

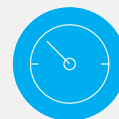
MRN01

Radon Mobile Head

MRN01 is dedicated for continuous measurement of ^{222}Rn activity concentration in air and in soil air.



Measurement of radon
in air and soil



Monitoring of the
atmosphere in
confined environments



Designed to be used in
harsh environments



Passive measurement,
no disturbance of the
environment

The radon mobile head is recording alpha particles from radioactive decay of ^{222}Rn in measuring chamber. The radon enters a detection chamber by a process of diffusion through three cellulose filters which trap all the solid radionuclides. Alpha particles from the decay of radon and its progenies are detected by a light tight silicon detector with 400 mm² of sensitive surface and with a depleted depth of 100 μm.

The energy window for alpha particles detection is set to between 1.5 MeV and 6 MeV. The detector totalises alpha emissions generated during pre-established time intervals from 1 to 240 min. Generated pulses are to be counted by data logger. The calibration of the sensor enables the volumic activity of the ^{222}Rn to be calculated.

Technical specification

Probe	radon measuring chamber based on passive diffusion
Detector	silicon ion implanted planar detector
Detector sensitive surface	400 mm ²
Sensitivity	0.02 pulses per hour at 1 Bq/m ³
Detection limit for ^{222}Rn	50 Bq/m ³
Measuring range	up to 1 GBq/m ³
Operating temperature	-20 °C to +70 °C
Output	negative pulse 3.6 V / 0 V on event open collector V+ / 0 V on event V+ from 3.6 to 5 V
Operation	with data logger
Length of cable	5 m as standard, max. 40 m upon request
Height	350 mm
Diameter	61 mm
Weight	1.5 kg



ISO Quality Certified Company

All specifications are subject to change without prior notice.
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