POLIMASTER

Innovating Radiation Detection Technologies Since 1992

X-RAY AND GAMMA RADIATION ELECTRONIC PERSONAL DOSIMETER

PM1621/PM1621A

The most efficient dosimeter available, unique features, high sensitivity, durability, reliability.
For Law Enforcement, Security, Scientists, Medical Professionals and other professionals exposed to radiation.

Due to unique characteristics,dosimeter capable to measure user's exposure levels when working with X-ray and to gamma radiation sources and record even minor fluctuations of natural background.

Dosimeter meets requirements of IEC 61526 standard.

The PM1621/PM1621A are designed to provide continuous measurementof:

- Personal dose equivalent rate of external photon radiation Hp(10)
- Personal dose equivalent of external photon radiation Hp(10)
- Time of dose accumulation.

ALARM

LOCATION

MEASUREMENT

IRDA

Applications

- Medical professionals
- Personal of nuclear facilities
- Radiological and isotope laboratories
- Emergency service
- Scientist
- Other professionals exposed to radiation

Versions

- PM1621- up to 0.2 Sv/h
- PM1621A - up to 2 Sv/h

Features

- Easy to use,two-button operation
- PC communication by IR interface
- Wide energy range 10 keV – 20 MeV
- Wide dose rate range - from least values of natural background up to 2 Sv/h
- Two independentdose and dose rate alarm thresholds
- Audible and visual alarms when thresholds are exceeded
- Storage of user PIN and 1000 readings of dose accumulation history (dose rate changes)
- LCD display, electroluminescent backlight
- Shockproof hermetic case
- Light weightand small dimensions

POLIMASTER®

Innovating Radiation Detection Technologies Since 1992

X-RAY AND GAMMA RADIATION ELECTRONIC PERSONAL DOSIMETER PM1621/PM1621A

SPECIFICATIONS

Detector	**Geiger-Muller tube**
Dose equivalent rate (DER) range Hp(10) **PM1621** **PM1621A**	 **0.01 µSv/h - 0.2 Sv/h** **0.01 µSv/h - 2 Sv/h**
Dose rate and dose threshold range	**within all measurement range**
Dose equivalent (DE) range Hp(10)	**0.01 µSv - 9.99 Sv**
Accuracy of DER measurement in the range: - 0.1 µSv/h - 0.1 Sv/h for PM1621 - 0.1 µSv/h - 1 Sv/h for PM1621A H is the dose equivalent rate, µSv/h	 **±(15 + 0.0015/H + 0.01H)%**
Accuracy of DE measurement in the range 1 µSv- 9.99 Sv	 **±15%**
Energy range	**10 keV - 20 MeV**
Energy response relative to 0.662 MeV (Cs-137) within the full energy range	 **±30%**
Response time at discontinuous variation of DER (according to IEC 61526), no more than	**5s - at increase** **10s - at decrease**
Coefficient of variation	**< 15 %**
Survive after momentary influence of maximum permissible gamma radiation: PM1621 **PM1621A**	 **1 Sv/h** **10 Sv/h**
Additional functions	**PC communication mode**
Drop test on concrete floor	**0.7 m**
Power supply	**One AA battery**
Battery lifetime	**12 months**
Battery discharge indication (partial and critical)	**indication on LCD**
Operating conditions: - temperature range - LCD indication - relative humidity (at 35°C) - pressure	 **- 40 ... + 60 °C** **- 20 ... + 60 °C** **up to 98%** **84 - 106.7 kPa**
Protection degree of case	**IP67**
Dimensions	**87 x 72 x 35 mm**
Weight (with battery), no more than	**150 g**

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

CE ISO 9001

POLIMASTER,112, M. Bogdanovich st., Minsk, 220040, Republic Belarus, phone: (375 17)217 70 80, fax: (375 17)217 70 81