

ecoqube proTM

User Guide



Version 1.0

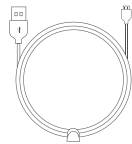
Introduction

EcoQube Pro is a palm-sized intelligent radon detector with outsized features. Ecosense's patented detection technology powers fast, accurate and reliable results. Robust wireless connectivity securely delivers the results and alert notifications straight to your smartphone. The EcoQube Pro is always monitoring to provide accurate radon levels. Keeping track of indoor radon levels is made easy and intuitive by having EcoQube Pro pair with a user-friendly smartphone app for set-up, configuration, and monitoring real-time levels.

In the box



EcoQube Pro

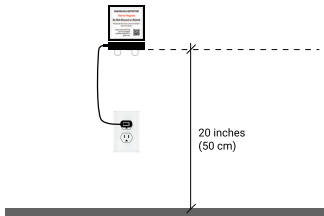


Power cable



Power adapter

EcoQube Pro Installation



Make sure its at the right height.

Place EcoQube Pro at least 20 inches above the floor. Do not place EcoQube Pro close to open windows or vents and keep it away from high heat, and high humidity.

To connect your device to a Wi-Fi network, find a spot with a good Wi-Fi signal. EcoQube Pro can use Wi-Fi together with an internet connection to send information to your smartphone app.

Install the device using adhesive tape:

Peel off the red liners and firmly press the adhesive onto the device. Ensure two pieces of adhesive are used for the device. Take off the back liners and situate the device at least 20 inches above the floor.

Proceed to fix it onto an interior the wall.

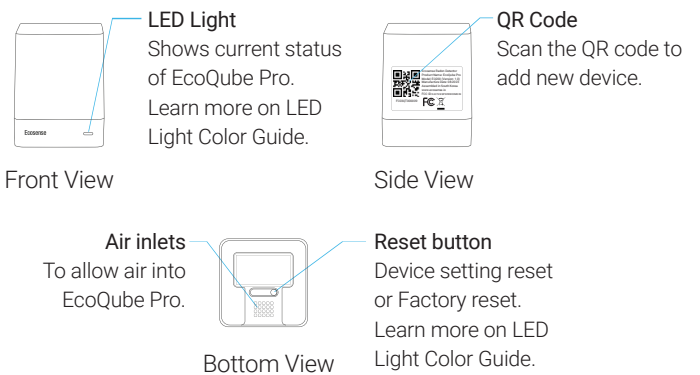
Uninstall the device (After testing is done):

Never pull away from the wall, stretch the strip slowly against the wall at least 15 inches to release.

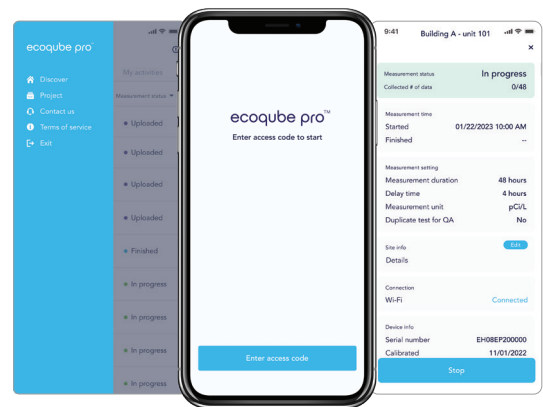
EcoQube Pro Set Up

1. Connect the large end of the power cable (USB Type-A) into the power adapter. Then plug the power adapter into the 110V AC power outlet.
2. Create a new user account with a valid email address on the web dashboard.
3. Get the project access code by sending an invitation from the dashboard.
4. Download and open the EcoQube Pro app.
5. Open the app and enter access code to start the test.

EcoQube Pro



EcoQube Pro App Overview



EcoQube Pro app connects with the EcoQube Pro radon detector device via Bluetooth. It provides all the configurations for devices such as site information, measurement settings, connectivity, and other notes. And it shows the test status and all the configurations. Also it gathers all information and data from the EcoQube Pro to be shared with your smartphone.

EcoQube Pro Operation Guideline

Start a new project (by project manager)

1. Go to the EcoQube Pro web dashboard and create a company account.
2. Create a new project on the web dashboard, providing necessary project details, property, and client information.
3. Send an invitation to the tester.

