



Meets the requirements of IEC 61526 standard

TY Y 33.2-22362867-010:2007

Branches of Use

- Army
- Emergency Services and Civil Defense

Purpose of Use

- Measurement of gamma and X-ray radiation individual dose equivalent rate (DER).
- Measurement of gamma and X-ray radiation individual dose equivalent (DE).
- Clock, alarm clock.

Application

The dosimeter may be used as an electronic direct reading device. It can be applied together with “PDC ECOMONITOR” software and as a stand-alone device.

Features

- IP54 ingress protection rating.
- Stand-alone use or use within automated system of personal dosimetry control.
- Storage of dose accumulation history in the nonvolatile memory with real time reference.
- Transfer of dose accumulation history through the infrared port to the computer.
- Blocking the mode of power supply switch off until the data reading procedure finished.
- Gamma radiation DER and DE threshold levels programming with the help of the computer or manually with control keys.
- Blocking certain indication modes in response to the computer command.

- Light and audio alarms when programmed threshold levels exceeded on DER and DE of gamma radiation.
- Display automatic switch off if current gamma background is lower than the preset threshold level with instant switching on at:
 - pressing any control key;
 - gamma background increase above the preset threshold level;
 - alarm clock ringing.
- Periodic self-testing of batteries and detector.
- Energy-compensated Geiger-Muller counter.

Specifications

Measurement ranges and main relative errors:

- gamma and X-ray radiation individual dose equivalent rate $H_P(10)$	$\mu\text{Sv/h}$	0.1...1 000 000; (1...10 $\mu\text{Sv/h}$; $\pm 20\%$; 10 $\mu\text{Sv/h}$...1 Sv/h; $\pm 10\%$)
- gamma and X-ray radiation individual dose equivalent $H_P(10)$	mSv	0.001 ... 9 999 ; $\pm 15\%$
Energy range of registered gamma and X-ray radiation and energy dependence	MeV	0.05...6.0; (0.05...1.25; $\pm 25\%$)
Recording resolution of dose accumulation history in the nonvolatile memory	minutes	5...255
Time of data storage in the nonvolatile memory	years	not less than 10
Data exchange rate through the infrared port	bit/s	38 400
Positive data exchange distance between the dosimeter and the infrared port adapter	m	not more than 0.3
Lithium battery (CR2450) life*	hours	2 200
Operating temperature range	$^{\circ}\text{C}$	-20...+50
Weight	kg	0.14
Dimensions	mm	56 x 96 x 16

* under gamma background not more than 0.3 $\mu\text{Sv/h}$, switched off alarm system

Delivery Kit

- DKG-21M dosimeter;
- special key for battery compartment;
- operating manual;
- packing box.