR/hr or cps
- Real time alarm
- Rate and integrated exposure
- Local read-out
- Optional: USB port
- Works well with standard SCADA data systems

APPLICATION:

The PEMO-7LE is a sensitive and versatile version of the broadly used, TBM-emergency response radiation detector for water monitoring. It may be used to monitor water in pipes or effluent streams.

DESCRIPTION:

The PEMO-7LE Pipe Monitor assures accurate detection and quick alarm in case of waterborne radioactivity contamination flowing thru one or more pipes. A constant check with alarm and data record on optionally included computer.

It provides integrated exposure information and can provide hard copy via external printer.

It is a complete system but may be expanded per need.

The PEMO-7LE uses a standard NaI(Tl) Detector in T/A's unique Strap-On Style probe to continuously measure any Gamma emitting radioactive water or other liquids.

- The water stream is under constant surveillance via a scintillation detector.
- The unit is completely self-contained.

Optional:

- Data archive & retrieval.
- Software package for integration into facility computer & to link multiple detectors.
**SPECIFICATIONS:**

**Sensitivity:**
- With 1" x 1" crystal, without the optional shielding: detects 80μR/hr above background in 3 sec at 99% confidence level.
- Sensitivity and response time depend on user’s requirements and physical circumstances such as pipe diameter, wall thickness and ambient background radiation level and energy (KeV) of major nuclides of interest.
- **For Example:** A system with 3" x 3" NaI detector and 2" of lead shielding has a limit of sensitivity better than 1 X 10-7 µCi/cc of Co-60 in 18" diameter pipe with 0.02mR/h background in one hour measurement.

**DETECTOR:**
- **Model PGS-3** - 1" x 1" NaI (TI) crystal scintillation detector probe, sensitive to all Gamma above 100 KeV depending on wall thickness of the pipe.
- **Mount Plate:** Blue Aluminum
- **Mount Strap:** Orange Adjustable Strapping

**ELECTRONICS - Model TBM-3D Programmable Scaler with RS-232 /485.**
- **Alarm:** Settable: 2000 Hz beeper, red LED.
- **Response Time:** Settable 0.1 to 100 seconds.
- **Readout:** 6 digit LCD for each detector showing: rate and total.
- **Power:** 6 AA cells. **OPTIONAL** AC adapter
  - 110 VAC to 240 VAC Input 9V DC Output, 0.6 amps
- **Flow Rate:** Measurement is independent of flowrate.
- **Case:** Sturdy, gasket lined aluminum case.
- **Cable:** 36" BNC to BNC Cable
- **BNC Adapter:** Right Angle
- **Serial Cable:** 16 feet Rj-11 to DB-9 (F)
- **OPTIONAL:** USB Adapter Model TU-S9

**WEIGHT & DIMENSIONS**
- **Dimensions Electronics:** 3"W x 4"H x 5.3"
- **Dimensions Detector:** 1.5" dia x 8" long.
- **Detector Assembly Weight:** 4 lbs for unshielded system.
- **Shipping Weight:** 8 lbs. (1 detector system)

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**OPTIONAL:**
- **Smart Switch:** B+B Electronics 4 Port 232-MSS2
- **On-site:** Onsite set-up with users SCADA System
- **PGS-3L:** 2" x 2" Na(Tl) Crystal probe
- **Shielding:** 0.25" to 3" low- activity-lead around detector.
- **Power:** AC adapter
- **Data:** Data Archive & Retrieval

*Call factory for more options*