



POLIMASTER[®]



Innovating Radiation Detection Technologies Since 1992

PERSONAL RADIATION DETECTOR PM1703GN GAMMA-NEUTRON PAGER



Highly efficient "pager type" personal radiation detectors.

First introduced in the United States in 2002 and quickly became the most widely used models across US law enforcement agencies.

Recommended for use by Law Enforcement agencies, Homeland Security, Customs and Border Patrol to prevent proliferation of the radiological and nuclear materials and weapons.

The PM1703M/PM1703GN are capable to detect even traces of radioactive and nuclear materials, including weapon grade (nuclear) materials. In addition PM1703GN is the first in the world Personal Radiation Detector which combines independent gamma and neutron channels.

The PM1703M/PM1703GN models are designed as extremely effective instruments to prevent illicit trafficking of radioactive and/or nuclear materials.



ALARM

LOCATION

MEASUREMENT

Features

- Easy-to-use, two-buttons operation
- Does not require any special knowledge or training
- Two independent scintillation detectors of CsI(Tl) and LiI(Eu) (for PM1703GN)
- Visual, audio and vibration alarms
- Non-volatile memory
- Shockproof hermetic case
- Low EMI interference from portable radio and cell phones

Applications

- First responders
- Customs and Border Patrol
- Police
- Emergency response teams
- Law enforcement
- HazMat teams
- Security guards

IRDA



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**PERSONAL
RADIATION DETECTOR
PM1703GN
GAMMA-NEUTRON PAGER**

SPECIFICATIONS

Detector - gamma - neutron	CsI (TI) LiI (Eu)
Sensitivity - gamma for Cs-137, no less - neutron for Pu- α -Be, no less for thermal neutrons, no less	1 cps/(μR/h) (100 cps/(μSv/h)) 0.05 counts cm²/ n 1.3 counts cm²/ n
Energy range - for gamma - for neutron	0.033 - 3 MeV 0.025 eV - 14 Mev
Time of measurement	0.25 s
Range of n coefficient (the number of mean square deviations of the current background) Step	from 1 to 9.9 0.1
Indication range of dose equivalent rate (DER)	1 - 7 000μR/h (0.01 - 70 μSv/h)
Accuracy of DER registration to Cs-137 in collimated radiation in the range from 10 up to 4 000 μ R/h (from 0,1 up to 40 μ Sv/h)	\pm 30 %
Count time: - in background mode - in the search mode	60 s 2 s
PM1703GN meets requirements of ITRAP Program: detection with no less than 99% probability within 3 s at background level of 20 μ R/h (0,2 μ Sv/h) and false alarm rate no more than 1 per 12 hours for Cs-137, Am-241, Co-60, with the dose rate	100 μR/h (1 μSv/h)
Additional functions	PC communication mode
Drop test on concrete floor	2.3' (0.7 m)
Power requirements	one 1.5V AA size battery
Battery lifetime	1 000 h
Battery discharge warning	indication on LCD
Operating conditions: - temperature range - relative humidity (at 95 °F (35 °C))	- 22 ... +122 °F (- 30 ... +50 °C) up to 98%
Case protection	IP65
Dimensions	3.43" x 2.83" x 1.38" (87 x 72 x 35 mm)
Weight (with battery), no more than	7.05 oz (200 g)

Design and specifications of the device can be changed without further notice.

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