



Innovating Radiation Detection Technologies Since 1992

WRIST GAMMA DOSIMETER PERSONAL COMPACT DOSIMETER

PM1603A/PM1603B PM1604A/PM1604B



Designed to work in extreme conditions.

Perfect as universal Homeland Security radiation control solution.

For special forces, emergency services, miners and other professional exposed to radiation.

Dosimeters have respectively wide range of dose rate and dose measurements from background to 10 Sv/h. IR communication channel with PC allows transmission of individual dosimeter code, dose accumulation history and/or dose rate with time stamps using the IRDA communication protocol.

This allows using dosimeter as a component of computer system for manpower dose accounting.



Dosimeters provide:

PM1603A/B - measurement of ambient dose equivalent $H^*(10)$ and ambient dose equivalent rate $\dot{H}^*(10)$ of gamma radiation.

PM1604A/B - measurement of personal dose equivalent $H_p(10)$ and personal dose equivalent rate $\dot{H}_p(10)$ of gamma radiation.

Application

- Customs and border patrol
- Police and fire rescue
- Emergency service
- Medical professionals
- Personal of nuclear facilities
- Radiological and isotope laboratories
- Mining

Versions

- **PM1603A** - for wrist, up to 6.5 Sv/h
- **PM1603B** - for wrist, up to 13 Sv/h
- **PM1604A** - for breast pocket, up to 6.5 Sv/h
- **PM1604B** - for breast pocket, up to 13 Sv/h

ALARM

LOCATION

MEASUREMENT

Features

- Stable to dose up to 300 Sv
- For wrist and breast pocket
- Rugged hermetic case
- Display of current time and date
- Lightweight and small dimensions
- PC communication
- LCD display, electroluminescent backlight
- Audible and visual alarm
- Non-volatile memory



IRDA



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PM1603A/PM1603B PM1604A/PM1604B

SPECIFICATIONS

Detector	Geiger-Muller tube
Dose equivalent rate (DER) range - PM1603A/PM1604A - PM1603B/PM1604B	0.01 μSv/h - 6.5 Sv/h 0.01 μSv/h - 13 Sv/h
Dose equivalent (DE) measurement range	1 μSv - 9.99 Sv
Range of dose accumulation time	1 - 9999 h
Dose rate and dose threshold range (two thresholds) Step	all operating range low order unit
Accuracy of DER measurement in the range: - 1 μ Sv/h - 5 Sv/h for PM1603A/PM1604A - 1 μ Sv/h - 10 Sv/h for PM1603B/PM1604B H is the dose equivalent rate, μSv/h	$\pm (15 + 0.02/H + 0.003H)\%$
Dose accuracy	$\pm 15\%$
Registered energy range - PM1603A/B - PM1604A/B	0.048 - 3 MeV 0.048 - 6 MeV
Energy response within the energy range 0.048 -3 MeV	$\pm 30\%$
Survive after momentary influence of maximum permissible gamma radiation within 5 min: - PM1603A/PM1604A - PM1603B/PM1604B	50 Sv/h 100 Sv/h
Additional functions	alarm clock, timer, stop watch, calendar
Calendar mode	day of the week, date, month, year
Adjustable timer periods range Stop watch periods range	1 s - 23 h 59 min 59 s 0,1 s - 23 h 59 min 59 s
Daily variation of watch at normal conditions	$\pm 0,5$ s/day
Power supply	one CR 2032 lithium battery
Battery lifetime	9 months
Battery discharge control	indication on LCD
Operating conditions: - temperature range - relative humidity (at 35°C) - pressure	-20 ...+70°C up to 98% 84 - 106.7 kPa
Protection degree of case	IP67
Water-resistant	1 m
Dimensions With a clip (for PM1604A/B)	50 x 56 x 19 mm 50 x 90 x 19 mm
Weight (with battery)	85 g

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

