

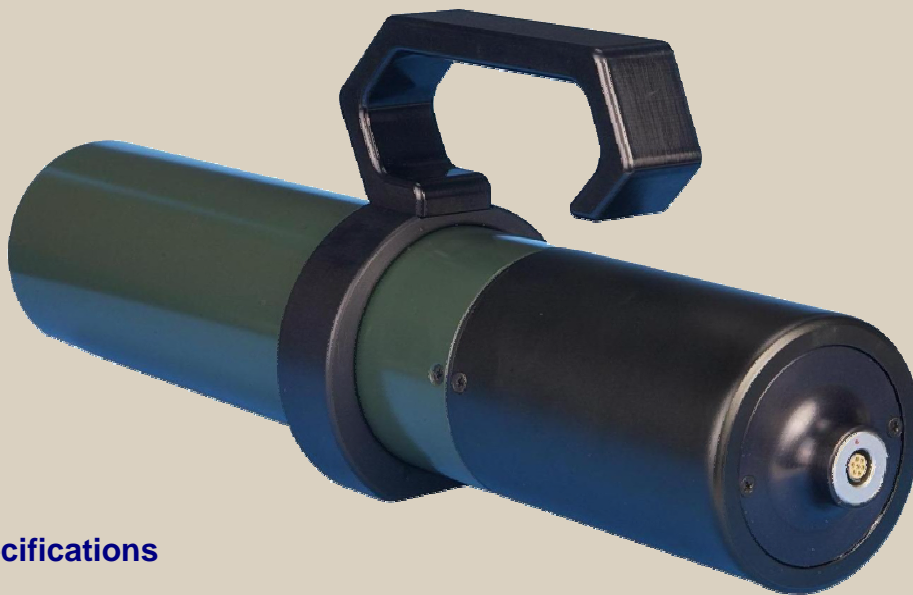
## RP-11 detector

The RP-11 is a scintillation probe for detection of gamma radiation. The RP-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 detector contains a microprocessor circuit, high voltage power supply, single channel analyzer (SCA), pulse shaper, RS-232 or RS-485 communication port, DC to DC converter, and TTL output. This configuration minimizes noise, improving sensitivity and stability.

The RP-11 is compatible to the RAM R-200 or as a stand alone unit with two, user selectable, communication protocols.

Calibration and internal parameters are set via software via the RS-232 port.



### Specifications

Radiation Detected:	Gamma above 50 keV
Scintillator:	NaI(Tl) 2" diameter, 2" thick. Window of 1 mm. (0.04") Al.
Sensitivity: <sup>137</sup> Cs:	20,000 cps/mR/h
Energy Calibration:	Software calibrated single channel analyzer (SCA).
Count Rate Range:	0 to 50,000cps
Output Signals:	RS-232 or RS- 485 and TTL pulses.
Temperature Range:	Operation: -30°C to +60°C (-22°F to +140°F) Storage: -30°C to +70°C (-22°F to +158°F)
Humidity Range:	10% to 95% RH (non condensing)
Dimensions:	340mm (13.4") length, 70mm (2.75") Diam.
Weight:	1.75kg (3.9lbs)
Casing:	Aluminum, splash proof, IP-65
Max. Cable Length:	TTL pulse - 100 m, RS-232 - 12 m, RS-485 - 1.2 km



## 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 RP-11

#4-0037-50

ROTEM INDUSTRIES reserves the right to change specifications without advance notice

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