

MOULD RISK STARTS BEFORE YOU CAN SEE IT.

The Future of Environmental Intelligence. This sensor detects early signs of mould risk. So you can act earlier.



THE OLD MODEL: REACTIVE & EXPENSIVE.

WAITING FOR TENANT REPORTS CREATES A CYCLE OF ESCALATING COSTS.

01



SURVEILLANCE: Reliance on sporadic device-based surveillance and manual inspections.

02



REMEDIATION: High costs for reactive cleaning and structural repairs.

03



DISRUPTION: Significant rehousing expenses during treatment.

04



LEGAL: Escalating legal costs and reputational risk from disrepair claims.

STOP THE DRAIN ON RESOURCES

Operating in a constant state of costly reaction simply formalises a cycle of repeating costs

01



BASIC MONITORS: Only guess at surface conditions while the wall rots.

02



TENANT REPORTS: Act as late-stage, high stress alarms. The damage is already severe.

03

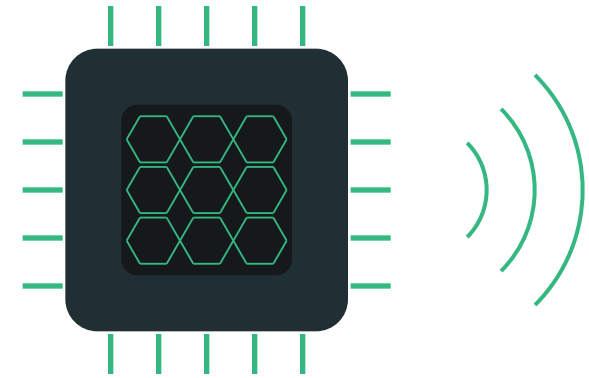


SURVEYORS/INSPECTORS: Reduce unnecessary call outs. Prioritise the homes that genuinely need investigation.

FIVE LAYERS OF INTELLIGENCE. ONE SMART SENSOR.

 A combination of hardware, nanoscience, and AI that makes the system far more powerful than the sum of its parts.

-  1. Room Air Temperature
-  2. Room Air Relative Humidity
-  3. Wall Moisture Detection
-  4. Graphene Nanosensor
-  5. AI & Actionable Insights



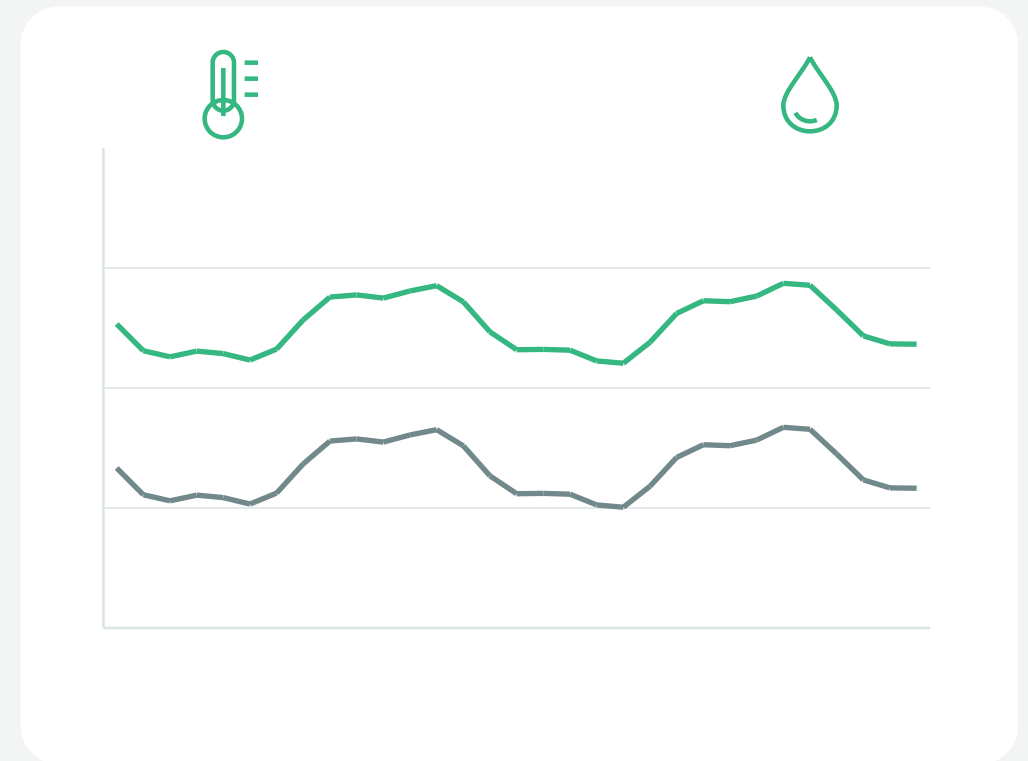
PRECISION ENVIRONMENTAL MONITORING



LAYERS 1 & 2: ESTABLISHING THE BASELINE (AIR TEMPERATURE & RELATIVE HUMIDITY)



Unlike manual spot checks, ArcAware Home is automatically checking the fundamental conditions of the room 24/7/365, establishing a baseline of data to understand what is 'normal' for your specific space. This creates a continuous timeline of environmental health rather than a momentary snapshot.

