



# EcotestCARD

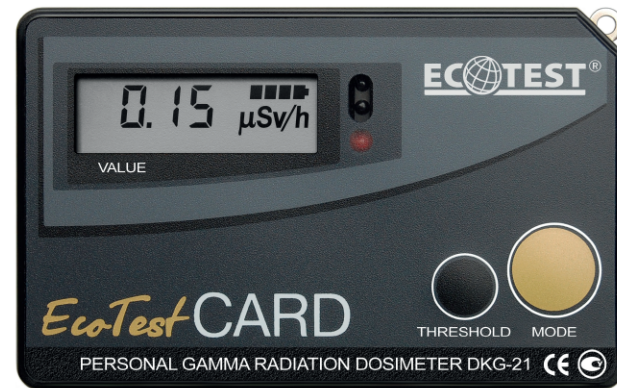
**Radiation monitoring badge**

**Complies with CE standards**

**Meets the requirements of IEC 61526 standard**

## FEATURES

- Storage of dose accumulation history in the non-volatile memory with real time reference
- Transfer of dose accumulation history through the infrared port to the computer
- Blocking the mode of power supply switch off until the data reading procedure finished
- Gamma and X-ray radiation DER and DE threshold levels programming with the help of the computer or manually with control keys
- Blocking certain indication modes in response to the computer command
- Light and audio alarms when programmed threshold levels exceeded on DER and DE of gamma and X-ray radiation
- Display automatic switch off if current gamma background is lower than the preset threshold level with instant switching on at:
  - pressing any control key
  - gamma background increase above the preset threshold level
  - alarm clock ringing
- Periodic self-testing of batteries and detector
- Energy-compensated Geiger-Muller counter
- Ingress protection rating IP31
- Clock, alarm clock
- Software allows to:
  - program parameters and operating modes
  - read dosimetric measurement results
  - review and print dosimetric information as reports
  - save and export read information as a report or text file for further processing by other text editors
  - import previously stored dosimetric information for processing and analysis



## DESCRIPTION

EcotestCARD is a direct reading personal dosimeter for personnel exposure monitoring.

This dosimeter badge can be used either independently or within the automated system of personal dosimetry control.

In 2011, the Ministry of Emergency Situations of Ukraine sent EcotestCARD dosimeters to Japan as humanitarian aid for recovery from the accident at the Fukushima NPP, where they gained a reputation of a reliable and precise product.

## PURPOSE OF USE

- Measurement of individual dose equivalent (DE) of gamma and X-ray radiation
- Measurement of individual dose equivalent rate (DER) of gamma and X-ray radiation

## SPECIFICATIONS

Measurement range of gamma radiation individual dose equivalent rate (DER)	1·10 <sup>-7</sup> ... 1 Sv/h
Main relative permissible error limit when measuring gamma radiation DER at <sup>137</sup> Cs calibration with a confidence probability of 0.95 - in the range from 1·10 <sup>-6</sup> Sv/h to 1·10 <sup>-5</sup> Sv/h (inclusive) - in the range from 1·10 <sup>-5</sup> Sv/h to 1 Sv/h	20 % 15 %
Measurement range of gamma radiation individual dose equivalent (DE)	1·10 <sup>-6</sup> ... 9.999 Sv
Main relative permissible error limit of gamma radiation DE measurement with confidence probability of 0.95	15 %
Energy range of detected gamma radiation	0.05 ... 6 MeV
Energy dependence when measuring gamma radiation DER and DE relative to 0.662 MeV energy ( <sup>137</sup> Cs) in the energy range from 0.05 to 1.25 MeV, not more	± 25 %
Complementary relative permissible error limit of photon-ionizing radiation DER and DE measurement result caused by ambient temperature deviation from 20 °C, in the temperature range from minus 20 to + 50 °C	5 % per each 10 °C of deviation from 20 °C
Battery life (under gamma background not more than 0.5 μSv/h, switched off alarm system and display)	800 hours
Operating supply voltage of the dosimeter from EEMB battery (LIR2450)	3.7 V
Operating temperature range	- 20 ... + 50 °C
Weight	0.08 kg
Dimensions	90 × 55 × 10 mm

## DELIVERY KIT

- personal gamma radiation dosimeter
- charger
- operating manual
- case with a clip
- package



## BRANCHES OF USE



RADIOLOGICAL LABORATORIES



RADIOACTIVE WASTE STORAGE SITES



MEDICINE



SANITARY DOSIMETRY AND ECOLOGY



NUCLEAR POWER INDUSTRY



EMERGENCY SERVICES AND CIVIL DEFENSE



INDUSTRY