Start and finish the test (by field tester)

1. Obtain project instructions and the project access code through email.
2. Install the EcoQube Pro app and use the access code to access the project.
3. Link a new device either by scanning the QR code or connecting via Bluetooth Low Energy (BLE).
4. Configure device settings and connect to a Wi-Fi network. Alternatively, you can skip Wi-Fi connection. If the device is linked to a Wi-Fi network, data will be uploaded to the server on an hourly basis.
5. Click on the "Start" button to start a new test.
6. Stop the test by connecting the device through BLE and upload the data to the server. If the device is connected to the Wi-Fi network, the test will be finished and the test result uploaded to the server automatically.

Generate the report (by project manager)

1. Go to the EcoQube Pro web dashboard and review the uploaded test results.
2. Choose the tests and download the radon report in PDF format.

Reset to device settings and stored data: This action will revert the Wi-Fi and unit settings back to their default values. Please note that all stored data will be erased.

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 the 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 Pro device, please remove the power cable from the back side.

EcoQube Pro LED Light Color Guide

LED Light Status	EcoQube Pro Status
 No light	No power to EcoQube Pro.
 Solid orange	EcoQube Pro is in setup mode waiting to connect.
 Flashing orange	While the EcoQube Pro is connected to the mobile app via BLE and configuring device settings. When setup is complete and you exit the screen, the LED indicator lights up green.
 Solid green	EcoQube Pro is operational and a test is in progress.
 Flashing green	EcoQube Pro has completed a test and is ready to retrieve test result.
 Flashing red	EcoQube Pro is updating internal firmware.
 Solid red	The EcoQube Pro has experienced a Wi-Fi connection error.
 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 Pro device will perform a reset to device settings and remove stored data.
 Factory reset preparation	While pressing and holding down the reset button for more than 20 secs, upon releasing the button, the EcoQube Pro device will perform a reset to factory settings.
 Solid multi-color	When an error has occurred in the sensor of EcoQube Pro.

EcoQube Pro 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

Radon Measurement Range: 0.18 ~ 255 pCi/L (7~9,435 Bq/m³)

Data Storage Capacity: Up to 96 data points

Delay Time Options: 0, 4, 12, 24 hours

Connectivity: Wi-Fi 802.11b/g/n (2.4 GHz), Bluetooth v4.2

Radon Level Visual Indicator: 3 - color LED on front side

Power Supply: 5V, 1A, Extend DC adapter

Weight: 0.243 lbs (110g)

Operating Temp Range: 32°F~104°F (0~40°C), Relative Humidity < 80%

Dimensions: 2.56 X 2.56 X 3.17 in. (65 X 65 X 80.5 mm)

Weight: 0.243 Lbs (110g)

For more details, please contact us at

support@ecosense.io

Customer Support

We are happy to help, please visit us at

<https://ecosense.io/support>

Regulatory Guide

Limited Warranty for EcoQube Pro Lease Program

Overview

This Limited Warranty is provided by Ecosense ("the Company") and covers certain aspects of the EcoQube Pro ("Product" or "product") leased under EcoQube Pro Lease Program ("the Program"). This warranty is only valid for the original lessee ("the Lessee") of the Product(s) or Property leased ("the Leased Product")

Coverage Period

This Limited Warranty covers the Leased Product for a period of [e.g., 12 months] from the date of the commencement of the lease agreement, unless otherwise stated in the individual lease contract.

What is Covered

This Limited Warranty covers all mechanical and electrical faults of the Leased Product occurring through normal use of the product. The Company, at its sole discretion, will repair or replace the faulty product or component at no charge to the Lessee.

What is Not Covered

This Limited Warranty does not cover damage to the Leased Product resulting from misuse, abuse, accidents, unauthorized repair, modifications, natural disasters, etc., or any issues related to wear and tear, aesthetics, or cosmetic damages.

Claim Process

To make a warranty claim, the Lessee should contact the Company's customer service department via email or phone within the coverage period and provide a detailed explanation and evidence of the fault or issue.

Disclaimer

This Limited Warranty gives the Lessee specific legal rights, and the Lessee may also have other rights which vary from state to state. The Company does not assume any liability for consequential or incidental damages, so the above limitations or exclusions may not apply to the Lessee. This Limited Warranty is in lieu of all other express warranties. Any warranty of merchantability or fitness for a particular purpose is limited to the duration of this Limited Warranty.

Safety and Maintenance

The Ecosense EcoQube Pro ('Product' or 'product') is intended for indoor use only. Avoid direct exposure to sunlight for long periods of time. 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 a 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.

Power Supply

The Product (Model EQ200) contains a power supply tested according to the following standards: UL62368-1 (for US adapter)

Model Description

EcoQube Pro (Model: EQ200)

FCC ID: 2AC7Z-ESP32WROOM32E

Model EQ200 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)