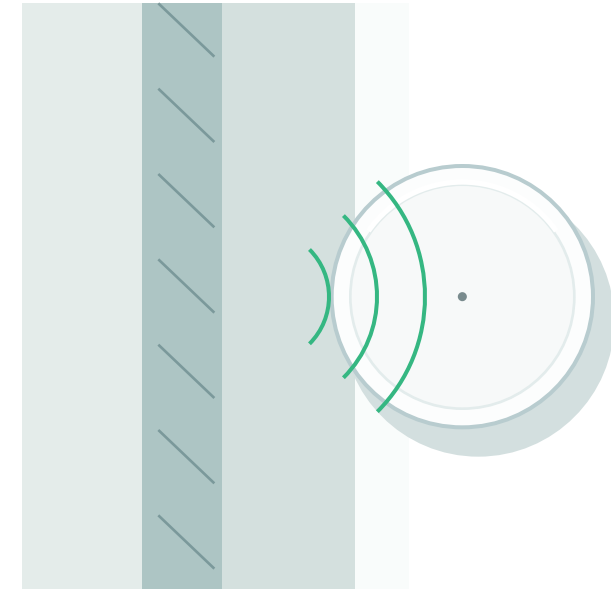


SEEING BEYOND THE SURFACE

💧 **LAYER 3: WALL MOISTURE DETECTION**

💧 Standard sensors only measure the air. ArcAware Home also measures moisture within the wall itself, helping show conditions that allow mould to take hold.

💧 **KEY INSIGHT:** By analyzing wall moisture trends over time, the system eliminates false positives caused by temporary events (like drying laundry indoors) and focuses purely on genuine structural risks.

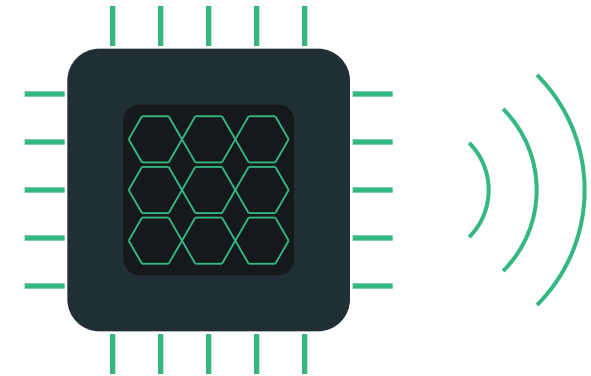


THE DIGITAL NOSE

LAYER 4: GRAPHENE NANOSENSOR TECHNOLOGY

 Our patented graphene nanosensor literally sniffs the air, detecting the unique VOC fingerprint that fungi release. This allows the detection of biological activity weeks before it becomes visible to the human eye.

 Detect mould, don't just guess based on non-specific humidity indicators.



ACTIONABLE INSIGHTS

LAYER 5:AI & ACTIONABLE INSIGHTS

 Data without context is just noise. Our AI model interprets the raw sensor data from the previous four layers to assign a property specific 'Mold Development Score'

 **KEY INSIGHT:** This turns complex environmental data into a simple Low/Medium/High risk alert, providing a clear heads-up when something isn't right and hasn't been right for a while.

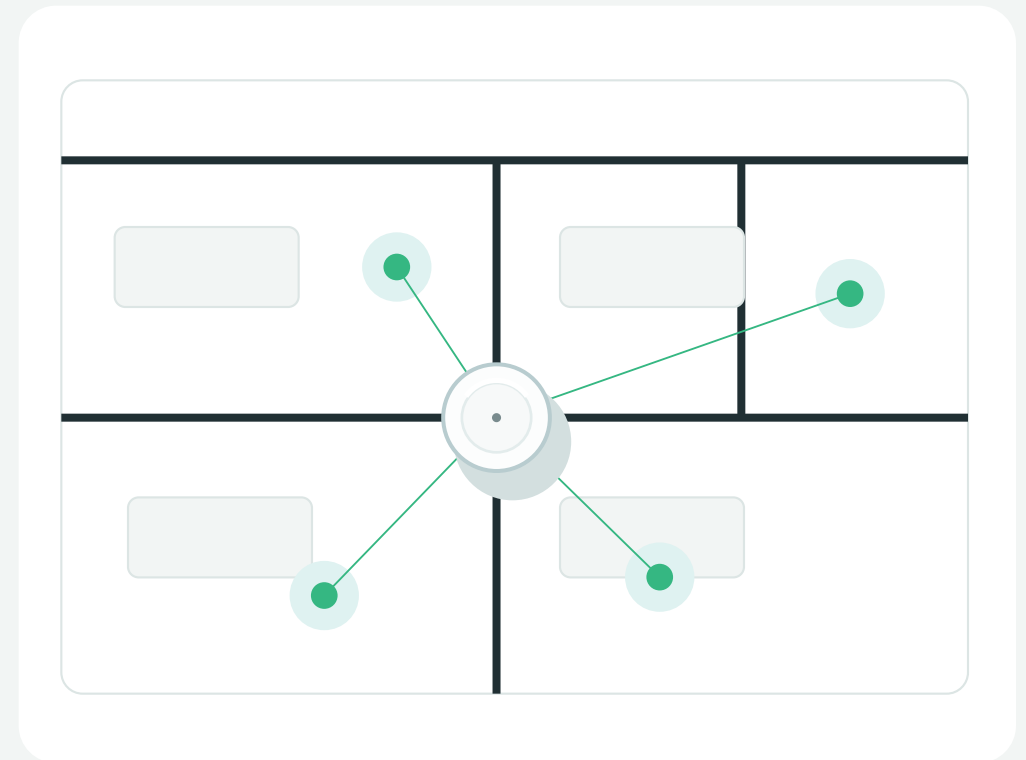
Low

Medium

High

WHOLE-HOME PROTECTION

-  **COMPREHENSIVE COVERAGE:** A typical setup involves 5- 10 devices per home (Bathrooms, Kitchen, Lounge, Bedrooms)
-  **MESH NETWORK RELIABILITY:** If a gateway fails, neighboring gateways take over the connection instantly to ensure no data loss.
-  **24/7 MONITORING:** Every room is monitored continuously, creating a complete environmental profile of the property.



