



EcoQube

User Guide

Ecosense

Introduction

At Ecosense, we are solely dedicated to developing innovative and highest performance radon gas monitoring solutions that ensure accurate and real-time reporting of indoor air safety levels for your family. Our real-time radon monitoring solution, EcoQube, integrates the latest high precision patented radon monitoring technology combined with wireless and cloud connectivity to deliver an easy to use, fast, highly accurate, compact, and affordable continuous radon monitoring solution.

In the box



EcoQube (x1)



Power cable (x1)



Power adapter (x1)

EcoQube Set Up

1. Connect the large end of power cable into the power adapter. Then plug the power adapter into an AC power supply.
2. Download and open the EcoQube app (Available in App store and Google play).
3. Register and create your account.
4. Follow instructions in the app.

EcoQube



Front View

LED Light

Shows current status of EcoQube.
Learn more on LED Light Color Guide.



Bottom View

QR Code

Scan the QR code to add new device.

Reset button

Device setting reset or Factory reset.
Learn more on LED Light Color Guide.

Air inlets

To allow air into EcoQube.

EcoQube App Overview

The EcoQube App connects with the intelligent EcoQube radon detector device. It gathers all data from the EcoQube detector device to be shared with your smartphone.



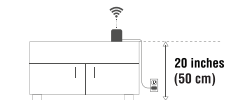
Menu

Radon level indication

Ecosense portal

Radon level historical chart

EcoQube Placement Guidelines



Make sure it's at the right height. Place EcoQube at least 20 inches (50cm) above the floor. Do not place EcoQube close to open windows or vents and keep it away from high heat, high humidity.

Find a spot with a good Wi-Fi signal. EcoQube uses Wi-Fi together with an internet connection to send information to your smartphone app.

Technical Specifications

Type	Pulsed Ion chamber
Radon sensitivity	30 cph(count per hour) per 1 pCi/L(37 Bq/m ³)
First reliable result	Within an hour
Accuracy/Precision (95% Confidence)	< ±10% at 10 pCi/L(370 Bq/m ³) after 10 hours
Data display update	10 minute interval (60 minutes moving average)
Operating temperature range	32°F–104°F (0–40°C), Relative Humidity < 80%
Measurement range	0.2 ~ 99.9 pCi/L (7~3,700 Bq/m ³)
Power supply	DC 5V, 200mA (5V 1A DC Adapter)
Dimensions	2.56 X 2.56 X 3.17 in. (65 X 65 X 80.5 mm)
Weight	0.243 Lbs (110g)
Connectivity	Wi-Fi 802.11b/g/n (2.4 GHz), Bluetooth v4.2

Maintenance

Reset to device settings: Resets Wi-Fi settings, alarm settings, and unit settings to default values.

1. Press button until LED goes off.
2. Keep holding the reset button for 5 seconds until the LED turns green.
3. Release the button.

Reset to factory settings: Resets to original manufacturer settings if device becomes unresponsive.

1. Press button until LED is off.
2. Press and hold the reset button for 5 seconds until the LED turns green.
3. Keep pressing and hold the reset button for more than 20 seconds until the LED turns orange.
4. Release the button.

Powering off











To switch off the EcoQube device, please remove the power cable from the back side.

Reset existing data

To erase all data on your account, you need to unregister the EcoQube by following the below steps. Go to All Devices and swipe left on the device name to show the Unregister menu.



EcoQube LED Light Color Guide

LED Light Status	EcoQube Status
 No light	No power to EcoQube.
 Flashing orange	EcoQube is in setup mode waiting to connect to a Wi-Fi network. LED light changes to solid green once setup is complete.
 Solid green	EcoQube is operational and connected to a Wi-Fi network. Detected radon level is within no action required range.
 Solid orange	EcoQube is operational and connected to a Wi-Fi network. Detected radon level is within consider fixing home range.
 Solid red	EcoQube is operational and connected to a Wi-Fi network. Detected radon level is within action required range.
 Flashing red	EcoQube is not able to connect to a Wi-Fi network.
 Flashing green	EcoQube is updating internal firmware.
 Reset mode preparation	While pressing and holding down the reset button, if the button is released within 5 secs, the reset mode shall be canceled and the LED light shall go back to its previous status.
 Device setting reset preparation	While pressing and holding down the reset button for 5 to 20 secs, upon releasing the button, the EcoQube device will only perform a reset to device settings.
 Factory reset preparation	While pressing and holding down the reset button for more than 20 secs, upon releasing the button, the EcoQube device will perform a reset to factory settings.

For more details, please visit us at <https://ecosense.io/user-guides>

Customer Support

We are happy to help, please visit us at <https://ecosense.io/support>
 For European customers, please contact <https://radonova.org/ecosense>



EcoQube

Regulatory Guide

Ecosense

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 the normal use and service for which the products were designed for a period of twelve (12) months, calculated from the later of the date of purchase or delivery if ordered on the internet. See www.ecosense.io/support for specific warranty and liability information relating to this Product.

Safety and Maintenance

The Ecosense EcoQube (‘Product’ or ‘product’) 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 in the User Guide or visit www.ecosense.io).

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, please contact your local dealer or visit us at www.ecosense.io.

Use a dry cloth to clean the Product.

Disposal: electronic equipment.

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 will not occur in a particular installation. If this Product does cause 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 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.

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 USA 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.

EU Declaration of Conformity

Hereby, Ecosense Inc., 1777 Hamilton Avenue, Suite 2180, San Jose, CA 95125, USA, declares that this Product is following the provisions of Radio Equipment Directive (RED) 2014/53/EU and its amendment. The full text of the EU declaration of conformity is available by contacting Ecosense support at support@ecosense.io.

Power Supply

The Product (Model EQ100) contains a power supply tested according to the following standards:
UL62368-1(for US adapter), EN62368-1(for EU adapter)

Model Description

EcoQube (Model: EQ100)
FCC ID: 2AC7Z-ESPWROOM32D
Model EQ100 includes Bluetooth and 802.11b/g/n (2.4GHz) Wi-Fi

ISM Frequency Bands and Output Power

Frequency Range:
2412MHz – 2462MHz (HT20) (Wi-Fi 802.11b/g/n)
2422MHz – 2452MHz (HT40) (Wi-Fi 802.11n)
2402MHz - 2480MHz (Bluetooth)
Output power:
<100mW (Wi-Fi)
<8mW (BLE)

