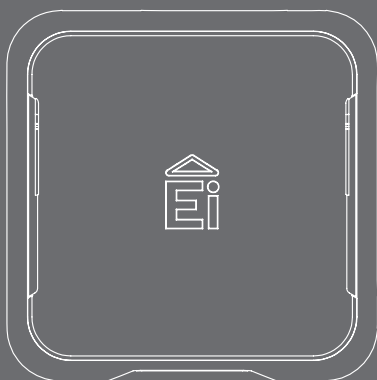




Radon Sensor

Ei1030

Installation Manual

Read and retain carefully for as long as the product is being used. It contains vital information on the installation of this product. This manual should be regarded as part of the product.

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Radon Background

Radon is a naturally occurring radioactive gas that is colourless, odourless, and tasteless, making it undetectable without specialized instruments. It is produced from the decay of uranium found in soil, rock, and groundwater and is part of the uranium-238 decay chain. Radon can seep into buildings through cracks in floors, walls, and foundations, accumulating indoors where ventilation is limited. When inhaled, radon and its decay products emit alpha particles that can damage lung tissue, significantly increasing the risk of lung cancer over long-term exposure. Because of its health risks, radon testing and mitigation are essential in homes and workplaces.

Introduction

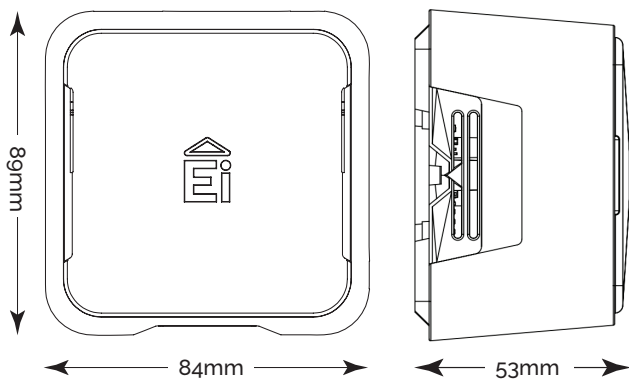
The Ei1030 Radon Sensor is for indoor use only. It measures Radon levels, temperature and humidity. It is wireless and powered by a non-replaceable lithium battery. Any data collected by the sensor is uploaded via the SmartLINK Gateway to a portal where the information is displayed.

The Radon Sensor must be installed in accordance with the instructions given in this manual.

Any use other than that described in this manual is seen as unintended use.

Please read the manual in full before installing the Radon Sensor.

Product Overview



Technical Specification

Power supply	3V Lithium Battery (non-replaceable)
Operational life	6 years
Radon Measurement Range	0 - 100 000 Bq/m ³
Radon Minimum Detectable Activity	25 Bq/m ³ at 1-hour integration time
RF frequency	868.2MHz band (1% duty cycle)
RF Range	>100 Metres in free air ¹
Receiver category	2
Typical RF power	8.1 dBm
Max RF power	+14 dBm
Data upload	Via the Ei1000G Gateway
Fixings	Supplied with screws, wall plugs and mounting bracket
Operating & Storage Temperature range	-10°C to 40°C
Operating & Storage Humidity range	15% to 95% Relative Humidity ² (non-condensing)
Dimensions	89mm x 84mm x 53mm
Weight	140g
Approvals	RF performance to EN 300 220-1 in accordance with EN 300 220-2 EMC performance to EN 301 489-1 in accordance with EN 301 489-3 Safety to EN 62368-1

1. Obstructions of any sort will result in a reduction in range from the free space specification. The range may vary depending on installation.
2. Temperature and humidity conditions are for normal operation and storage. Units will function outside these ranges as required by the specific product Standards. Extended exposure to conditions outside these ranges can reduce product life. For advice on prolonged operation outside these ranges consult the manufacturer.

Installation

IMPORTANT: A SmartLINK Gateway must be present and fully operational in the dwelling.

IMPORTANT: To install the Radon Sensor, you must have access to that Gateway in the SmartLINK app.

