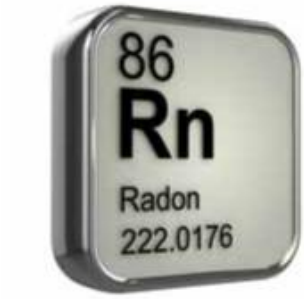
GIH-MM GmbH

RADON

OUR PRECISION FOR YOUR SAFETY.
We measure radioactivity & radon
and calibrate your measurement system.

www.gihmm.com

Radon is a naturally occurring radioactive noble gas and is mainly caused by the radioactive decay of uranium, which occurs in different concentrations throughout the rock and in the soil. There it can escape as gas through cavities such as cracks and mix with the ambient air.



Radon is converted into other radioactive substances by further radioactive decay. However, these products derived from radon are no longer gases, but solids that accumulate on dust particles in the air (so-called aerosols).

What effects does Radon have on your health?

Radon and its derived products enter the body via respiration. Most of the radon gas inhaled through the air is exhaled quickly and therefore has no effect whatsoever. Radon is unlikely to degrade in the airways. However, this process is of little importance to health.

The biggest health risk is therefore not from the radon itself, but from its short-lived derived products from. Depending on the size of the aerosols containing these derived products, they can reach the upper respiratory tract, the bronchi, or even the alveoli, where they can adhere. There radon-derived products release their radioactive decay over a long period of radiation. They can damage the immediate surrounding lung tissue and thus contributes to the development of **lung cancer**.

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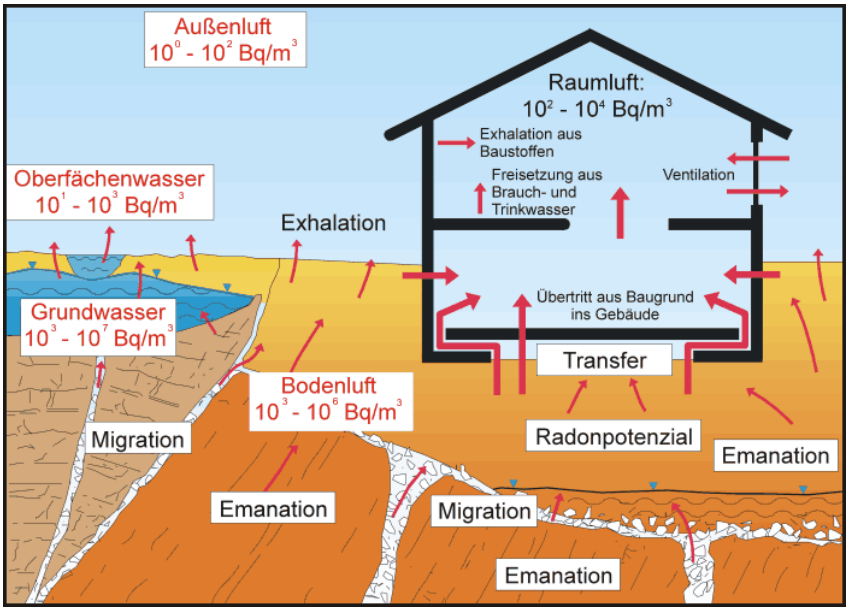
Why is Radon dangerous indoors?

Outdoors, the radon escaping from the ground can mix with the air very quickly and therefore occurs in such low concentrations that it is not relevant to health in nature.
However, indoors, higher concentrations may occur if:

- the building stands on soil with elevated uranium content
- the air permeability of the soil is high
- there is no adequate seal between the floor and the house
- the ventilation rate is too low



Especially in the heating season, the indoor radon concentration may increase significantly due to the so-called chimney effect. The warm, rising room air creates a suction effect in the lowest rooms of the building, whereby radon-containing air can be sucked off the ground.

A radon measurement in your home is therefore highly recommended
- in schools and office buildings soon duty.

For more information, please contact us at
02266/80216 or at www.gihmm.at

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AIRTHINGS

Corentium Home
by Airthings

Corentium Home is a small yet powerful radon gas detector.
It provides exactly what you need to stay on top of your radon levels.



FOR EVERYONE
Developed by CERN scientists, we are proud to offer a product which is accurate, simple and elegant. In short, Corentium Home is a detector for everyone.

PORTABLE
Every room in your home has different radon levels. With Corentium Home you can measure all rooms for the price of one device..

FUNKTIONS
Reset button: resets the device
Mode button: displays total days measured
Reporting: free web-based reporting
Quick: results within 24 hours

SPECIFICATIONS
Radon sampling: passive diffusion chamber
Detection method: alpha spectrometry
Measurement range: 0 – 9999 Bq/m3
Operation environment: 4°C to 40°C

LONG BATTERY LIFE
Above 2 years of continuous monitoring
Comes with replaceable AAA batteries

ACCURATE
Unaffected by other radiation
After 7 days: σ < 20 % at 100 Bq/m3
After 1 month: σ < 10% at 100 Bq/m3

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AIRTHINGS

Corentium Plus
by Airthings

Corentium Plus is the radon monitor that brings data to life. Built with multiple state-of-the-art sensors, it records everything you will need to know about your fluctuating radon levels.