COMPLETELY SELF-CONTAINED INTELLIGENCE

EVERY ARCAWARE HOME UNIT IS A TAMPER PROOF, AUTONOMOUS SMART SENSOR DESIGNED FOR SCALE.

01



ZERO WIRING: Peel & Stick installation.

02



ZERO WI-FI DEPENDENCY: Connects via 5G cellular network independent of tenant internet.

03



LONG LIFE: 3+ years battery life.

04

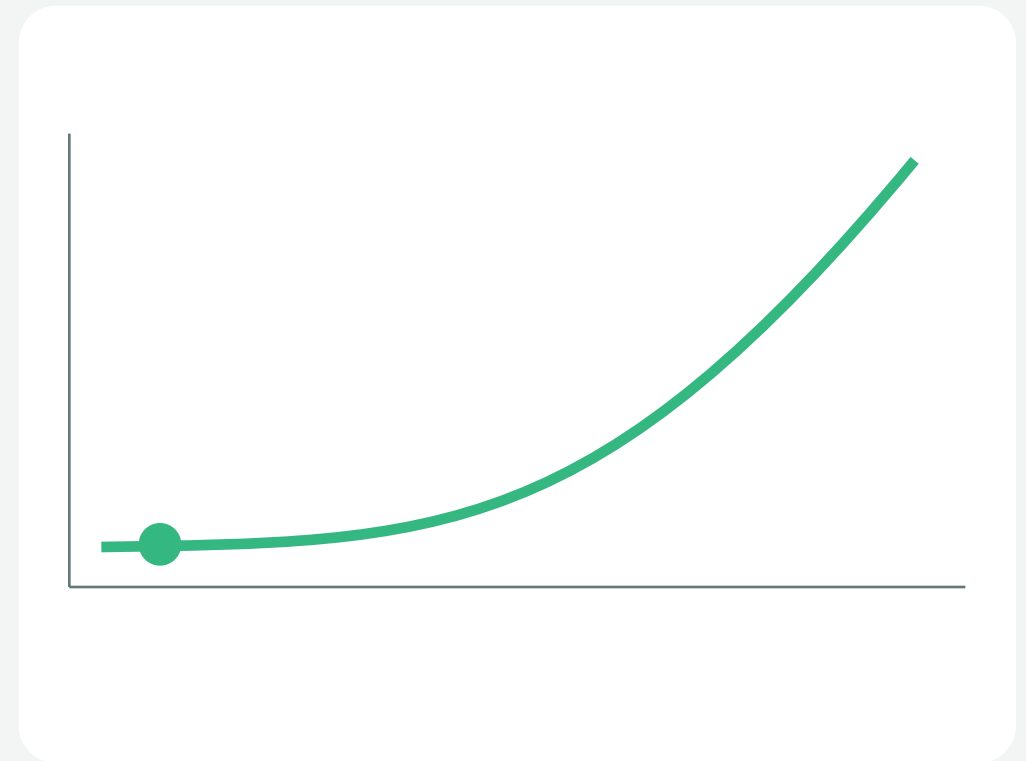


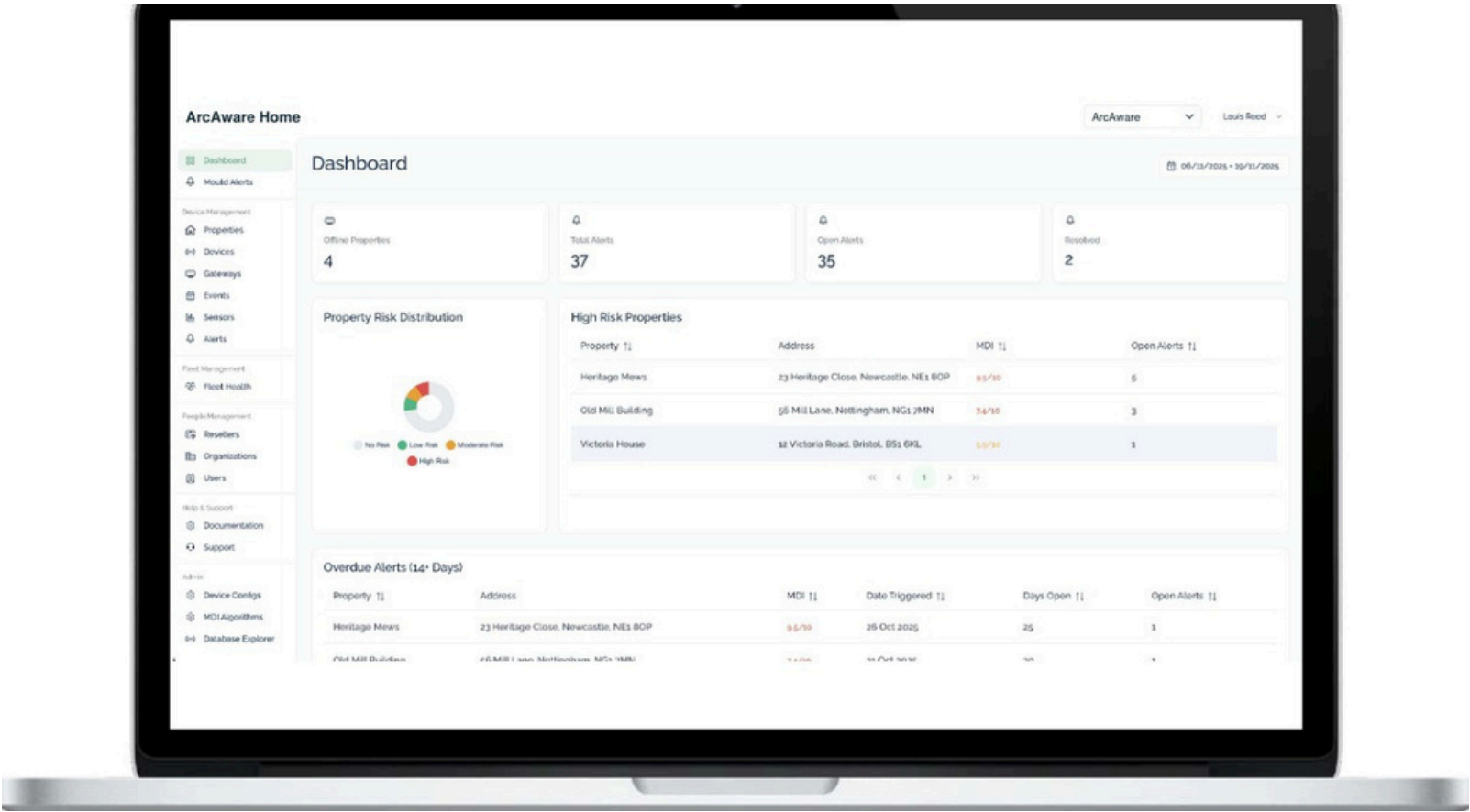
RESILIENT: Mesh network ensures no data loss even if a gateway fails.

