## The PM-11 detector

The PM-11 is a scintillation probe for detection of gamma radiation. The combination of the RAM DA 2000 monitor and the PM-11 probe, permits highly efficient surface contamination detection.

A low voltage interface connects the RAM DA 2000 monitor with the probe. The PM-11 contains a highly efficient, hermetically sealed, NaI(TI) scintillator, 2" diameter and 2" thick, coupled to a 2" photomultiplier tube. This is encased in a rugged, splash proof housing for protection against shock, vibration and humidity. The probe also contains a high voltage power supply, single channel analyzer (SCA), pulse shaper, GM saturation indicator, detector identifier and malfunction detection circuitry. This configuration minimizes noise, improving sensitivity and stability.



## **Specifications**

Radiation Detected: Gamma above 50 keV

Scintillator: Nal(Tl) 2" diameter, 2" thick. Window of 1 mm. (0.04") aluminum

**Energy Calibration:** Optional factory calibrated single channel analyzer (SCA) within

the energy range

Count Rate Range: 0 - 50,000cps

Output Signals: TTL pulses.

Detector status: ID, OK, malfunction, overflow

**Temperature Range:** Operation: -10°C to +50°C (15°F - 122°F)

Storage: -20°C to +60°C (-5°F - 140°F)

**Humidity Range:** 40% to 95% RH (non condensing)

**Dimensions:** 340mm (13.4") length, 70mm (2.75") width

**Weight:** 1.75kg (3.9lbs)

Casing: Aluminum, splash proof



## **Surface Sensitivity (in contact)**

Isotope	Sensitivity cpm/Bq/cm <sup>2</sup>	MDL Bq/cm <sup>2</sup>
<sup>51</sup> Cr	27	140
125	25	150
131	320	12
<sup>99m</sup> Tc	315	12
<sup>32</sup> P	17	220

 $<sup>^{\</sup>star}$  Minimum detectable level calculations are based on background reading of 3600 cpm The confidence level is 99%

## **Ordering Information**

Model PM-11 #3-0011

Note: Specifications subject to change without notice.

ROTEM INDUSTRIES reserves the right to change specifications without advance notice



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