

PURPOSE

BDKS-96b is designed to be used as a part of dosimeter-radiometer MKS-08 (with measurement console UIK-05, UIK-05-01 or UIK-06).

It is allowed to measure the parameters of gamma and X-ray radiation, as well as the fields of pulsed photon radiation (including single pulses) in the process of dosimetric control of X-ray and flaw detection installations and apparatuses, charged particle accelerators, etc.

There is no mechanical shutter. The dark current of the photomultiplier is compensated electronically.



FEATURES

- wide measurement range;
- high sensitivity and wide energy range;
- operation in harsh weather conditions.

SPECIFICATIONS

Type of registered radiation	ADER, ADE x,γ
Energy range of registered X-ray and gamma-radiation	from 15 keV to 10 MeV
Measurement range of ambient dose equivalent rate H*(10) of registered X-ray and gamma-radiation	0,01 μSv/h - 10 Sv/h
Measurement range of ambient dose equivalent H*(10) of registered X-ray and gamma-radiation	0,1 μSv - 10 Sv
Limits of tolerable intrinsic relative error, %	± (15 + 2/Ax)
Energy dependence	± 25 %
Typical sensitivity, no less: <ul style="list-style-type: none"> • sensitive subchannel • rough subchannel 	8,0 s ⁻¹ ·μSv ⁻¹ ·h 4,0 s ⁻¹ ·μSv ⁻¹ ·h
Type of detector	Tissue equivalent scintillation detector
Active area of detector, mm ²	Ø 30 × 15
Continuous operation time, no less	≥24 h
Overall dimensions, mm	Ø 60 × 215
Weight, kg	1,0
<i>Note: where Ax – numerical value measured value</i>	

ENVIRONMENT

- operating temperature range: from minus 20 °C to +50°C;
- relative humidity up to 95% at +35°C;
- atmospheric pressure from 84 to 106,7 kPa;
- protection class – IP 67;
- housing easy to decontaminate

RELIABILITY AND GUARANTEES

- working resource before the complete overhaul is 10000 hours for 10 years of operation;
- overhaul period is 5000 hours upon condition of average amount of repairs for the service period;
- warranty period of operation is 18 months from the moment of putting into operation or if the guarantee period of storage is expired.
- guarantee period of storage is 6 months from the sale date