BUYING TIME: PREVENTION VS DAMAGE

£ Reactive approaches wait for the 'Damage Phase', where remediation is expensive. ArcAware Home operates in the 'Prevention Phase'.

🔧 **Day 1 (ArcAware Home):** Mould Risk Warning. Simple fixes work.





THE EXPANDING ArcAware ECOSYSTEM.

01



NOW. SMART EARLY MOULD MONITORING. Patented graphene nanosensors detect risk weeks before visibility.

02



NOW: INTEGRATED WALL MOISTURE SENSING. Moisture sensors to track internal wall conditions.

03



FUTURE: NEXT-GEN MULTI-GAS EXPANSION. Future-proof architecture for seamless multi-gas detection.

NEXT GENERATION: COMPLETE AIR SAFETY

 **BEYOND MOULD:** A COMPREHENSIVE ENVIRONMENTAL SAFETY HUB.

 General Volatile Organic Compounds (VOCs)

 Microbial VOCs

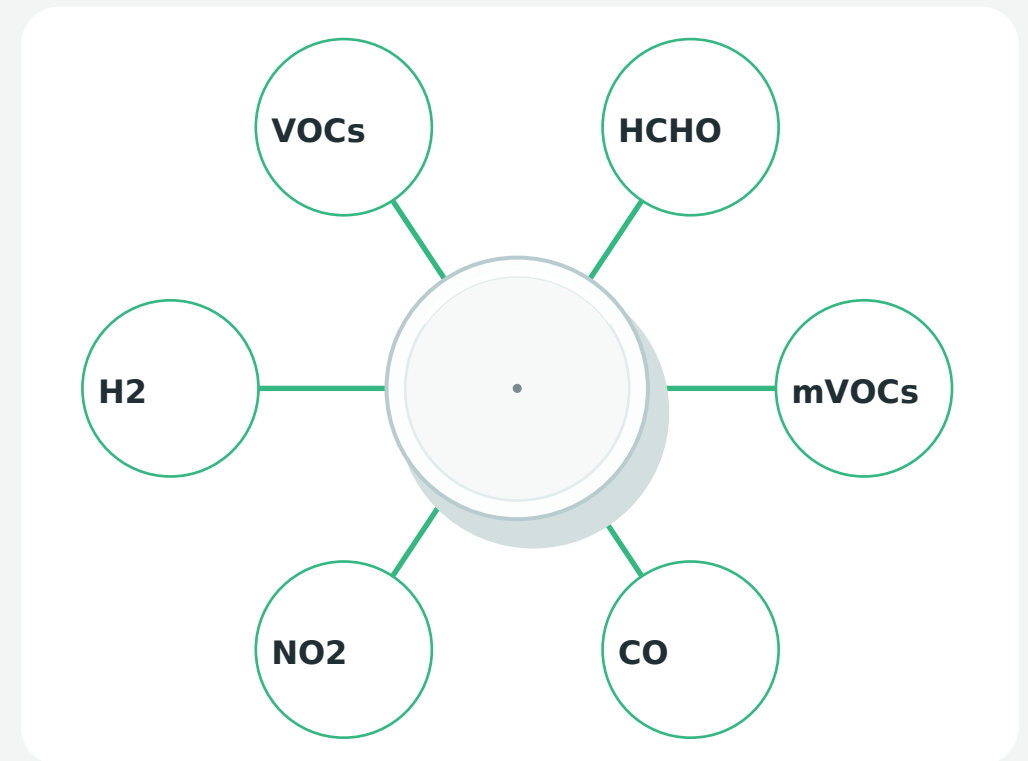
 Carbon Monoxide (CO)

 Nitrogen Dioxide (NO₂)

 Hydrogen (H₂)

