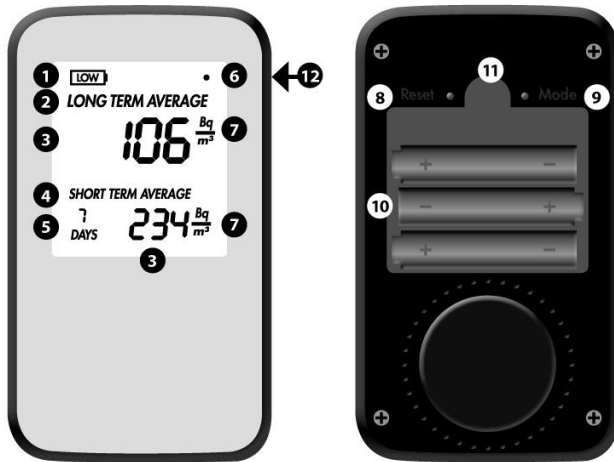


# CANARY®

## Digital Radon Monitor

### *User manual*



Valid for instruments from S/N 2XXXXXXXXX

#### KEY TO FIGURE

1. Low battery level indicator. Change batteries as soon as possible when this icon appears
2. 'LONG TERM AVERAGE'. Long term average
3. Measuring value
4. 'SHORT TERM AVERAGE'. Short term average
5. Measurement period for short term average. Ranges between 1 and 7 days
6. Measurement indicator. Blinks when the instrument is active
7. Unit of measure: Bq/m<sup>3</sup> (Becquerel per cubic meter of air)
8. 'RESET'. Reset button. Use to start a new measurement period. **Note:** Removes all stored data from the previous measurement
9. 'MODE'. Button to display number of measurement days since the last reset. Appears on the screen for 20 seconds
10. Battery holder for 3 x AAA alkaline batteries (LR03)
11. Opening of battery cover
12. USB input. For use by manufacturer

#### SAFETY

Please contact the seller should the instrument require service or repair. The instrument should not be opened.

Avoid dropping or hitting the instrument, as well as pressure, vibration, dust and moisture. Condensation may occur if the instrument is moved from one place with high humidity to a cold place. If moisture condensation occurs, remove the batteries and place the instrument in a dry place for 2 hours. The instrument should not be exposed to direct sunlight for long periods.

Use only AAA alkaline batteries (LR3). Batteries must not be exposed to flame or other high heat sources. Battery terminals shall not be touched and kept free of dust, sand and liquids.

## GETTING STARTED

1. Install the batteries supplied. Check their polarity and make sure that they are oriented correctly, as marked in the battery compartment. If the display shows the error message 'Err' and a number, press RESET, remove the batteries, and reinsert
2. The display shows 'CAL' (calibration) and counts up to 50. The instrument self-calibrates in this phase. Duration: 30 seconds
3. The display shows up to 4 flashing dashes indicating the time left until radon levels are shown. In this phase, data is obtained for an initial radon level calculation. The phase duration depends on radon levels, but typically ranges from 6 to 24 hours. The indicator at the top right of the screen flashes when the instrument is active
4. Place the instrument in living areas (e.g., bedroom and living room) and in places deemed representative of the air breathed in each living area. The instrument should not be exposed to direct sunlight or moisture, and should be placed at least 50 cm above floor level, and at least 150 cm from the nearest door, window or air vent. Moreover, it should not be moved during measurement
5. **Note:** Results on the first day must be regarded as a radon level indication only. Bear in mind that the longer the measurement period, the more accurate the measurement

## USING THE INSTRUMENT

- The long term average represents the average radon value for the previous year (updated once a day)
- The short term average alternates between showing radon values for the last day (updated hourly), and for the last seven days (updated once a day)

The long term average is intended to identify potential health hazards. The short term average is intended to assess the effects of measures to reduce radon levels - for example, increased ventilation. The short term average can also be used to provide an indication of radon levels. It may provide relevant (albeit general) information when long-term measurement is not possible.

Proposed measurement method: Buildings can be diagnosed by measuring all living areas - e.g., living rooms and bedrooms - for at least one week. For a more accurate value, this should be followed by a long-term measurement (for at least 2 months) in the room with the highest radon value. **Note:** For measurement methods, measurement period and trigger level, please follow recommendations from national authorities.

RESET is used to restart the instrument before a new measurement. This operation removes all stored radon data. Remember to note all previous measurement before using the RESET button.

MODE is used to get information on the number of measurement days since the instrument started for the first time or the last RESET operation. This information is displayed on the lower half of the screen for 20 seconds before the screen returns to the ordinary display.

It is recommended to keep the instrument continuously activated and the batteries in place until exhaustion. Batteries last at least 2 years. **Note:** Upon battery replacement, the instrument is reset and all stored data deleted.

## RESPONSIBILITY

The instrument is tested and quality-assured by production. It meets the accuracy values set out in the specification table, unless the unit has measured continuously high radon levels (many thousand Bq / m<sup>3</sup>) over several years. It is recommended to keep the instrument continuously activated and the batteries in place until exhaustion.

Instrument and batteries should not be disposed of as household waste. The materials used in the instrument are recyclable. It is the consumer's environmental responsibility to ensure that electronics and batteries are disposed of according to applicable waste management laws. Consumers should contact the seller or local authorities for information on environment-friendly disposal.

Corentium AS provides a 2-year warranty against system failure. Corentium AS shall not be liable for damages related to failure or loss of data arising from incorrect operation and handling of the instrument.

## SPECIFICATION

**Sampling Method:** Passive radon diffusion chamber

**Detection Method:** Alpha spectrometry

**Power Supply:** 3 AAA alkaline batteries (LR03). 2 years battery life

**Dimensions:** 120mm × 69mm × 25.5mm

**Weight:** 130 grams (incl. batteries)

**Operation Environment:** Temperature 4 °C to +40 °C. Relative Humidity < 85%

**Measurement Range:** Lowest detection limit 0 Bq / m<sup>3</sup>. Upper display limit 9999 Bq / m<sup>3</sup>

**Measurement Uncertainty** (at 100Bq / m<sup>3</sup>): 7 days <20%. 1 month <10%

© 2015 Corentium AS. All rights reserved.

[www.corentium.com](http://www.corentium.com)

v3.2

**Designed and manufactured in Norway**

Corentium AS, Oslo, Norway

