# RadonEye<sup>™</sup> Digital Radon Gas Monitor



User Guide

ecosense

### Introduction

At Ecosense, we develop the highest performing, most innovative radon monitoring solutions to ensure maximum indoor air awareness and safety for your family.

#### About RadonEye

The first radon result is available in 10 minutes and a reliable average result is produced within an hour. The RadonEye is more accurate than other home monitors with an industry leading radon counting efficiency of 30 counts per hour per pCi/L - 15 times more sensitive than the industry standard. The sensor's quick response allows users to see in real time when radon levels rise. The RadonEye is easily set up using Bluetooth to the user's smartphone. The built-in OLED display shows the last measurement taken and scrolls through averages determined over longer periods of time.

### What is radon gas?

Radon is a naturally occurring radioactive gas that comes from the breakdown of uranium and radium found in soil and rock all over the world. After entering buildings through cracks and holes in the foundation, it decays into radioactive particles that can become trapped in your lungs when you inhale. A known human carcinogen, radon exposure is the leading cause of lung cancer in nonsmokers, attributable to 21,000 lung cancer deaths in the United States each year. While elevated radon may be more common in some areas, any building can have a problem. The only way to know is to test. The World Health Organization (WHO) and the U.S. EPA recommended ALL buildings be tested regardless of where you live. If radon levels are high, they can affordably be reduced by a certified radon mitigation professional. EPA guidance suggests mitigating if levels are at or above 4 picocuries/liter (148 Becquerels/meter<sup>3</sup>).

More information on how to fix your home can be found at "Consumer's Guide to Radon Reduction: How to Fix Your Home" at <u>www.epa.gov/radon/consumers-guide-radon-reduction-how-fix-your-home</u>

English

### What's in the Box







RadonEye

12V Power Cord

**Calibration Certificate** 



RadonEye's LED display

### RadonEye Setup

- 1. Make sure your windows and doors are closed for accurate radon measurement.
- 2. Connect the power cord to turn the device on.
- 3. Download and launch the Ecosense RadonEye app.



4. For Android users, notification for file access is required for exporting data and notification for location access is required when Bluetooth is in use. Tap "Allow" when prompted with messages such as "Allow RADONEYE to access photos, media, and files on your device?" and "Allow RADONEYE to access this device's location?"



5. Turn Bluetooth on to pair your phone with RADONEYE. After pairing, your RADONEYE stays paired until you unpair RADONEYE.



6. The values of current measurements will be displayed in 10-minute intervals and an average value will be logged every 60 minutes into your app. When the measured result is greater than the 4pCi/L (148Bq/m) EPA action radon level, an alarm will sound if it is enabled.

#### How to save data

- 1. Please click the "DATA" tab.
- 2. Click the chart area to load data from the device.
- 3. Click the "Save Current Log Data" button to save the data.
- 4. Name the file and click "Save".
- Click "Yes" to open the data or click "No" to save the data to the app. The saved data can be found later in the "Saved Log Data" menu.
- Click the Export button in the upper right corner and select the desired export option. (Email, message, local folder, note, etc.)



#### **Technical Specifications**

Radon Sensor: Pulsed ionization chamber Radon Sensitivity: 30 CPH (Counts Per Hour) per 1 pCi/L Radon Accuracy/Precision: < ±10% at 10 pCi/L after 10 hours Radon Measurement Rate: Every 10 minutes Radon Measurement Result: 60 minutes moving average Measurement Range: 0.2 ~ 99.9 pCi/L (7~3,700 Bq/m<sup>3</sup>) Connectivity: Bluetooth Radon Alarm: Integrated audio alarm (configurable to set radon level) Radon Level Visual Indicator: OLED display Power Supply: 12V, 1A, Extend DC adapter Data Storage Capacity: 1 year Operating Range: 32°F~104°F (0~40°C), RH < 80% Size: @80(mm) x 120(mm), 240g Operating System: iOS 13 and Android 5.0 or later

### **Ecosense Support**

RadonEye is based on a dual-channel pulsed ion chamber system with a highly accurate detection circuit. This innovative design delivers high sensitivity levels which allows for first reliable radon data in just 1 hour compared to 24 hours for other detection devices. (20 times faster than any other consumer electronic radon measurement devices.) In addition, the device provides a data logger, graphic display, and alarm setting to your mobile device via Bluetooth technology (mobile app).

We are happy to help and can be reached via email at:

support@ecosense.io

Monday - Fridays, 8am to 5pm Pacific Time Zone (Except holidays)

### Limited Warranty

Ecosense warrants that its products shall substantially conform to its product specifications and be free from defects in design, materials, and workmanship under normal use and service for which the products were designed, for a period of twelve (12) months. This period is calculated from the later of the date of purchase or delivery if ordered on the internet. However, the warranty period may vary depending on the region or supplier.

See www.ecosense.io/support or contact Ecosense support at support@ecosense.io for specific warranty and liability information relating to this product.

## Safety and Maintenance

The Ecosense RadonEye is intended for indoor use only. Avoid direct exposure to sunlight for long periods. Avoid exposure to direct heat sources. For correct usage, make sure the product is operating in the specified temperature range (see technical specifications).

Exposure to high humidity might permanently alter the product sensitivity or damage the product. Do not disassemble. If the product does not work as specified or you are in doubt, contact your local dealer or visit us at <u>ecosense.io</u>.

Use a dry cloth to clean the product.

Disposal: electronic equipment.

#### **RF Exposure Safety**

This product is a radio transmitter and receiver.

It is designed not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission.

The antenna must be installed and operated with minimum distance of 8 inches (20 cm) between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

English

### **Regulatory Compliance USA**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the Product.

This Product complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This Product may not cause harmful interference, and (2) this Product must accept any interference received, including interference that may cause undesired operation. This Product has been tested and found to comply with the limits for a 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 residential installation. This Product generates, uses and can radiate radio 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 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 or more of the following measures:

-Reorient or relocate the receiving antenna.

- -Increase the separation between the Product and receiver.
- -Connect the Product 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.

### EU Declaration of Conformity

FTLab co., LTD located at 503 ho, 8, 330 beon-gil, Haebong-ro, Ansan-si, Gyeonggi-do, Korea, hereby declares that this Product complies with the provisions of the Radio Equipment Directive (RED) 2014/53/EU and its amendment. The full text of the EU declaration of conformity is available at: <a href="https://www.link.ecosense.io/doc-rd200">www.link.ecosense.io/doc-rd200</a>.

Ecosense WEEE Reg. Nos.: DE13932546, FR281905\_05LXSZ