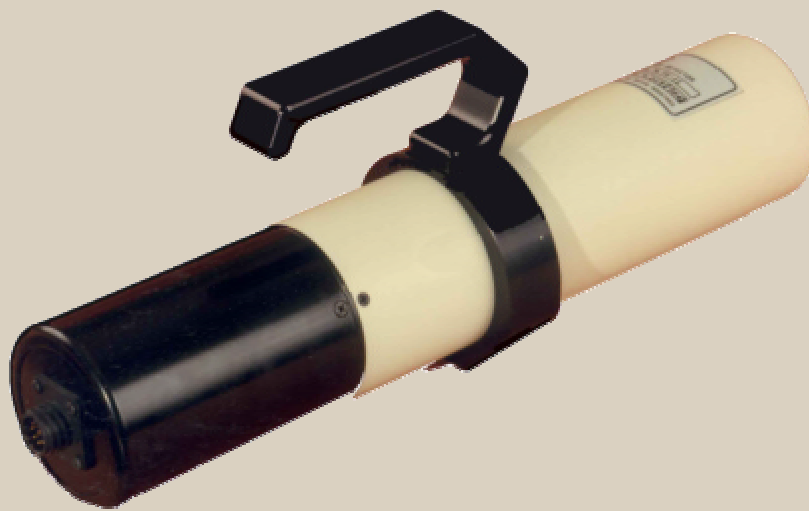


# The PM-11 detector

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(Tl) 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

<b>Radiation Detected:</b>	Gamma above 50 keV
<b>Scintillator:</b>	NaI(Tl) 2" diameter, 2" thick. Window of 1 mm. (0.04") aluminum
<b>Energy Calibration:</b>	Optional factory calibrated single channel analyzer (SCA) within the energy range
<b>Count Rate Range:</b>	0 - 50,000cps
<b>Output Signals:</b>	TTL pulses. Detector status: ID, OK, malfunction, overflow
<b>Temperature Range:</b>	Operation: -10°C to +50°C (15°F - 122°F) Storage: -20°C to +60°C (-5°F - 140°F)
<b>Humidity Range:</b>	40% to 95% RH (non condensing)
<b>Dimensions:</b>	340mm (13.4") length, 70mm (2.75") width
<b>Weight:</b>	1.75kg (3.9lbs)
<b>Casing:</b>	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
<sup>125</sup> I	25	150
<sup>131</sup> I	320	12
<sup>99m</sup> Tc	315	12
<sup>32</sup> P	17	220

\* 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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