2. APPLICATION

2.1. The instrument is an individual dosimeter and radiometer designed for radiation monitoring of terrain, living accommodations and industrial promises and is used to measure the following values·

gamma-radiation field equivalent dose rate;

beta-radiation intensity from radionuclide-contaminated surfaces:

specific radioactivity of caesium-137 as well as to signal an excess of user-set threshold value of gamma-radiation equivalent dose rate by sounding an alarm.

2.2. Design of the Instrument permits connection of external detection units.

3. BASIC SPECIFICATIONS

3.1. Measurement range of field equivalent dose rate of gamma radiation, μSv/h 0.1 - 99.99, which corresponds to the exposure dose rate of gamma-radiation, μR/h 10 - 9999.

3.2. Measurement range of beta-radiation intensity from surface (for radionuclides strontium-90+ yttrium-90), $1/(s \cdot cm^2)$ 0.1 - 99.99, which corresponds to intensity $1/(min \cdot cm^2)$ 6-6000.

3.3. Measurement range of specific radioactivity of caesium-137, Bq/kg 2.10^3 - 2.10^6, which corresponds to specific radioactivity, Ci/kg $5.4 \cdot 10^{-8}$-$5.4 \cdot 10^{-5}$.

3.4. Registered radiation energy ranges, MeV:

beta-radiation 0.5 - 3;

gamma-radiation 0.06 - 1.25.

3.5. Value limits of admissible basic measurement error of field equivalent dose rate of gamma radiation, %:

within the range of from 0.1 to 1 μSv/h ±40;

within the ranges of from 1 to 10 μSv/h and from 10 to 99.99 μSv/h ±25.

3.6. Value limits of admissible basic measurement error of beta-radiation intensity from surface (for radionuclides strontium-90 + yttrium-90), %:

within the range of from 0.1 to 1 $1/(s \cdot cm^2)$ ±60;

within the ranges of from 1 to 10 and from 10 to 99.99 $1/(s.cm^2)$ ±40.

3.7. Value limits of admissible basic measurement error of caesium-137, %:

within the range of from $2 \cdot 10^3$ to $2 \cdot 10^4$ Bq/kg ±60;