# corentium

# MONITOR MANUAL







## **KEY TO FIGURE**

- A POWER ON / MONITOR RESTART
- B BLUETOOTH COMMUNICATION
  C INSTRUCTION LIGHTS (LEDS)
- KENSINGTON LOCK
- USB CONNECTION
- 3 BATTERY COMPARTMENT 4 TRIPOD MOUNT THREAD
- 5 CALIBRATION LABEL
- 6 SERIAL NUMBER LABEL

SPECIFICATION	
Sampling Method	Passive radon diffusion chamber
Detection Method	Alpha spectrometry
Power Supply	3 AA alkaline battery (LR06) ~ 18 months battery life-time
Dimensions	5.5 x 5.5 x 1.2 inches 140 x 140 x 30 mm
Weight	10.6 ounces (incl. batteries) 300 grams (incl. batteries)
Operation Environment Temperature Relative Humidity	39 to 104 °F 4 to 40 °C < 85 % RH
Measurement Range	0 - 2700 pCi/L 0 - 100000 Bq/m³
Measurement uncertainty After 1 day After 7 days	Std dev < 7 % + 0.12 pCi/L Std dev < 7 % + 5 Bq/m <sup>3</sup> Std dev < 5 % + 0.05 pCi/L Std dev < 5 % + 2 Bq/m <sup>3</sup>
Diffusion time constant	25 minutes
Internal memory storage capacity	5 years at 1h time resolution
Temperature sensor Range Resolution Accuracy	39 to 104 °F 4 to 40 °C 0.36 °F 0.2 °C ± 1 °F (typical), ± 2 °F (max) ± 0.5 °C (typical) , ± 1 °C (max)
Humidity sensor Range Resolution Accuracy	5 % RH to 85 % RH (non-condensing) 0.5 % RH ± 4.5 % (in range 20 - 80 % RH)
Barometric pressure sensor Range Resolution Accuracy	50.0 kPa to 115.0 kPa 0.06 kPa ± 1 kPa

## **USAGE**

#### **SAFETY**

Contact the seller if the product requires service or repairs. The cover must not be opened.

Avoid subjecting the unit to shock, impact, pressure, vibrations, dust and moisture. Condensation can occur if the unit is moved from a location with high atmospheric humidity to a cold location. If condensation occurs, remove the batteries and leave the unit in a dry environment for 2 hours. The unit must not be exposed to direct sunlight for extended periods. The monitor must be stored under dry conditions.

Use only batteries of type LR6, alkaline AA batteries. The batteries must not be exposed to fire or other extreme heat. The battery terminals must not be touched, and they must be kept free from dust, sand, liquids and other foreign objects.

Use Kensington Lock for securing the instrument from theft, being moved during measurement, etc.

NOTE: The instrument should not be used in environments with humidity more than 85 % RH.

#### **CALIBRATION**

The monitor is tested, quality assured and calibrated by manufacturer. Calibration certificate is valid for one year.

#### **GETTING STARTED**

- NOTE: When inserting batteries the monitor starts automatically. You do not need to press the button. Use a torx 6 screw driver to open battery compartment.
- To start a new data set, press the button.
   NOTE: May require some force.
- Allow 45 seconds for a self test phase.
- To maintain the right calibration, monitor should preferably be active continuously.

# **BLUETOOTH COMMUNICATION**

Default tool for analysis and reporting is the Corentium PRO app:

- Go to your App Store / Google play store and search for Corentium PRO.
- Open the Corentium PRO app.
   NOTE: The reporting option can be used after 24 hours.
- Optional tool is the CRAPC Software. Connect via USB.

# **INSTRUCTION LIGHTS**

- Flashing green, yellow and red: Monitor selftest.
- Flashing green: Operation mode.
- Flashing yellow: Attention. Connect to the Corentium PRO app for instruction.
- Flashing red: Error. Connect to the Corentium PRO app for instructions.
- Flashing blue and beep: Bluetooth connect.
- Flashing blue: Bluetooth disconnect.
- Continuous blue: USB connected.

# **USB CONNECTION**

- Open CRA PC Software (refer to Installation Guide and Software Manual).
- Connect radon monitor to PC via USB.

NOTE: Using the CRA PC Software, data can be downloaded after 24 hours.

#### **COMPLIANCES**

The monitor and the batteries must not be disposed of as ordinary household waste. The materials used in Canary pro can be recycled. It is the user's environmental responsibility to ensure that electronic equipment and batteries are disposed of in accordance with national regulations. Users should contact the seller or their local authority for information about environmentally friendly waste disposal.

In the event of incorrect use or operation of the monitor, Corentium AS cannot be held responsible for any losses resulting from failure or from the loss of measurement data.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residual installation. This equipment generates uses and can radiate frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/ TV technician for help

ICES-003 Class B Notice This Class B digital apparatus complies with Canadian ICES-003.

Avis NMB-003, Classe B Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

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