

POSHUK (Search dosimeter-radiometer MKS-07)



Purpose of use

- Measurement of gamma and X-ray radiation ambient dose equivalent rate.
- Measurement of gamma and X-ray radiation ambient dose equivalent.
- Measurement of surface beta-particles flux density.
- Measurement of surface alpha-particles flux density with the help of the BDPA-07 detecting unit of alpha radiation (on demand).
- Measurement of thermal and fast neutrons flux density with the help of the BDPN-07 detecting unit of neutron radiation (on demand).

Features

- Geiger-Muller counters without return run of counting response.
- Analog indicator of radiation intensity.
- Up to 4096 measurement results recording in the non volatile memory with further transfer to the computer through infrared port.
- Review of the recorded measurement results on the digital display.
- "Precisely" channel with indicated average result on the digital display of the fixed measurement time of 1 to 99 minutes, and "start-stop" measurement mode.
- Detection of soft beta radiation.
- Programmable threshold levels of gamma radiation dose equivalent rate and beta-particles flux density.
- Audio signalling of detected gamma-quantums, beta-particles, and exceeded programmed threshold levels of dose equivalent rate or beta-particles flux density.
- Digital display backlight.
- Multilevel indication of battery discharge.

Specifications

Measurement ranges and basic relative errors:

- Gamma and X-ray radiation dose equivalent rate (¹³⁷ Cs)	0.1µSv/h ... 2.0Sv/h; ±15%
- Gamma and X-ray radiation dose equivalent (¹³⁷ Cs)	1.0µSv ... 9 999mSv; ±15%
- Beta-particles flux density (⁹⁰ Sr+ ⁹⁰ Y)	1/(cm ² ·min) 5...100 000; ±15%

Energy ranges of measurement and energy dependence:

- Gamma and X-ray radiation	MeV	0.05...3.0; ±25%
- Beta radiation	MeV	0.15...3.0;
Measurement time intervals	seconds	2...5
Storage battery (four nickel-cadmium AA size batteries) life	hours	not less than 100
Operating temperature range	°C	-25...+55

Weight and dimensions:

	Weight (kg)	Dimensions (mm)
- Control panel	0.5	154x86x35
- Gamma radiation detecting unit	0.6	214x80x36
- Beta radiation detecting unit	0.5	154x82x43
- Delivery kit in packing	4.2	445x255x85

Delivery kit

- control panel;
- gamma radiation detecting unit;
- beta radiation detecting unit;
- telescopic tube;
- connecting cable;
- technical description and operating manual;
- logbook;
- battery charger;
- packing bag of close and waterproof cloth used to carry the device on one's shoulder;
- exchange infrared port adapter and software (at the customer's request).