SMART RADIATION DETECTOR BDMG-96-RS

PURPOSE

This detector is intended for measurement of ambient dose equivalent rate H*(10) and ambient dose equivalent of gamma-radiation.
BDMG-96-RS is an external radiation detector of dosimeter-radiometer MKS-18 (use with one of measurement console UIK-09, UIK-10 or UIK-11) or can be applied as a part of an automated radiation monitoring system.

FEATURES

- a short measurement time and quick automated adaption to changing radiation conditions;
- an operation in a wide temperature range;
- a data exchange between radiation detector and measurement console from a set of MKS-18 is made via interface RS-485;
- an ability of connection to a personal computer for an operation with the special software which has been developed by SPE «TETRA» Ltd («Atlant-Monitor», «TETRA_Checker», «TETRA_Reporter» etc).

SPECIFICATIONS

Energy range of registered gamma particles	from 50 кеV to 3 MeV
Measurement range of ambient dose equivalent rate of gamma radiation	from 0,05 μSv/h to 10 Sv/h
Measurement range of ambient dose equivalent of gamma radiation	from 0,1 μSv to 10 Sv
Typical sensitivity, no less: - sensitive subchannel - rough subchannel	 4,0 s^{-1}· $μSv^{-1}$·h 4,0 s^{-1}· mSv^{-1}·h
Limits of tolerable intrinsic relative error, %	± (15 + 5/Ax)*
Type of detector	Counter Gamma-1-1 Counter СБМ-20
Warm-up time, no more	1 min
Overall dimensions	Ø 40 × 235 mm
Weight	0,3 kg
Note * for gamma radiation sources with radionuclide ^{137}Cs	

ENVIRONMENT

- operating temperature range: from minus 40 to +50°C;
- relative humidity up to 95% at +35°C;
- atmospheric pressure from 84 to 106,7 кPa;
- protection class – IP67;
- 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.

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