

LAMSE

eRIS2-R

Gamma and X-Rays Radiation Monitor



Internal detector

Energy compensated Geiger-Müller for detecting and measuring the gamma and X-Rays radiation.



Rechargeable Ion-Li battery

Internal rechargeable Ion-Lithium battery of large capacity and with multiple recharge options (PC, electric network, vehicles, power-bank, etc).



Data memory

Manual and automatic recording of the measurement values with the date, time and other parameters.



USB connectivity

It has a USB port for connection to the PC for downloading stored data. It also allows recharging the internal Ion-Li battery.



Software

For downloading memorized values and data management. Option to choose the language (Spanish or English).



Several models

In order to adapt as much as possible to the needs of the user, there are available two options: a model with maximum range of 10 mSv/h and other model with maximum range of 100 mSv/h.



Small and lightweight

Compact instrument of small dimensions, of only 220 g.



User friendly

The navigation through the menus is very intuitive and it has the possibility to choose language (Spanish or English). That makes it a very easy to use device.



Several measuring modes

Rate mode for the measurement of the current level of radiation, freeze mode of the maximum rate reached, search mode, dosimeter mode with accumulation of dose and time.



Fast response

Stable measurement combined with fast response when a sudden variation of the radiation field greater than 3 times the standard deviation of the mean value.



Self-diagnosis

Continuous checking of the detector status, battery level and data memory, as well as alarm levels. Graphic indication by means of a bar of the measurement status relative to the alarm level.



Adjusted and calibrated

After manufacture, each instrument is adjusted and calibrated individually for ambient equivalent dose $H^*(10)$, with the reference radioisotope Cs137. A complete traceable Certificate is delivered with the instrument.



Accessories

It is supplied with charger, USB cable, shoulder bag, software, user manual and manufacturer's calibration certificate.



After sales service

With the support of a fast and efficient technical service, both for repairs and calibrations or verifications.

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Models:

ERIS2-R10	with internal detector of max.10 mSv/h	(ref. LAM048V01)
ERIS2-R100	with internal detector of max.100 mSv/h	(ref. LAM048V02)

General technical specifications:

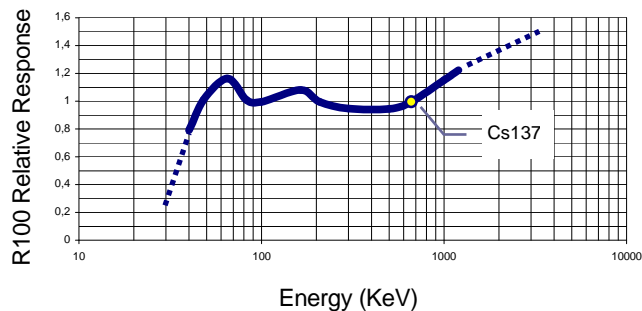
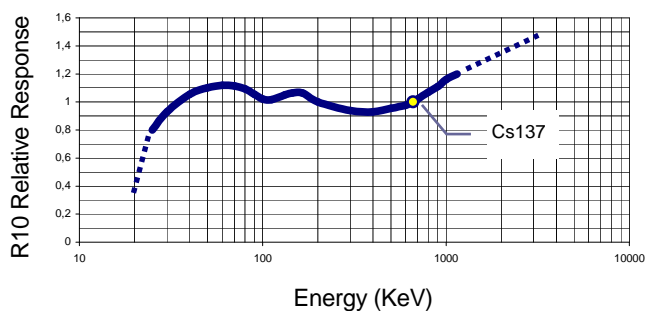
Data memory.....	Record of the date, time, measurement, and parameters. Selection of manual, automatic or periodic recording. Capacity for approx. 8000 memory records.
Measuring units.....	Dose rate ($\mu\text{Sv/h}$, mSv/h) and accumulated dose (μSv , mSv) with time of accumulation
Connectivity.....	USB 2.0, type Mini-B connector, for communication and battery recharge.
Power.....	Internal rechargeable large-capacity Ion-Li battery. Maximum autonomy without recharging of approx. 300 hours (with internal detector, $<1 \mu\text{Sv/h}$).
Alarms and warnings.....	Acoustic and visual alarm in rate, accumulated dose, cps and Bq/cm^2 , adjustable by advanced user by password. Warnings of battery level, full memory, detector failure and saturation of the measuring range.
Response time.....	Dynamic, minimum 2 s, 3-sigma criterion (standard deviation of the mean value)
Pushbuttons.....	Membrane keypad (4)
LED.....	Bi-color, alarm indication (red), and battery recharge (blue)
Display.....	Graphic LCD, with backlight controlled by keypad
Audio.....	Piezoelectric, alarm indication.
Case.....	ABS. IP51
Dimensions.....	11.7 x 7.2 x 2.5 cm.
Weight.....	220 g
Temperature range.....	-10°C to $+50^\circ\text{C}$
Humidity range.....	max. 90% RH (not condensed).

Technical specifications of internal detector (R10, R100)

Measuring type.....	Gamma and X-rays, $\text{H}^*(10)$. Calibration related to Cs137 (662 KeV)
Detector.....	Energy compensated Geiger-Müller
Measuring modes.....	Dose rate and maximum dose rate (Sv/h). Search mode (graphic) Accumulated dose (Sv) with accumulation time (h)
Energy range.....	R10: From 25 KeV R100: From 40 KeV
Energy dependence..... (related to Cs137)	R10: max. $\pm 20\%$ in the optimum energy range from 25 KeV to 1.3 MeV greater than $\pm 20\%$ outside the optimal energy range R100: max. $\pm 20\%$ in the optimum energy range from 40 KeV to 1.3 MeV greater than $\pm 20\%$ outside the optimal energy range
Rate indication range.....	R10: $0.01 \mu\text{Sv/h}$ to 10 mSv/h . R100: $0.01 \mu\text{Sv/h}$ to 100 mSv/h .
Dose indication range.....	$0.01 \mu\text{Sv}$ to 1 Sv (0.01h to 9999 h)
Gamma sensibility..... (related to Cs137)	R10: approx. $1.7 \text{ cps}/\mu\text{Sv/h}$ R100: approx. $0.7 \text{ cps}/\mu\text{Sv/h}$
Accuracy.....	Maximum deviation $\pm 15\%$ over the entire measuring range (related to Cs137).

LAMSE reserves the right to modify specifications without prior notice.

Standard relative response curves of the R10 and R100 models according to the emission energy:



The ERIS2-R is supplied with USB charger, USB cable, user manual, data download software, shoulder bag and manufacturer's calibration certificate (ISO9001)

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