ROTEM INDUSTRIES LTD.

GM-10

The GM-10 detector is designed for efficient surface monitoring of alpha, beta and gamma radiation contamination on skin, clothing, shoes, laboratory bench tops, floors, equipment etc. It is an ideal detector for maintaining the highest safety standards in laboratory environments, nuclear medicine, molecular biology, radiochemistry, transport of nuclear materials and storage facilities.

A low voltage interface connects the RAM DA 2000 monitor with the probe. The GM-10 uses a pancak thin mica window. This is encased in a rugged, splash proof housing for protection against shock, vib The probe also contains a high voltage power supply, pulse shaper, GM saturation indicator, detector malfunction detection circuitry. This configuration minimizes noise, improving sensitivity and stability.

Specifications

GM Type: Pancake LND 73118 or equivalent

Window: Mica 1.5 - 2.0 mg/cm^2 protected by a fine stainless steel wire mesh

Sensitivity (^{137}Cs): Approximately 350cpm/µSv/hr (3500cpm/mR/hr)

Accuracy: ±15% of reading

Count Rate Range: 0 - 42kcps

Output Signals: TTL pulses.
Detector status: ID, OK, malfunction, GM saturation

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: 260mm (10.2") length, 70mm (2.8") width, 75mm (2.9") height

Weight: 370g (0.8lbs)

Casing: Aluminum, splash proof

Performance (surface sensitivity - in contact) Beta Emitting Isotopes

Isotope	Emax (keV)	2p Effic (%)	Sensitivity cpm/Bq
^{14}C	156	3	15
^{35}S	167	8	40
^{147}Pm	224	15	75
	290	20	100

^{99}Tc			
$^{90}Sr + ^{90}Y$	580 + 2280	50	500
^{67}GA	900	48	235
^{123}I	1000	55	280
^{36}Cl	714	45	210
^{210}Pb	1160	50	250
^{32}P	1710	70	330
^{51}CR	325	0.2	1
^{99m}Tc	140	5.3	25
^{125}I	35	0.5	2.4
^{131}I	610	40	190
^{230}Th	4600	14	65
^{241}Am	5400	14	65

*MDL - Minimum detectable level calculations are based on background readings of 1 cps and a confi

Ordering Information

GM-10 # 4-0015-01

Option:

Set of 4 Collimators #A-0050

Note: Specifications subject to change without notice.