

## Dosimeter / radiometer DKS-96



Popular dosimeter / radiometer distinguished by its reliability and a wide choice of detectors suitable for all main applications of dosimetry and radiometry. As a result of modernization in 2008, the DKS-96 was equipped with a large graphic display, improved software and wide service functionality (see "features"). Two models of the DKS-96 control unit are available – UIK-05 and UIK-06.

### Norms, certificates, patents, licences

[RU №16369-08](#)

[KZ.02.03.02816-2009/16369-08](#)

### Purpose:

- measurement of dose and ambient equivalent dose-rate (hereafter dose and dose-rate)  $H^*(10)$  and  $H^*(10)$  of continuous and pulsed gamma and X-ray radiation;
- measurement of alpha and beta radiation flux density;
- measurement of dose  $H^*(10)$  and dose-rate  $H^*(10)$  of neutron radiation;
- measurement of gamma radiation flux density;
- search and localization of radioactive sources and contaminations;
- measurement of gamma radiation flux density and dose-rate in boreholes and liquid media;
- radiation survey of territories with fixing of geographical coordinates using GPS sensor;
- control unit can be used as a pulse counter.

### Features:

- automatic determination of detector type and selection of corresponding measurement modes;
- indication of several simultaneously measured quantities (for gamma and beta measurement channels of detector units BDKS-96c and BDZB-96b);
- indication of dynamic scale and signaling information attributable to the instrument's status and all measured quantities (excess of thresholds, presence of external interference, battery status, etc.);
- A lot of alarm threshold settings – for dose and dose-rate (lower, upper warning and upper thresholds), for alpha and beta contaminations (flux densities);
- fast monitoring mode using three preset thresholds;
- convenient keyboard with direct access buttons for display illumination and for control of thresholds of the audible alarm;
- automatic selection of low or high sensitivity measurement mode of the BDMG-96 detector unit;
- "Search" and "detection" modes of operation allow to perform surveys in a more effective way and to prevent errors of the operator;
- RS-232 interface for communication with personal computer;
- nonvolatile memory for 2000 measurement results (viewed on the display of the DKS-96 control unit or on the PC screen);
- measurement mode with background subtraction.

### Measurement modes

- measurements with user defined time interval;
- measurements with unlimited time and periodic update of the measurement result (until the statistical error drops down to 6%);
- dose measurement (for gamma and neutron radiation);
- automatic – measurements with user defined time interval (1÷60 min) and archiving the results into memory;
- pulse count feature (DKS-96 counts pulses from the probe on 10, 30, 100, 300, 1000, 3000 second intervals);

- "Detect" and "Locate" modes for survey probes;
- threshold mode for estimation of measured radiation intensity in comparison with one, two or three thresholds and indication of both the numeric value and a corresponding message ("Excess", "Normal", "Clean", "Clean!").

#### Basic complete set:

- UIK-05 (UIK-05-01) or UIK-06 control unit (at the customer's option);
- probes (at the customer's option);
- case;
- passport and operation manual;

#### Optional equipment and service

- cable for connection to a computer;
- software;
- charge adapter CA-02C;
- headphones;
- matching unit MU-96;
- lightproof casings for BDZA and BDZB probes;
- expanding pole 0.7; 1.6; 4 m;
- GPS sensor.

Request for Quote: Dosimeter-radiometer DKS-96 (A, AL, AM, AS, AD, B, B1, BB, BS, G, GB, GW, GH, GS, GT, GL, N) where desired probe types included into the complete set are designated as suffix, for example DKS-96-A-AL-GL (UIK-06) stands for DKS-96 with control unit UIK-06 and a set of 3 probes (2 for alpha radiation and 1 for gamma radiation)

#### Accessory

<a href="#">BDZA-96 probe (Dosimeter / radiometer DKS-96A)</a>	Standard 70 cm <sup>2</sup> probe for alpha radiation measurements
<a href="#">BDZA-96B probe (Dosimeter / radiometer DKS-96Ab)</a>	Large area probe for alpha radiation measurements. Recommended for contamination monitoring of hands.
<a href="#">BDZA-96M probe (Dosimeter / radiometer DKS-96Am)</a>	Small area probe for alpha radiation measurements
<a href="#">BDZA-96S probe (Dosimeter / radiometer DKS-96As)</a>	Medium area 30 cm <sup>2</sup> probe for alpha radiation measurements.
<a href="#">BDZA-96T probe (Dosimeter / radiometer DKS-96At)</a>	Probe intended for measurements of alpha contamination of non-easily-testable objects and in hard-to-reach places.
<a href="#">BDZB-96 probe (Dosimeter / radiometer DKS-96B)</a>	Standard probe for measurement of beta particles flux density and evaluation of gamma radiation dose rate.
<a href="#">BDZB-99 probe (Dosimeter / radiometer DKS-96B1)</a>	"Pancake" probe with gas discharge counter (mica window) for measurement of beta particles flux density and evaluation of gamma radiation dose rate.
<a href="#">BDZB-96b probe (Dosimeter / radiometer DKS-96Bb)</a>	Probe automatically compensates for gamma radiation contribution to the measurement results. Suitable for contamination monitoring of hands and cloth.
<a href="#">BDZB-96S probe (Dosimeter / radiometer DKS-96Bs)</a>	Probe for measurement of beta radiation with Beta-2 counter.
<a href="#">BDKS-96 probe (Dosimeter / radiometer DKS-96G)</a>	Probe for measurement of continuous and pulsed gamma and X-ray radiation. PMT dark current is compensated electronically, no mechanical shutter inside probe.
<a href="#">BDKS-96S probe (Dosimeter / radiometer DKS-96GB)</a>	Probe for measurement of gamma and beta radiation (accompanied by gamma background). Automatic compensation for gamma background during beta measurements.
<a href="#">BDMG-96 probe (Dosimeter / radiometer DKS-96M)</a>	Wide range probe for gamma radiation with automatic switch between scales for low and high dose rate values.
<a href="#">BDVG-96 probe (Dosimeter / radiometer DKS-96V)</a>	Probe with unbeaten (unsurpassed, the best) sensitivity to gamma radiation (in the Russian Federation).
<a href="#">BDPG-96 probe (Dosimeter / radiometer DKS-96P)</a>	Probe with high sensitivity for gamma radiation measurement.
<a href="#">BDPG-96M probe (Dosimeter / radiometer DKS-96Pm)</a>	Probe with sensitivity sufficient for survey applications. Suitable for detection of radiation sources in hard-to-reach places.
<a href="#">BDKG-96 probe (Dosimeter / radiometer</a>	Probe with stainless steel casing for geologic applications, well logging, inspection of concentration.

<a href="#">DKS-96K</a>	
Power supply:	
• with UIK-05	four C-size batteries
• with UIK-05-01	rechargeable battery
• with UIK-06	rechargeable battery
Continuous operation time	not less than 45 ÷ 75 hours (depending on probe type)
Operation temperature range	minus 20 ÷ +50°C
Warm-up time	no more than 1 min
Instability of readings during 10 hours of measurements	±10 %
Overall dimensions, weight:	
• control unit UIK-05, UIK-05-01	202×86×90 mm, 1.0 kg
• control unit UIK-06	165×78×48 mm, 0.3 kg