



# HomeLINK® Environmental Sensors

## IoT Integration for Social Landlords





Aico, an Ei Company, are the European market leader in home life safety, pioneering new technologies and offering high quality alarms, developed and manufactured in Ireland. All Aico alarms meet UK standards and offer a variety of sensor types to guarantee protection for every home, the cornerstone of which is delivering education, quality, service and innovation. In 2020, Aico expanded their Connected Home offering with the acquisition of leading Internet of Things (IoT) solutions provider, HomeLINK.

HomeLINK is a multi-award-winning, high-tech business that leverages cutting edge smart home integration and analytics technologies, to address the needs of social landlords and their residents. Their team has industry leading expertise in artificial intelligence and the Internet of Things (IoT), software development and integration and a track record of helping landlords reduce operating costs and carbon emissions whilst improving their residents' wellbeing and safety.

an  Company

The Ei logo is a red square containing the letters 'Ei' in white, with a white house icon above the 'i'.

# What is an Environmental Sensor?

Discreet and secure, our Environmental Sensors are placed throughout the home to monitor temperature, humidity and Carbon Dioxide (CO<sub>2</sub>), providing actionable insights into conditions such as mould risk, energy efficiency, ventilation, excess cold and heat and indoor air quality.

Data insight enables the creation of healthier, safer homes for residents through improved forecasting and maintenance of property conditions.



# Why Environmental Sensors?

An exciting innovation in home life safety, our Environmental Sensors have been designed to create better maintained, healthier and energy efficient homes.

Easy to install and manage, environmental sensors help to overcome many challenges, from compliance and carbon footprint to mould risk and fuel poverty; adding another dimension to resident safety, while helping landlords to meet their strategic goals.

Actionable insights on environmental conditions allow for preventative measures and proactive maintenance, enabling landlords to adhere to requirements outlined in Standards and Legislation, such as the Homes (Fitness for Human Habitation) Act 2018 and the Energy Efficiency Standard for Social Housing.

# How do Environmental Sensors work?



Gather data on indoor environmental conditions by installing Environmental Sensors in high-risk areas such as bathrooms, kitchens, bedrooms and living rooms.



Connected sensors across multiple properties will give millions of invaluable data readings. Advanced Machine Learning technology constantly interprets the data to provide clear, actionable insights which are available via the HomeLINK dashboard.



Designed with social landlords, our innovative portal provides the information landlords will value most, to optimise investment, identify and tackle fuel poverty, improve maintenance and deliver unrivalled service to residents.

# Where to Install Environmental Sensors



Innovative and minimalistic, Environmental Sensors can be placed discreetly in any room with minimal disruption for residents.

Some indoor areas are more susceptible to changes in indoor environmental conditions.



## **Bathroom**

A high-risk area for condensation, damp and mould due to high humidity and inadequate ventilation.



## **Kitchen**

A high-risk area for condensation, damp, mould and excess heat due to potentially limited ventilation and increased humidity from cooking.



## **Living Room**

Residents are likely to spend a lot of time here, increasing CO<sub>2</sub> levels from high occupancy and smoking.



## **Bedroom**

Residents spend a significant amount of time sleeping and it can be a risk area for allergens e.g. dust mites.

# Actionable Insights - Ei1020



**Temperature +  
Humidity**

**Ei1020**

- Condensation, Damp, Mould
- Energy Efficiency
- Excess Cold
- Excess Heat



# Actionable Insights - Ei1025



**Temperature +  
Humidity + CO<sub>2</sub>**

**Ei1025**

- Condensation, Damp, Mould
- Energy Efficiency
- Excess Cold
- Excess Heat

**Additional insights:**

- Indoor Air Quality
- Void Risk
- Ventilation
- Allergy Risk

# Features and Functions

**Environmental Sensors are designed to be low maintenance and easy to install and use for landlords and residents alike.**

- Two models with built-in temperature and humidity sensors; additional Carbon Dioxide sensor in Ei1025.
- 10-year lithium battery built in, meaning battery replacement is not required.
- Tamper-proof locking baseplate.
- Minimal design with no LEDs or sound, ensuring the system is unobtrusive and discreet.
- Automatic power on when slid onto the baseplate.
- Suitable for ceiling or wall mounting.
- Links to Aico's SmartLINK Gateway via Radio Frequency.

