Gamma dosimeter DKG-100D

Miniature dosimeter to assess radiation background level. The dosimeter based on CsI(Tl) scintillator detector.
It is a cooperative development of the Obninsk Institute for Nuclear Power Engineering, OINPE NRNU MEPhI, and SPC "Doza".
Versions in other colours, with company's logo or text are available upon request.

Features:

In 2017 SPC "Doza" and the Obninsk Institute for Nuclear Power Engineering, OINPE NRNU MEPhI, signed an Agreement on industrial partnership and cooperation. One of the articles of this Agreement is cooperative research and development, inter alia, development of tutorials and training materials for joint activity to address the challenges of designing measurement instruments and radiation monitoring systems for facilities of the nuclear industry, medical and special services. In 2019 "Gamma dosimeter DKG-100D based on detector with CsI(Tl) crystal and silicon photomultiplier" project was created. This dosimeter is a result of concerted efforts of a group of students - aspiring engineers - together with experienced specialists and designers of SPC "Doza".

Application:

It is designed to indicate ambient dose equivalent rate (ADER) for gamma and continuous X-ray (photon) radiation.

Technical Characteristics

Detector	scintillation with Si-PMT
Energy range of detected photon radiation	0.05 to 3.0 MeV
Indication range of ambient dose equivalent rate for photon radiation	0.1 μSv/h to 10 mSv/h
Basic error of measurement	±15 %.
Warm up time	not more than 5 s
Continuous operation time	not less than 36 h
Ambient air temperature	– 40 to +50°C