



**POLIMASTER**



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**Innovating Radiation Detection Technologies Since 1992**

## **PORTABLE RADIATION DETECTOR**

# **PM1621M PM1621MA**

**PM1621M Portable Radiation Detector  
with dosage accumulation capability  
For First Responders, Law Enforcement, Security**

**LOW COST - HIGH EFFICIENCY**  
**unique features, high sensitivity, durability,  
reliability**

**PM1621M is designed to provide continuous measurement of:**

- personal dose equivalent rate of external gamma and X-ray radiation
- personal dose equivalent of external gamma and X-ray radiation
- time of dose accumulation

**PM1621M is also designed to search for radiation sources as regular Portable Radiation Detector with short response time corresponding to ANSI 42.33 Type 2**

### **Applications:**

PM1621M may be used independently or as part of system for everyday, efficient and emergency control of personnel and people at sites, production facilities and units, where there is potential or real risk of exposure to external X-ray and gamma



**ALARM**

**LOCATION**

**MEASUREMENT**

### **Features**

- Combines Personal Radiation Detector and Dosimeter functionality
- Easy to use, two-button operation
- Shows the user accumulated dose
- Four independent dose and dose rate alarm thresholds
- Allows searching for radiation sources
- Vibration /Audible /Light Alarms
- Wide energy and dose rate range
- **PC** communication by **IR** interface
- Storage of 1000 events history
- Shockproof hermetic case
- Light weight and small dimensions

**PM1621M** has a unique combination of radiation detection and dosage accumulation capability. It's a perfect low cost instrument for first responders giving its users opportunity to detect and evaluate radiation levels and determine exposure level from gamma radiation sources and X-ray sources and alarm in case preset thresholds for the dose or dose rate are exceeded.

**IRDA**



# PORTABLE RADIATION DETECTOR

## PM1621M/PM1621MA

### SPECIFICATIONS

Detector	Advanced Geiger-Muller tube
<b>Dose equivalent rate range (DER):</b> PM1621M PM1621MA	0.01 $\mu\text{Sv/h}$ - 0.2 Sv/h 0.01 $\mu\text{Sv/h}$ - 2 Sv/h
<b>Dose equivalent rate threshold range</b>	Two thresholds within all DER measurement range
<b>Dose equivalent range (DE)</b>	0.01 $\mu\text{Sv}$ - 9.99 Sv
<b>Dose equivalent threshold range</b>	Two thresholds within all DE measurement range
<b>Accuracy of DER measurement</b> in the range 10 mR/hr - 10 R/hr (H is the dose equivalent rate, mR/hr)	$\pm(15 + 0.000015/H + 0.0001H)\%$
<b>Accuracy of DE measurement</b> in the range 100 mR - 999 R	$\pm 15\%$
<b>Energy range</b>	10 keV - 20 MeV
<b>Energy response relative</b> to 0.662 MeV (Cs-137) within the full energy range	$\pm 30\%$
<b>Time of response at discontinuous variation of DER</b> (according to IEC 61526 and ANSI N42.33 Type2), no more than	4s - at increase
<b>Additional functions</b>	<ul style="list-style-type: none"> <li>- PC communication mode</li> <li>- Vibration alarm</li> <li>- Sound operations mode 85 dB(A) at 1 foot</li> <li>- Metal belt clip</li> </ul>
<b>Automatic data logging</b>	<b>1000-point data log</b> record intervals from 1 second
<b>Power supply</b>	one battery AA
<b>Battery lifetime</b>	12 months
<b>Battery discharge indication</b> (partial and critical)	indication on LCD
<b>Operating conditions:</b> <ul style="list-style-type: none"> <li>- temperature range</li> <li>- pressure</li> </ul>	- 40 ... + 60 °C 70 - 106.7 kPa
<b>Degree of protection provided by housing</b>	IP67
<b>Dimensions</b>	87 x 72 x 35 mm
<b>Weight</b> (with battery), no more than	150 g

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