SPECIFICATIONS
Radon sampling: passive diffusion chamber
Detection method: alpha spectrometry
Detector: 1 silicon photodiode
Diffusion time constant: 25 min
Measurement range: 0 - 50 000 Bq/m3
Sampling rate 1 hour
Operation environment

- 4°C to 40°C
- 5% RH to 85% RH non-condensing
- 50 kPa to 110 kPa

FUNCTIONS
Air quality measures: radon, temperature, humidity
Reset button: resets the device
Mode button: displays total days measured
Reporting: free web-based reporting
Software: Custom Reporting and Analysis (CRA)
Memory: up to 10 years of data at 1-hour resolution

UMGEBUNGSSENSOREN
Temperature: 0.336°C resolution, ± 1°C accuracy
Humidity: 0.5% RH resolution, ± 4.5 % accuracy
Barometric pressure: 0.01 kPa resolution, ± 1 kPa accuracy

DATA & ACCURACY
Free reporting and analysis software for PC
Unaffected by other radiation
After 7 days: σ < 12 % at 50 to 350 Bq/m3
After 1 month: σ < 9% at 90 to 220 Bq/m3

LONG BATTERY LIFE
Approximately 1.5 year of continuous monitoring
Comes with replaceable AA batteries

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AIRTHINGS

Corentium Pro
by Airthings




Corentium Pro, a favorite among home inspectors and professionals. Fully AARST-NRPP certified for the North American market and beyond, this professional radon detector will be a reliable workhorse for decades.

SPECIFICATIONS
Radon sampling: passive diffusion chamber
Detection method: alpha spectrometry
Detector: 4 silicon photodiodes in 4 distinct radon chambers
Diffusion time constant: 25 min
Measurement range: 0 - 50 000 Bq/m3
Sensitivity: ~100 cph at 1000 Bq/m3
Sampling rate: 1 hour
Operation environment

- 4°C to 40°C
- 5% RH to 85% RH non-condensing
- 50 kPa to 110 kPa

MEMORY
Internal memory stores 5 years of data
Capacity: ~ 1900 days of measurement

- 5 data sets of one year length
- 177 data sets of 1-week length
- 325 data sets of 2-days length

Memory type: non-volatile flash memory

DATA & ACCURACY
Data accessible via Android or iOS app
Free reporting and analysis software for PC
After 24 hours: $\sigma < 7\ \% \pm 5\ Bq/m^3$
After 7 days: $\sigma < 5\ \% \pm 2\ Bq/m^3$

ENVIRONMENTAL SENSORS
Temperature: 0.2°C resolution, ± 1°C accuracy
Humidity: 0.5% RH resolution, ± 4.5% accuracy
Barometric pressure: 0.002 kPa resolution, ± 1 kPa accuracy

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AIRTHINGS

Wave

Radon is the number one cause of lung cancer among non-smokers. Radon gas kills more than 6x the amount of people than home fires and carbon monoxide poisoning combined. Radon gas can be found everywhere and fluctuates daily. Every home needs a radon detector.

NOT JUST A RADON DETECTOR

Wave will provide you with detailed information about radon, temperature and humidity levels right on your phone. View daily, weekly, monthly and yearly measurements in the mobile app. Use the data to take the necessary steps to protect your home and loved ones from the dangers of radon gas.

CHECK YOUR RADON LEVELS INSTANTLY

Accessing your radon levels in real time is necessary to minimize the potential health effects. Know your levels by using the free mobile app or by waving your hand in front of the device to receive a color code. These color codes are easy to understand, making it a device for all ages.

Green (good): Air quality is good, radon is low.
Yellow (warning): Air quality could be better.
Red (danger): Air quality is not good; radon levels are high.

FUNKTIONS

Air quality: radon, temperature, humidity
Motion sensor: wave
Visual Alerts: green, yellow, red
Free mobile app: iOS and Android
Long battery-life: ~1.5 years
Notifications: In app and email

SPECIFICATIONS

Radon sampling: Passive diffusion chamber
Detection method: Alpha spectrometry
Operational Environment: 4°C to 40°C
Measurement range: 0 – 9999 Bq/m3
Weight: 219g (with batteries)
Dimension: 120 mm (diameter), 36 mm (height)

NOTIFICATION

Wave will notify you on your mobile phone or tablet when you are within range of the unit. You will also receive audio alerts and email notifications when Radon levels are too high.

EASY TO INSTALL

Simply mount the plate with the single screw (included), download the app, pull the battery tab and follow the instructions given in the app.

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V2

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