Location

Correct positioning of the Ei1030 is critical to achieve accurate measurement of radon concentrations.

The Ei1030 should be installed at breathing height in the most commonly lived-in area of the dwelling (e.g. living room, bedroom).

Do **NOT** install:

- Where it will be subject to moving air or draughts (e.g. air conditioning unit, windows, vents, fans etc...)
- Next to or directly above sources of Heat (such as cookers, heaters, etc...)
- In areas where it may be exposed to water splashes, dripping or condensation (e.g. sink, above an electric kettle, etc...)
- In direct sunlight

Do NOT install in kitchens, bathrooms, laundry rooms, closets or unused spaces.

The Ei1030 radon sensor will need time to adjust to its location. Do NOT move the sensor to ensure data integrity.

Follow local guidance if readings exceed recommended levels.

Mounting

WARNING: to prevent injury, this device must be securely attached to the wall or ceiling in accordance with the installation instructions.

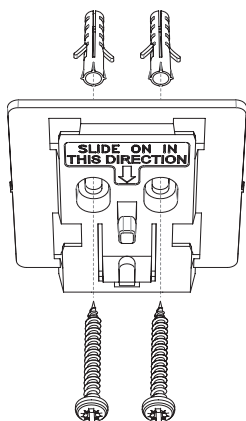


Figure 2

The Ei1030 radon sensor must be mounted rigidly to a vertical wall surface using the provided bracket & fasteners. The sensor shall be mounted with its air inlet(s) unobstructed. The wall surface should be structurally sound and free from excessive moisture or vibration. Remove the mounting bracket from the packaging.

Place the mounting bracket exactly where you want to mount the sensor. With a pencil, mark the location of the two screw holes.

Taking care to avoid any electrical wiring, drill holes using a 5.0mm drill bit through the centre of the marked locations. Push the plastic screw anchors provided into the drilled holes. Screw the mounting bracket to the wall/ceiling (see figure 2).

IMPORTANT: Make sure the mounting bracket is positioned so that the text is at the top.

Adding the Radon Sensor to the Gateway System

Open your SmartLINK App available to download from the Google Play or iTunes app store and simply follow the steps in the SmartLINK App.

RF Communication

Ei Electronics radio communication systems are very reliable and are tested to high standards. However, due to their low transmitting power and limited range (required by regulatory bodies) there are some limitations to be considered.

Receivers may be blocked by radio signals occurring on or near their operating frequencies.

The numbers of walls, ceilings and metal objects in the signal path can also reduce the strength of the signal.

If you get an error and the Radon Sensor does not register with the Gateway, try a different location. If the problem persists, please contact us at the nearest address at the end of this manual.

Guarantee

Ei Electronics/Aico guarantees this device for five years from the date of purchase against any defects that are due to faulty materials or workmanship.

This guarantee only applies to normal conditions of use and service and does not include damage resulting from accident, neglect, misuse, unauthorised dismantling, or contamination howsoever caused. This guarantee excludes batteries which have degraded due to external factors outside of reasonable use and/or Ei Electronics'/Aico's control. This guarantee also excludes incidental and consequential damage.

This guarantee does not apply to any device that has been modified in any way by a third party or has been fitted with a third party element.

Do not interfere with this device or attempt to tamper with it. This will invalidate the guarantee and may result in malfunction.

This guarantee is in addition to your statutory rights as a consumer.

If this device should become defective within the guarantee period, then contact us.

If you are advised to return your device to us, please ensure to separate it from the mounting bracket, place it in a padded box, with the proof of purchase and a note stating the nature of the fault.



Hereby, Ei Electronics declares that this Ei1030 Sensor is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. The Declaration of Conformity may be consulted at www.eielectronics.com/compliance

The crossed out wheellie bin symbol that is on your product indicates that this product should not be disposed of via the normal household waste stream. Proper disposal will prevent possible harm to the environment or to human health. When disposing of this product please separate it from other waste streams to ensure that it can be recycled in an environmentally sound manner. For more details on collection and proper disposal, please contact your local government office or the retailer where you purchased this product.



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