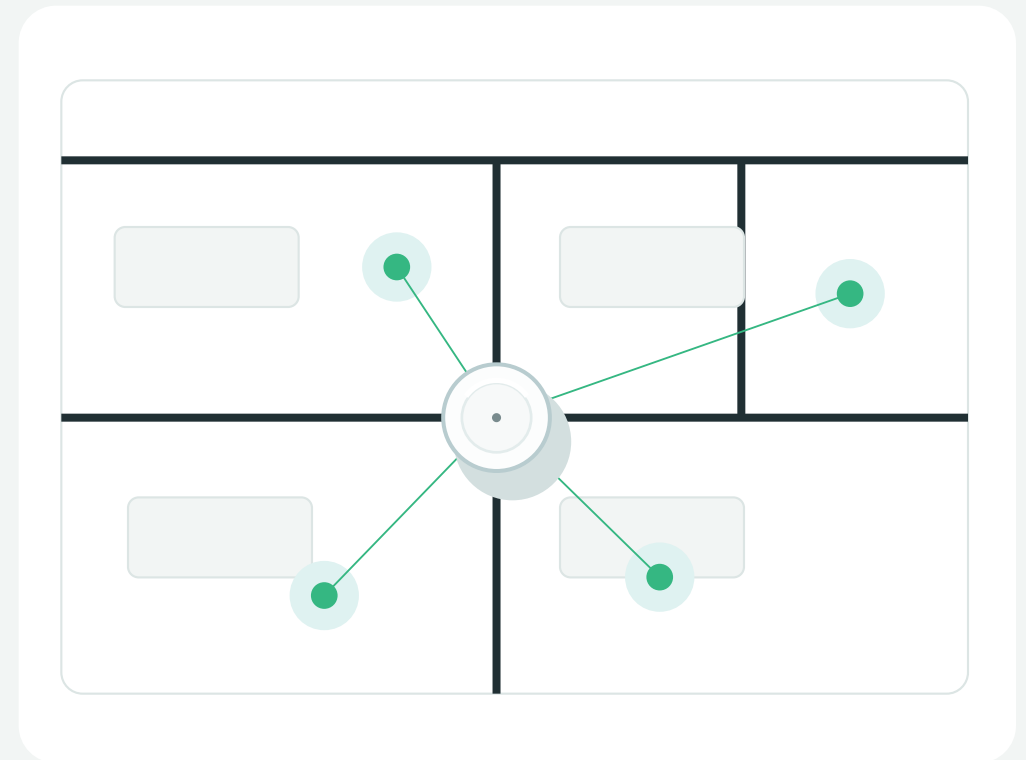
 Formaldehyde (HCHO)

 One unified platform evolving to protect tenant health and building assets.

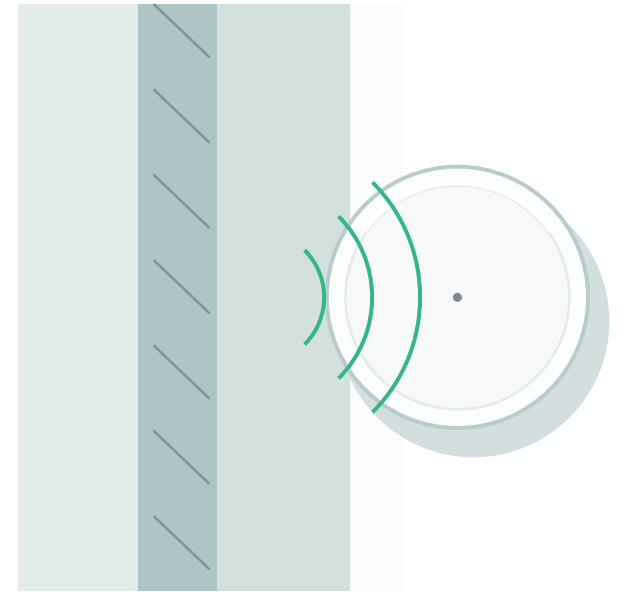
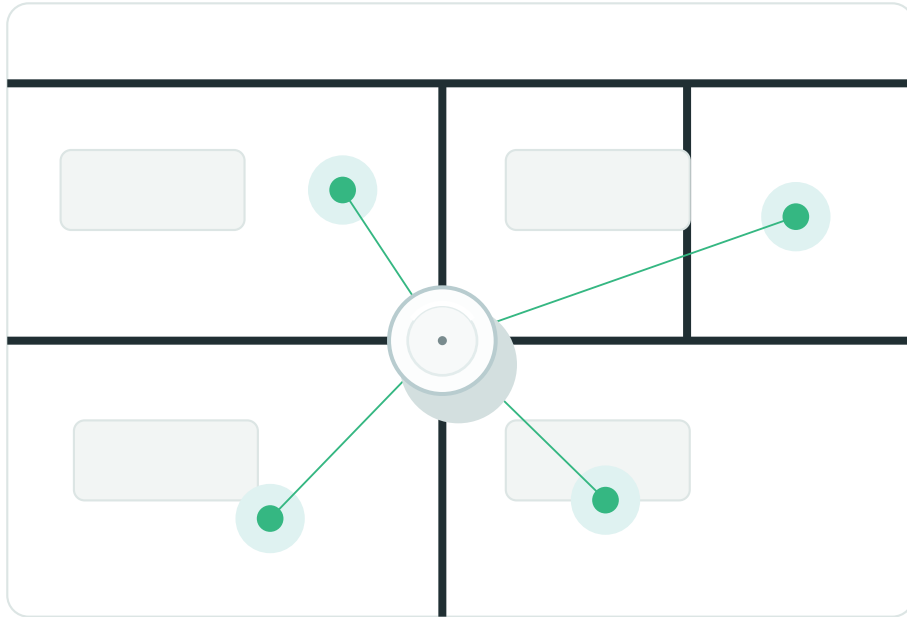


INNOVATION: MOISTURE STICKERS.

