



POLIMASTER®



Innovating Radiation Detection Technologies Since 1992

COMBINED GAMMA DOSIMETER AND CHEMICAL AGENT DETECTOR PM2012MB



PM2012MB is a two-in-one instrument featuring chemical detector and gamma radiation detector in one unit.

The device is designed to detect chemical warfare agents and toxic compounds and differentiate between organophosphorus and arsenic-containing compounds, as well as continuously monitor radiation background, measure gamma dose and dose rate and provide audible, visual alarms when preset thresholds are exceeded.



The PM2012MB is invaluable for first responders, police officers, military, and customs and border patrol services in the day-to-day monitoring of public safety as well as in special HazMat operations. It can be used as a personal detector, a monitor for surveying contaminated areas, or as a fixed-installed detector.

Features

- Detection and difference between organophosphorus (GA, GD, GB, VX, etc.) and organoarsenic (Lewisite, and Lewisite like) compounds
- Indication of chemical agent concentration levels
- Continuous monitoring of the radiation background
- Precise measurement of gamma dose and dose rate
- Recording and storage of up to 8600 history events in the instrument's non-volatile memory
- Transmit of all recorded data to a PC via USB and Bluetooth 4.0 for data processing and analysis
- Provision of audible, visual alarms when the preset alarm thresholds are exceeded.

The PM2012MB uses Ion Mobility Spectrometry principles to detect chemical vapour agents. Ion Mobility Spectrometry provides rapid response time at very low vapor concentrations while also ensuring high selectivity and accuracy to minimize the probability of the false positive alarms.

The PM2012MB requires very little training or maintenance and operates for more than 150 hours from one battery in normal environment.

**chemical
ALARM**

**radiation
ALARM**

LOCATION

MEASUREMENT



NATO Stock Number 6665-33-2087892

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TECHNICAL SPECIFICATIONS

Detectors: - Chemical detector - Radiation detector	IMS with ⁶³Ni source Geiger Mueller
Dose Rate measurement range	1.0 µSv/h - 10 Sv/h
Dose measurement range	1.0 µSv - 14.9 Sv
Energy range	0.06 - 3.0 MeV
Chemical detector response time: - organophosphorus compounds - arsenic-containing compounds	(5±1.5)10⁻⁵ mg/l for 10 s (3±0.9)10⁻⁴ mg/l for 15 s
Chemical agent concentration indication on analogue scale: - one segment - two segments - three segments	close to threshold level 75-99% threshold level reached/exceeded 100-124% threshold level highly exceeded 125% and up
Alarms	Audio, visual
Communication with PC (download/view data log, parameter settings)	USB, Bluetooth 4.0
Power requirements	one LR20/D battery 1.5V or vehicle power supply 9-36 VDC or 220VAC
Battery operation time	150 h
Ingress protection	IP55
Environmental: - operating temperature - relative humidity	-10 to +50 °C up to 98% at 35 °C
Dimensions, max.	66 x 47 x 195 mm
Weight, max	0.77 kg

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

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