

# RADEX RD1706

We'd like to call your attention to our new elaboration RADEX RD1706 radiation monitors. The device can be used not only by the population in day-to-day life but by the personnel operating with ionizing radiation sources as well. RADEX RD1706 evaluates the ambient equivalent of dose rate  $H^*(10)$  of gamma radiation with taking into account gamma radiation and the pollution of objects by sources of beta particles.

RADEX RD1706 evaluates the value of beta and gamma radiation by the means of two SBM20-1 type Gejgera – Muller counters and displays the indications in  $\mu\text{Sv/h}$  on LCD. The time of observation a dose rate and varies from 40 to 26 seconds.

Registration of every particle is accompanied with a sound signal what makes it easier to search for the source of radiation.

The device possesses «BACKGROUND» mode which gives not just one but two indications. One stands for exceeding of a dose rate over a background dose rate, the second stands for a background dose rate. This mode is convenient for examining inside buildings, when it is necessary to know how indications indoors differ from the ones outdoors.



## Technical specifications

Range of ambient equivalent of dose rate indications $H^*(10)$	$\mu\text{Sv/h}$	from 0.05 to 999.0
Range of registered gamma radiation energy	MeV	from 0,1 to 1.25
Range of registered X-ray radiation energy	MeV	from 0.03 to 3.0
Range of registered beta radiation energy	MeV	from 0.25 to 3.5

Reproducibility of indications (at confidential probability 0.95) where P is a doze rate in $\mu\text{Sv/h}$	%	7+6/P
Threshold levels	$\mu\text{Sv/h}$	from 0.1 to 99.0
Time of calculation	seconds	from 26 to 1*
Time of indication	-	continuously
Power elements, size «AAA»	pieces	one or two
Time of continuous work of the device, not less than	hours	500**
Overall dimensions height x breadth x depth not more than	mm	105x60x26
Weight (without power elements) not more than	kg	0.09

\* 1) Period of observation shortens with the increase of a dose rate more than 3.0  $\mu\text{Sv/h}$ .

2) The increase in the number of performed cycles improves the reliability of indications.

\*\* 1) On the basis of manufactures settings, background dose rate not higher than 0.3  $\mu\text{Sv/h}$  and two batteries with a capacity of 1350 mAh.

2) The device can operate with one power element «AAA» type (but the time of continuous operating reduces).

- ability to register gamma, beta and x-ray radiation;
- expanded range of indications (up to 999.0  $\mu\text{Sv/h}$ );
- time of observation is reduced from 1 to 26 sec.;
- time of observation gradually reduces from 26 to 1 sec. when the value of a dose rate is higher than 3.5  $\mu\text{Sv/h}$ ;
- improved precision of indications;
- the ability to set threshold level indications up to 99.0  $\mu\text{Sv/h}$  (100 times in comparison with RADEX RD1503);
- «BACKGROUND» mode for performing inspections inside premises using algorithm similar to methodical instructions [MY 2.6.1.715-98](#) Conducting a radiationally-hygienic inspection of inhabited and public buildings;
- displaying the value of a background dose rate;
- displaying the difference in indications between the average dose rate and a background dose rate;
- value of a background dose rate is saved after turning off the device;
- displaying an average dose rate exceeding over a background dose rate;
- vibra-call signal as the additional alarming function;
- possibility to regulate a vibra signal (turning on/off);

元翔五金行 電話：04-22615775 傳真：04-22621395  
台中市復興路二段 120 之 19 號 <http://yuansum.myweb.hinet.net>