- 💧 Miniaturised Wall Moisture Technology.
- 🔍 GRANULARITY: Multiple readings per room monitoring corners, window reveals, and behind wardrobes simultaneously.
- 💧 THE NETWORK: Stickers communicate wirelessly with the main Arc Aware hub to create a high- fidelity, 3D moisture map of the property.

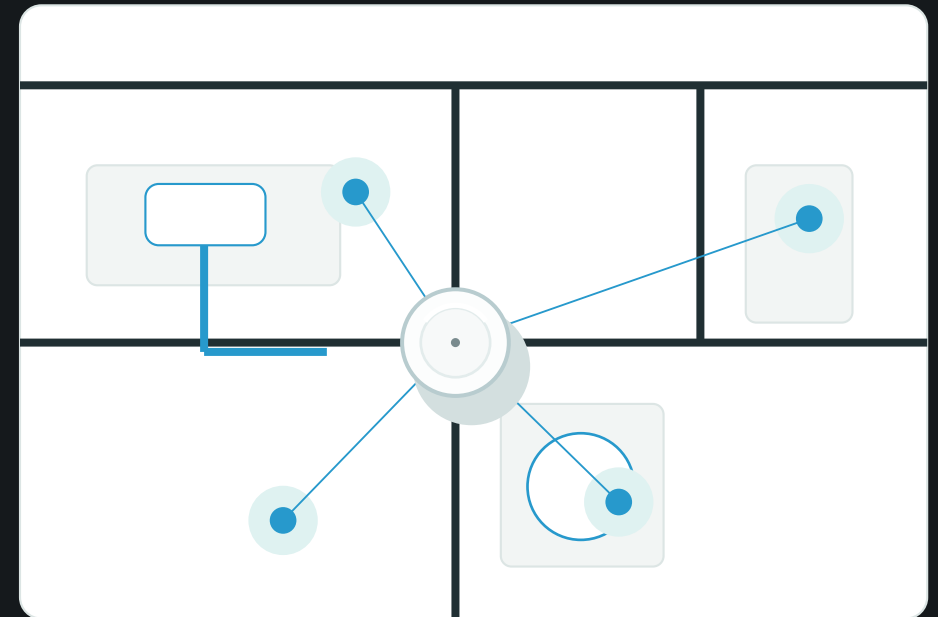


COMMON SENSE



EARLY LEAK DETECTION FOR BUILDINGS

Protecting property assets before water damage
starts **SMALL LEAKS CAUSE THE BIGGEST BUILDING
LOSSES**



THE HIDDEN COST OF WATER DAMAGE

Most leaks are discovered after damage has already occurred.

01



Water damage is one of the largest and most expensive risks in buildings.

02



Small leaks often go unnoticed for days or weeks.

03



Hidden leaks occur behind walls, under floors, or in service areas.

04



Repairs involve structural work, drying, redecorating, and operational downtime (such as hotel room closures).

FIND IT BEFORE YOU SEE IT.

01



Manual inspection: Infrequent, labour intensive, and consistently misses hidden leaks.

02



BASIC FLOOD SENSORS: Only detect standing water, triggering alerts long after the damage has already started.

03



Average water damage repair: £5,000 - £25,000

04



Cost to protect an entire apartment with ArcAware Leak: <£50 per year



ArcAware Leak

01

**DAMPNESS DETECTION:**

Identifies early moisture from slow plumbing leaks.
Differential detection.

02

**FLOOD EVENT DETECTION:**

Identifies standing water or sudden flood events.

03



ACOUSTIC SENSING: Listens for the acoustic signatures of active leaks.

04



ACCELEROMETER: Identifies leak vibration signatures.

05



AIR TEMPERATURE MONITORING: Identifies freezing conditions that can lead to burst pipes.

