



Number
U1524-01
in State Register
for Measuring
Devices

Hygienic
conclusion
of the State
Sanitary-Hygienic
Expertise
5.10/6300 of
February 20, 2002

TY Y 33.2-22362867-006-2001

Purpose of use

- Measurement of gamma radiation equivalent dose rate.
- Measurement of gamma radiation equivalent dose.
- Evaluation of surface contamination by beta radionuclides.
- Clock, alarm clock.

Household application

- Apartment, building and construction control; personal radiation safety; ground-surface continuous territories control; and vehicles control.
- Evaluation of radiation contamination of farm products.
- Visual aids for educational institutions.

Specifications

Measurement ranges and basic relative errors:

- Gamma radiation equivalent dose rate	µSv/h	0.1 ... 999.9 ; ±25%
- Gamma radiation equivalent dose	mSv	0.001 ... 9 999 ; ±25%
- Beta-particles flux density with possible evaluation of surface contamination by beta radionuclides (⁹⁰ Sr+ ⁹⁰ Y)	1/(cm ² ·min)	10 ... 100 000 ;

Specifications (continued)**Energy ranges of measurement and energy dependence:**

- Gamma and X-ray radiation	MeV	0.05 ... 3.0 ; $\pm 25\%$
- Beta radiation	MeV	0.5 ... 3.0 ;

Measurement time intervals	seconds	5 ... 70
Battery life	hours	6 000
Operating temperature range	°C	-10 ... +50
Weight	kg	0.2
Dimensions	mm	120 x 52 x 26

Features

- ★ Three independent measuring channels with alternate indication of data on the single liquid crystal display.
- ★ Built-in gamma, beta sensitive Geiger-Muller counter.
- ★ Automatic setting of measurement intervals and ranges.
- ★ Audio signalling of each detected gamma-quantum and beta-particle.
- ★ Programming of audio alarm threshold level relative to gamma radiation dose rate.
- ★ Digital display.
- ★ Two AAA size batteries.
- ★ Four-level indication of power supply discharge.
- ★ Shock resistant frame.
- ★ Small weight and dimension parameters.

Delivery kit

- MKS-05 "TERRA-P" dosimeter-radiometer;
- operating manual;
- cardboard box.

A leather case used to carry the device on a waist-belt or wristlet can be ordered at extra cost.

***MKS-05 "TERRA" dosimeter-radiometer is recommended by
the Scientific-Methodical Council under
the Ministry of Education of Ukraine
for use in educational process in secondary schools.***

(Protocol #440 of June 7, 2001)