# Case Study

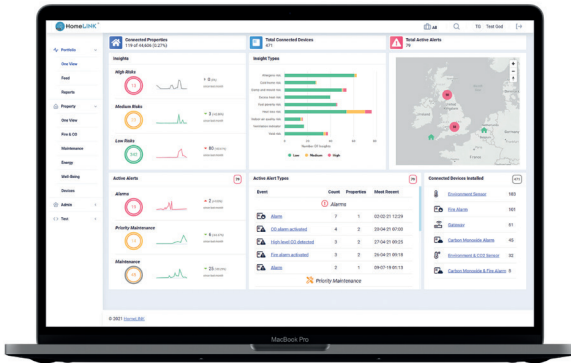
**Wolverhampton Homes recently deployed the Environmental Sensors across a portion of their housing stock and saw some striking results:**

- 19% improvement in ventilation. Better respiratory health. Better maintenance outcomes.
- Identified mould caused by structural and lifestyle issues.
- Identified homes with poorer thermal rating for potential investment.
- Reduction in damp and mould risk. Empowerment led to behaviour change; now 'low' risk across all properties.
- Highlighted a long-term unexpected property void.



# The Dashboard

Designed with social landlords, the analytics platform displays data insights via a holistic, user-friendly dashboard.



From Carbon Dioxide, energy efficiency and indoor air quality to mould risk, allergens and ventilation, there's a wealth of actionable insights available, segmented by high, medium and low risk. View top-level data on the main dashboard or drill down for deeper insights to tackle problems, maintain compliance and enable preventative strategies within housing stock.

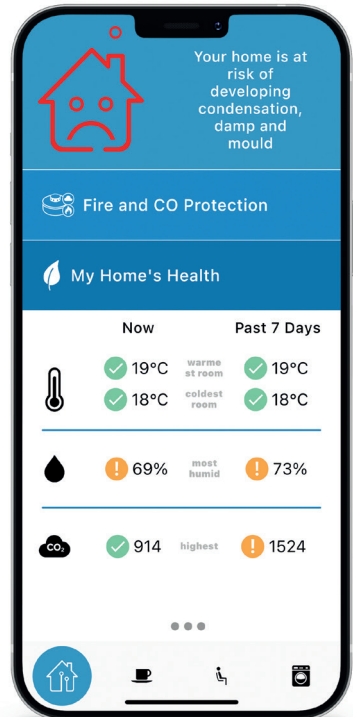
The HomeLINK Dashboard provides detailed property and portfolio views and is designed for multiple user roles.

# Empower Residents

By empowering residents with their data and personalised insights, landlords will see improvements in the maintenance and health of their stock with less intervention, while residents can save money by running their homes with energy efficiency in mind.

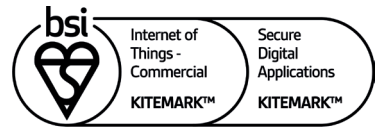
With the HomeLINK Resident App, residents are provided with a healthy home rating, temperature, humidity and CO<sub>2</sub> data and handy advice on the measures they can take to improve the quality of their home.

When Fire and Carbon Monoxide alarms are interlinked with the SmartLINK Gateway, the Resident App will notify residents with testing reminders and alarm activation events.



# Integration with the Ei1000G SmartLINK Gateway

The Environmental Sensors and Platform connect with Aico's Ei1000G SmartLINK Gateway; an innovative and award-winning system designed to monitor Fire and Carbon Monoxide alarm systems in real-time. The Ei1000G has recently received a BSI Kitemark for IoT, in recognition of its communications performance and security.



KM 735628

KM 763216

The SmartLINK App enables quick and easy installation of Environmental Sensors with advanced House Coding capabilities. Simply scan the associated QR code to capture the Environmental Sensors, while the Gateway automatically House Codes the units to wirelessly interconnect to the system.

Aico's SmartLINK Gateway is the central hub for your data, extracting information from both Fire and Carbon Monoxide alarm systems and Environmental Sensors. With all data in one place, landlords can benefit from increased efficiency and improved asset management.





## Education, Quality, Service & Innovation

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