

'Minimize measurement uncertainty during short term building inspections'



corentium

corentium PRO

Digital Radon Inspection System



Corentium pro

- Digital radon inspection system using four radon sensors to increase sensitivity and minimize measurement uncertainty during short term building inspections.
- Equipped with sensors for temperature, humidity, atmospheric pressure and tilt
- Stores 5 years of sensor data at 1 hour time resolution
- Data upload to PC with mini-USB cable in less than 20 seconds
- Corentium Report and Analyze (CRA) software for analysis and reporting
- Approx. 1.5 years battery lifetime

Measuring radon, made easy

*'Standard radon report
in a few seconds'*

CORENTIUM report and analyze (CRA)

Choose any measurement period for analysis and reporting. Select days per week, and hours per day to generate results for building occupancy periods.

Generate a standard radon report in a few seconds using the report wizard. Numerous options for visualizing, analyzing and reporting radon data and temporal variations.



RECOMENDED USE

	Corentium home	Corentium plus	Corentium pro
Home owners	●		
Workplaces	●	●	
Radon professionals	●	●	●
Home inspectors			●

ACCESSORIES



- USB cable for data upload
- CRA Software upgrade

For Corentium pro:

- Suitcase for storing instrument
- Tripod for mounting instrument
- Kensington lock for securing instrument

TECHNICAL SPECIFICATIONS

	Corentium home	Corentium plus	Corentium pro
Dimensions (in mm)	120 x 69 x 25.5	120 x 69 x 25.5	140 x 140 x 30
Weight (in grams incl. batteries)	130	130	300
Power Supply	3 AAA alkaline batteries (LR03)	3 AAA alkaline batteries (LR03)	3 AA alkaline batteries (LR06)
Battery life-time	~2 years	~2 years	~1.5 years
Radon Sampling	Passive diffusion chamber	Passive diffusion chamber	Passive diffusion chamber
Detection method	Alpha spectrometry	Alpha spectrometry	Alpha spectrometry
Measurement uncertainty (statistical)			
After 1 day			Std dev < 7% + 5 Bq/m ³ (Std dev < 7% + 0.12 pCi/L)
After 7 days	Std dev 20% at 100 Bq/m ³ (Std dev 20% at 2.7 pCi/L)	Std dev <12% at 50 - 350 Bq/m ³ (Std dev <12% at 1.35 - 9.46 pCi/L)	Std dev < 5% + 2 Bq/m ³ (Std dev < 5% + 0.05 pCi/L)
After 1 month	Std dev 10% at 100 Bq/m ³ (Std dev 10% at 2.7 pCi/L)	Std dev <8% at >350 Bq/m ³ (Std dev <8% at >9.46 pCi/L)	Std dev <9% at 90 - 220 Bq/m ³ (Std dev <9% at 2.43 - 5.95 pCi/L)
			Std dev <6% at >220 Bq/m ³ (Std dev <6% at >5.95 pCi/L)
Measurement range			
Lower detection limit Instrument	0 Bq/m ³ (0 pCi/L)	0 - 50.000 Bq/m ³ (0 - 1.000 pCi/L)	0 - 100.000 Bq/m ³ (0 - 2700 pCi/L)
Upper display limit	9.999 Bq/m ³ (500.0 pCi/L)	9.999 Bq/m ³ (500.0 pCi/L)	
Operation environment			
Temperature	4°C to +40°C	4°C to +40°C	4°C to +40°C
Humidity	<85% RH	<85% RH	<85% RH
Temperature sensor			
Range		4 °C to +40 °C	4 °C to +40 °C
Resolution		0.336 °C	0.2 °C
Accuracy (max)		+0.5 °C (typical) +1 °C (max)	+0.5 °C (typical) +1 °C
Humidity sensor			
Range (non-condensing)		5 %RH to 85 %RH	5 %RH to 85 %RH
Resolution		0.5 %RH	0.5 %RH
Accuracy (in range 20-80 %RH)		+4.5 %	+4.5 %
Barometric pressure sensor			
Range		50.0 kPa to 115.0 kPa	50.0 kPa to 115.0 kPa
Resolution		0.06 kPa	0.06 kPa
Accuracy		+1 kPa	+1 kPa
Diffusion time constant	25 minutes	25 minutes	25 minutes
Internal memory storage capacity		10 years at 1h time resolution	5 years at 1h time resolution
P/N	234 (US: 233)	227 (US: 226)	236
EAN	7090031102340 (US: 7090031102333)	7090031102272 (US: 7090031102265)	7090031102364