



Radioactivity Meter Gamma-Scout GS-Rechargeable

Radioactivity meter with rechargeable battery for all types of radiation with internal memory and software

The radioactivity meter is a professional measuring device for the very precise detection of alpha, beta and gamma radiation. This radiation meter has a large measuring range and can be used for sporadic on-site measurements or for long-term measurements or monitoring. The measuring device enables a certified measurement of the natural ambient radiation and increased artificial radiation up to 500 times the legal limit value. The use cases are diverse. The radiation meter is traditionally used in nuclear power plants. It is being used more and more to test imported materials, as well as to measure food that is being irradiated. Natural radioactive radiation, such as that found near lakes, can also be accurately measured.

When testing building materials in the renovation of factories ... the radiation meter naturally also does its job. Two device versions are available online: the radiation meter in the standard version as model GS1 or the same meter but with acoustic signaling (ticker) as model GS2. The measured values of the radiation can be stored in the radiation meter itself and transferred to a computer and evaluated using the data kit (software and data cable) included in the scope of delivery. A measuring device of this series is intended for stationary use. It's the Gamma Scout Online (GS-3). This radiometer continuously sends measurement data to the PC or laptop (pulse transmission from the device to the PC every 10 / 30 or 60 seconds).

What is radioactivity?

Antoine-Henri Becquerel discovered at the end of the 19th century that uranium compounds emit invisible rays spontaneously, i.e. without external influence.

For example, the decay of radium emitting alpha radiation. The unstable nucleus of the radioactive isotope of radium (consisting of 88 protons and 138 neutrons) constantly strives to transition to a more stable state. Therefore, the radium nucleus emits a so-called alpha particle, equivalent to a helium nucleus, consisting of 2 protons and 2 neutrons. This is alpha radiation.

Which units of measurement are common in radiation protection?

We have no sensory organ to perceive the ionizing radiation. Measuring devices are required to detect radiation, and knowledge of the type and energy of radiation and the behavior of radionuclides in the body is required to assess the effects of radiation. For example, the activity measurement alone says nothing about the biological effect or the danger of the radiation.

You can find further general information on radiation measurement and radiation protection from the International Commission on Radiological Protection (ICRP) or the Society for Radiological Protection (SRP).

The supplied software is used to transfer the radiation readings stored in the radiation meter and evaluate them on the PC. However, the data can also be transferred and evaluated in other spreadsheet programs such as Microsoft Excel.

Subject to change

- ▶ Tested precision device
(each individual radiation meter is subjected to a final test, this final test is carried out by Institute for Radiation Protection of a State University of Applied Sciences and documented with a test certificate)
- ▶ All types of radiation (the meter detects radioactive alpha, beta and gamma radiation)
- ▶ Continuous operation (this radiation meter continuously monitors radiation/switch on or off just as superfluous as changing the battery/ battery lasts up to 10 years)
- ▶ Large screen
- ▶ Data storage
- ▶ Evaluation of the radiation measurements on the PC
(the included software allows you to transfer the measurement data from the radiometer to a computer to transfer and evaluate.)
- ▶ Certification
(The GAMMA-SCOUT® has been tested by TÜV for its device safety and meets the European CE standard as well as the American FCC-15 standard / it is also allowed in airplanes be carried along)
- ▶ Expansion version (GS2)
(the measuring device GAMMA-SCOUT® w/ALERT gives an acoustic signal when radiation is above a limit value that can be entered)
- ▶ **Rechargeable battery as a power source that is charged via USB (mains adapter or PC).**

Subject to change

Specifications

Technical specifications

Measuring principle / Radiation detector	Geiger-Müller counting tube, auto shut-off, stainless steel case with halogen filler - Measurement length = 38.1 mm / 1.5 in - Measurement diameter = 9.1 mm / .4 in - Window = 1.5 ... 2.5 mg/m ²
Radiation types	- Alpha radiation from 4 MeV - Beta radiation from 0.2 MeV - Gamma radiation from 0.02 MeV
Selection of the diaphragm	- Alpha + Beta + Gamma (without diaphragm) Beta + Gamma (approx 0,1 mm) alpha is totally protected - Gamma (display Al (approx 3 mm) alpha and beta radiation are totally protected approx. 2 MeV, it attenuates Gamma under 7%)
Gamma Sensibility	95.0 impulses / min for radiation Co60
Null quota	< 10 impulses / min with protection 3 mm Al y 50 mm Pb
Measurement ranges	0.01 µSv / h - 1000 µSv / h
Measurement of the impulses	1 ... 99 s, 1 ... 99 min, 1 ... 99 h, Mean value 24 h in µSv / h
Internal recording of the impulses	Intervals to be selected. every 1 min., 10 min, 1 hour, 1 day y 7 days
Storage capacity of the internal memory	2 KB
Software / data cable	Yes, in the delivery
Power	Internal battery, charged via USB (mains adapter or PC)
Consumption	Under 10 micro-amp on average
Duration	More than 117000 h x 20 impulses / min (approx. 10 years)
Display	LCD display with 4 positions, numeric, with quasi-logarithmic denomination and representation and indication of functions.
Housing	Novodur plastic, shock resistant
Dimensions	161 x 72 x 30 mm / 6.3 x 2.8 x 1.2 in
Weight	153 g / < lb
Certification	Yes, in the delivery a quality certification is included for every numbered meter.
Standard	- European standard CE - USA standard FFC15

More information

More product info



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