DKG-21M

NEW

Branches of Use

- Army
- Ministry of Emergencies, Civil Defense

Purpose of Use

- Measurement of individual equivalent dose rate (EDR) of gamma radiation.
- Measurement of individual equivalent dose (ED) of gamma radiation.
- Clock, alarm clock.

Application

The dosimeter may be used as an electronic direct reading device for Army, at nuclear power engineering sites, physics laboratories, health care organizations, industrial enterprises and companies that deal with gamma radiation sources. It can be applied together with “PDC ECOMONITOR” software (see p.59) for programming, reading, and processing of the dosimeter measurement results.

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 to the computer through the infrared port.
- Blocking the mode of power supply switch off until the data reading procedure finished.
- Gamma radiation EDR and ED threshold levels programming with the help of the computer or manually with control keys.
- Blocking certain indication modes in response to the computer command.

DKG-21M | Personal Gamma Radiation Dosimeter

- Light and audio alarm of exceeded programmed threshold level of gamma radiation EDR and ED.
- 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:		
- Personal gamma radiation equivalent dose rate $H_P(10)$	μSv/h	0.1...1 000 000 ; ±15%
- Personal gamma radiation equivalent dose $H_P(10)$	mSv	0.001 ... 9 999 ; ±15%
- Energy range of detected gamma and X-ray radiation and energy dependence	MeV	0.05...6.0; (0.05...1.25; ±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	°C	-10...+50
- Weight	kg	0.14
- Dimensions	mm	56x96x16

Delivery Kit

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