Ecotest CARD **(Personal gamma radiation dosimeter DKG-21)**

Purpose of use

- Measurement of personal gamma and X-ray radiation equivalent dose rate (EDR).
- Measurement of personal gamma and X-ray radiation equivalent dose (ED).
- Clock, alarm clock.

Application

- The dosimeter may be used as an electronic direct reading device at atomic 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 for programming, reading, and processing of the dosimeter measurement results.

Features

- Stand-alone use or use within the automated system of personal dosimetry control.
- Dose accumulation history storage in the non volatile memory with real time reference.
- Dose accumulation history transfer to the computer through infrared port.
- Locking power down mode of the dosimeter until all accumulated data read.
- Gamma radiation EDR and ED threshold levels programming with the help of the computer or manually with control keys.
- Blocking certain indication modes with the help of the computer command.
- Light and audio alarm of exceeded programmed threshold level of gamma radiation EDR and ED.
- Digital 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 (batteries, detector).
- Energy compensated Geiger-Muller counter.

Specifications

Measurement ranges and basic 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 non volatile memory	minutes	5…255
- Time of data storage in the non volatile memory	years	not less than 10
- Data exchange rate through 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	0,08
- Dimensions	mm	86x54x9

Delivery kit

- DKG-21 "EcotestCARD" dosimeter;
- operating manual;
- cardboard box;
- case with a clip;