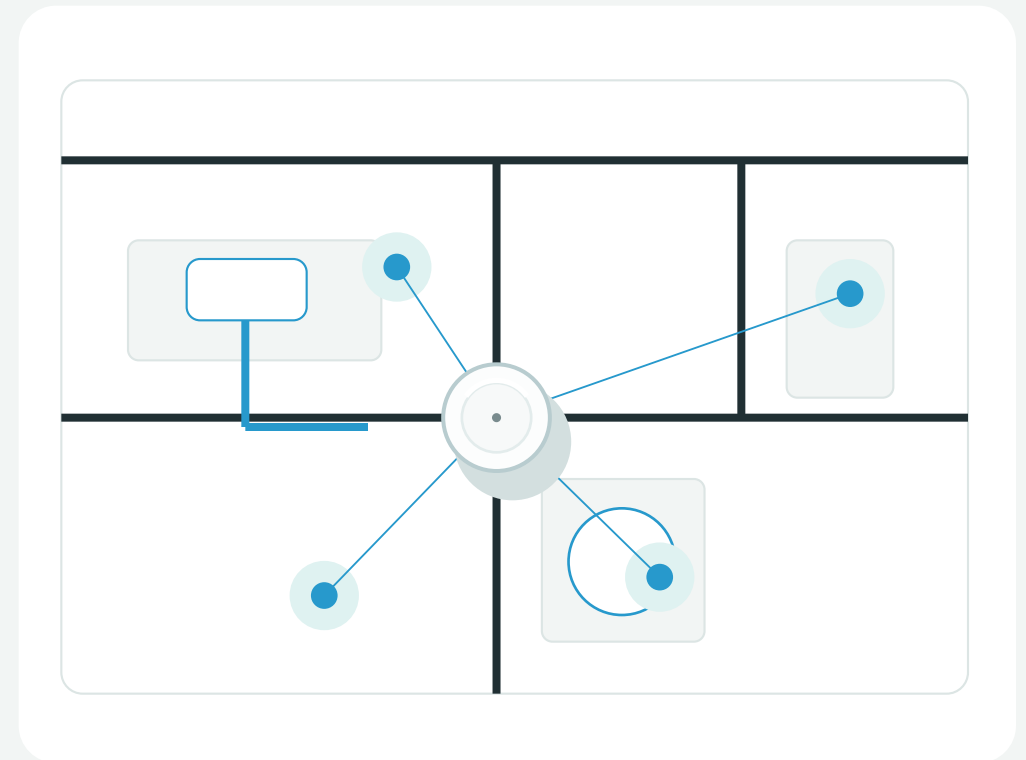
06

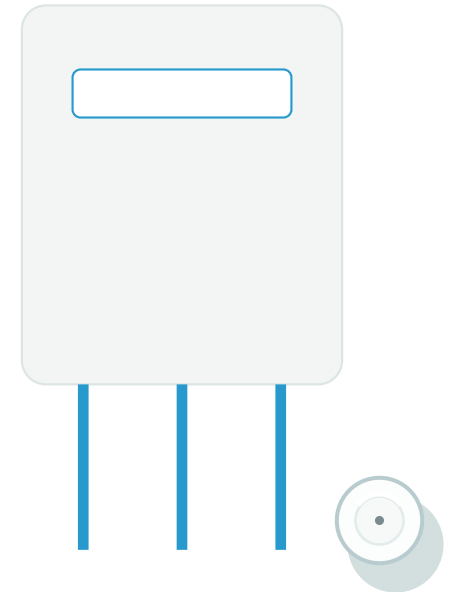
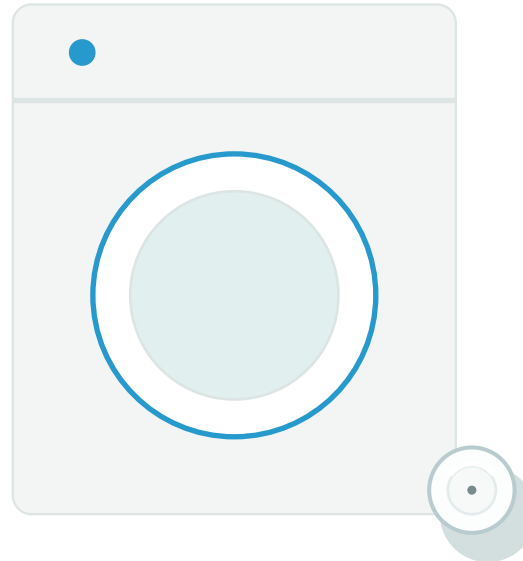
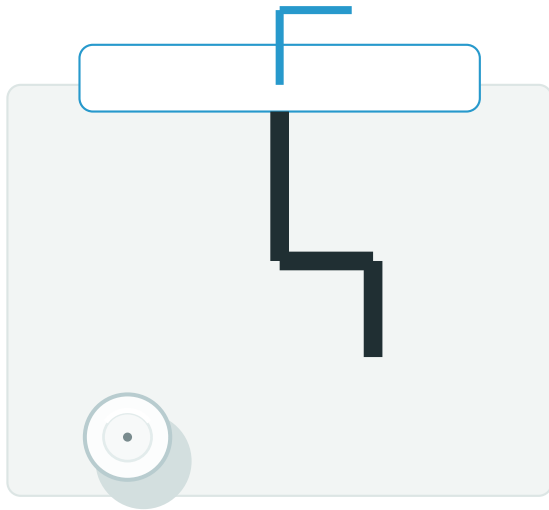
**HUMIDITY MONITORING:**

Detects rising humidity in enclosed spaces.

