Radon Scout
Radon Scout PLUS

Radon monitor for long-term monitoring and ventilation control

The *Radon Scout* offers the highest senitivity of its class exceeding the sensitivity of its competitors many times. This results in the lowest detection limit and statistical error. The thousands of times proven and US-EPA certified instrument will show the time distribution of Radon even at levels below 100 Bq/m³. Thus, meteorological influences as well as ventilation effects can be detected easily.

Due to its outstanding sensitivity, the instrument is perfectly suited for direct controlling of ventilation equipment by a potential-free switch contact. As an accessory, we offer a wireless switch which can be directly connected to the instrument. Thus, very low effort is required to control fans such as kitchen hoods, wall or window ventilators anywhere in your home. It is even possible to upgrade older instruments. The switch threshold for the *Radon Scout* is fixed to the EU target value of 300Bq/m³ whilst the *Radon Scout PLUS* allows user specific settings.

Two standard D-size cells enable an autonomous operation over a few months. The Radon detector *Radon Scout PLUS* offers an additional connection for an external power supply. In fact, this allows an operation over infinite time periods.

The size of the data memory was designed to get a high-resolution time distribution. Any number of measurement series may be created. The acquired data can be loaded by a PC even if a measurement is in progress. The Radon detector can be directly connected to a modem for remote data transmission.

The included Radon Vision software handles the remote connection as simple as a direct cable link.

Because of the high sensitivity, variations of the activity concentration will detected accurately even in case of low Radon levels. The Radon detector works in diffusion mode so that a possible influence of Thoron can be excluded. The measurement chamber, equipped with a semiconductor detector and high voltage collection, is immune to ambient humidity.

Sensors for temperature and humidity (barometric pressure in addition in case of *Radon Scout PLUS*) are very useful add-ons. The integrated tilt detector will give a signal if the Radon detector was moved from its original position during the measurement.

The instrument has been certified by the US-EPA/NRSB and other international authorities.

Technical Data

Measurement Range	0 ... 10MBq/m³
Sensitivity	1.8cpm @ 1000Bq/m³ (independent on the humidity) 200Bq/m³ with 20% statistical error (1σ) at 1 hour interval 1000Bq/m³ with an statistical error (1σ) < 10 % at 1 hour interval 100Bq/m³ with 17% statistical error (1σ) at 3 h interval
Response Time	120 Minutes to 95% of the final value
Internal sensors	Relative humidity (0…100%) Temperature (-20…40°C) Tilt PLUS: barometric pressure (800…1100mbar)
Integration interval	1 hour and 3 hours or customised 1…255 minutes, adjustable
Potential-free switch contact for ventilation control or alert indication	Threshold level fixed to 300Bq/m³ PLUS: Adjustable alert threshold Maximum load 24V/0,5A
Data storage	Non-volatile memory (circular structure) storage of 672 data records PLUS: storage of 16383 data records
Power supply	2 x D-size cell (Ni-Cd, NiMH or Alkaline)

	PLUS: Additional external DC input
Battery operation	> 90 days
Interface	USB and RS232
Control	Single switch, measurement/stand-by (lock-function) PLUS: Display with backlight
Dimensions	175mm x 135mm x 55 mm
Weight	800 g (incl. Battery)
Radon Vision Software (included)	Set-up, data download (also via modem – analogue line, ISDN, GSM, TCP-IP) Interactive graphical display (zoom, pan, fit data-cursor, marker for tilt and start of a new measurement, error bars, smoothing) Selective ASCII export (EXCEL format) Selective graphical protocol print (space for individual header, user comments) Calculation of average concentration and exposure Automatic created file names and path structure o Switch over between US and SI-units (Bq/m³/pCi/L)

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