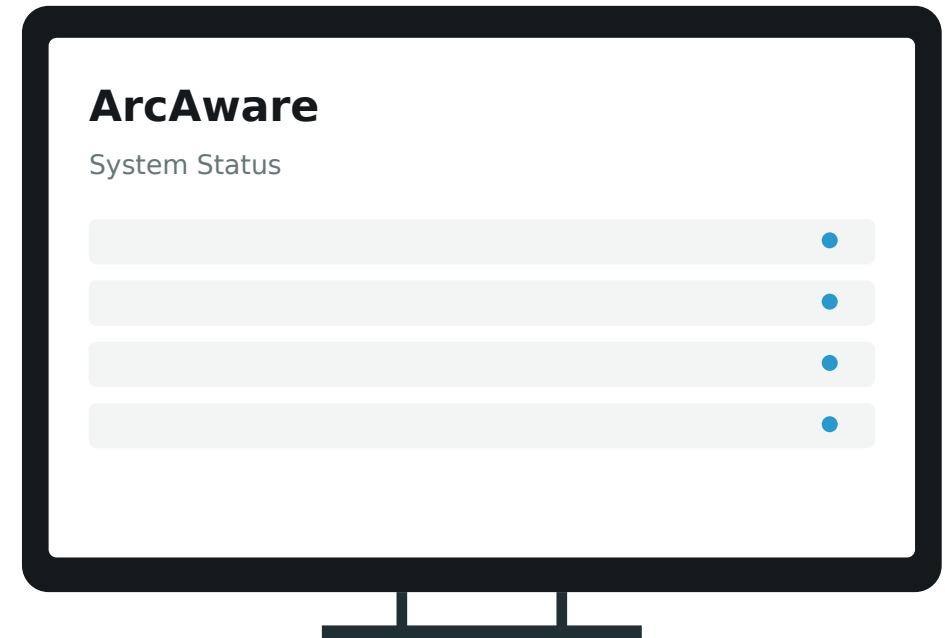
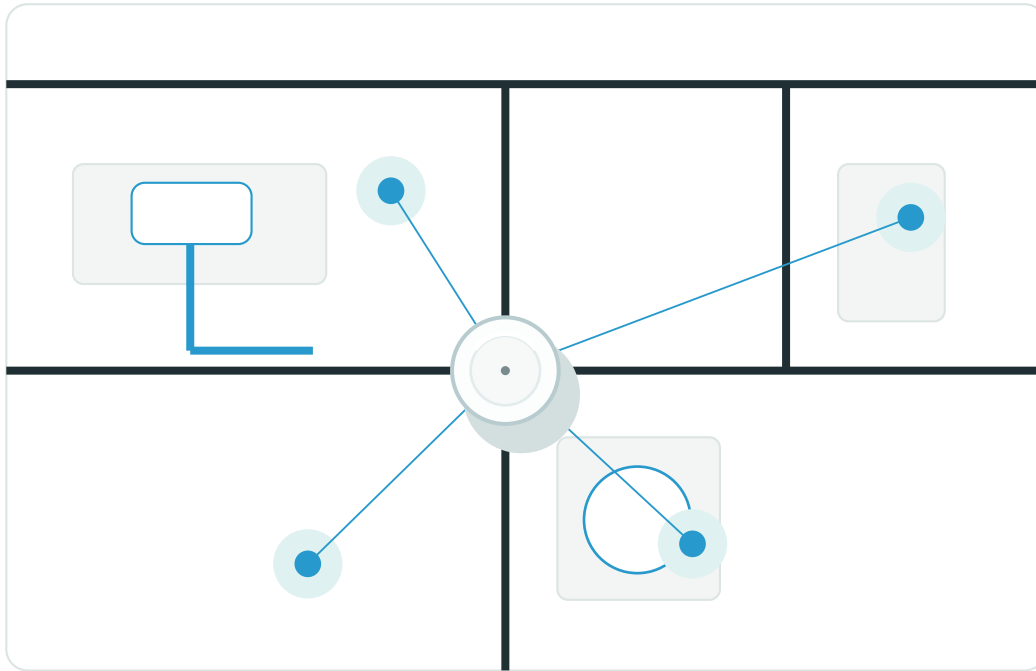
DESIGNED FOR REAL BUILDINGS.

-  Up to 10-year battery life
-  Compact sensor size easily places in tight spaces
-  Wireless connectivity (Wi-Fi or 5G cellular gateway)
-  Reliable operation with no plumbing modification required





 **Typical Locations:** Under sinks, behind washing machines, boiler cupboards, plant rooms, bathrooms, and service risers.



A NEW STANDARD IN PLUMBING PROTECTION.

FOR BUILDING OWNERS

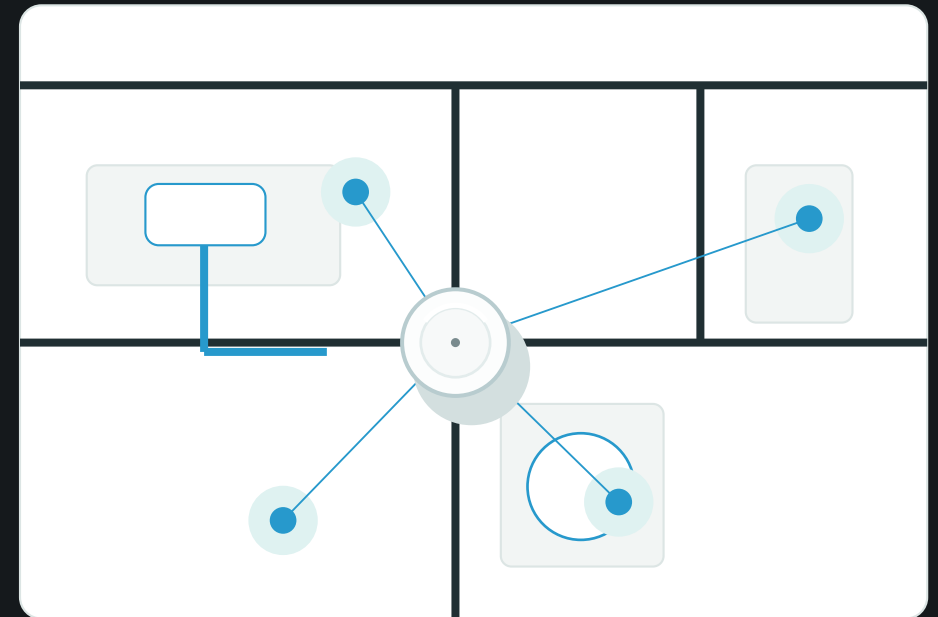
- **PREVENT COSTLY WATER DAMAGE:** Detect leaks early before major repair costs.
- **PROTECT PROPERTY ASSETS:** Avoid structural damage, mould, and tenant disruption.
- **IMPROVE OPERATIONAL VISIBILITY:** Monitor multiple properties from a single dashboard.
- **REDUCE INSURANCE EXPOSURE:** Potential reduction in claims and insurance costs.

FOR INSTALLERS & RETAILERS

- **HIGH-VOLUME CATEGORY:** Growing demand for smart leak protection.
- **EASY ADD-ON:** Integrates perfectly during appliance, boiler, or bathroom installations.
- **FAST INSTALLATION:** Works alongside existing plumbing infrastructure.
- **NEW REVENUE:** Opportunity for ongoing monitoring services.

PROTECT BUILDINGS BEFORE DAMAGE HAPPENS

Early leak detection is the most cost-effective form of building protection



STOP MOULD BEFORE IT STARTS.

ArcAware: Continuous Environmental Intelligence. Five layers of technology. Two new product innovations. One complete ecosystem. Partner with us to protect your tenants and your property assets.

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