ROCK COMPLIANCE

Remote Monitoring Solution

Our Objectives

Using simple monitoring solutions to automate manual tasks...

Save time

Thousands of engineer hours per year are saved, allowing them to focus on more skilled tasks

Reduce the cost of operation

Reduce the number of visits required per site from 12 per year to just two, saving call-out fees

Save energy

Save 000s of Ls per year in water per site, as well as gas from heating taps and excess carbon in car/van trips

Improve maintenance Asset longevity

Issues are identified as soon as they occur and allow for proactive, rather than reactive treatment

Peace of mind concerning compliance obligations

Increase your visibility on water and EML compliance a thousand times over

Monitor

Gather the key data from your operational systems to understand performance.

Analyse

Simple insightful presentation and analysis turn data into valuable information.

Improve

Resulting in lower carbon consumption, reduced costs and robust compliance.

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What solutions does this offering include?

Healthy Building System ™

Improve the health, well-being and satisfaction of building occupants.

- Air Quality
- Occupancy
- Smart Cleaning
- Water Safety
- Occupant Satisfaction
- Safety & Security

Smart Maintenance

24/7 remote monitoring to automate compliance, predict maintenance requirements and reduce risk.

- Pipe Monitoring
- Electricity Monitoring
- Cold Storage
- Emergency Lighting
- Mould, Damp & Leaks
- Predictive Maintenance

How it works

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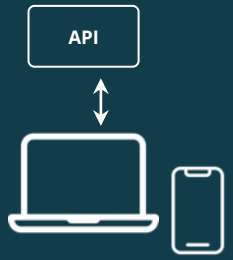
Discrete sensors

The world's smallest sensors take seconds to install, send data every 5 or 15 minutes and have a battery life of up to 15 years.

Cloud storage

Sensor data is received by cloud connectors over radio frequency and then sent to the cloud via secure cellular networks.



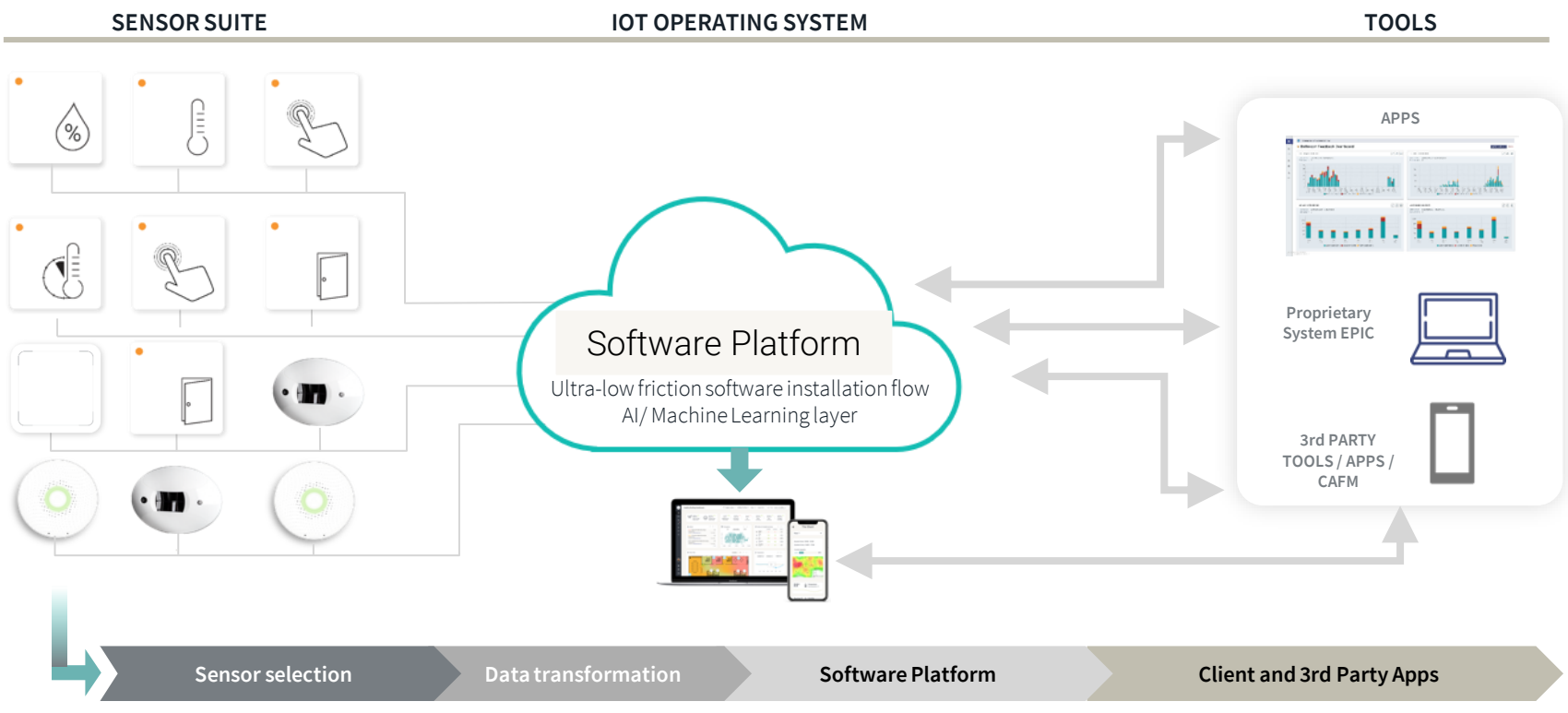
platform

Use your mobile or computer's web browser to visualize data and get powerful insights. Or send data to your systems with our API.

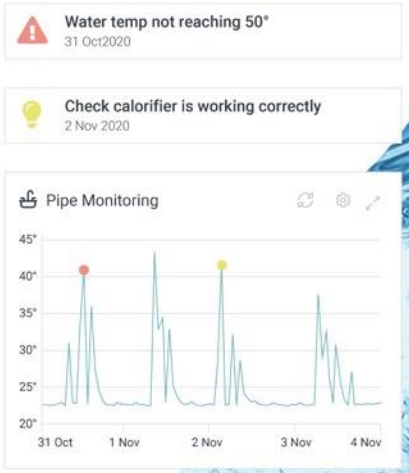
Reports & alerting

Notify your team to urgent matters with customizable sms and email alerts. Export and share your data with one-click reporting.

What is it?


SENSOR SUITE
IOT OPERATING SYSTEM
TOOLS
Software Platform
Ultra-low friction software installation flow
AI/ Machine Learning layer
APPS
Proprietary
System EPIC
3rd PARTY
TOOLS / APPS /
CAFM
Sensor selection
Data transformation
Software Platform
Client and 3rd Party Apps

Pipe Monitoring



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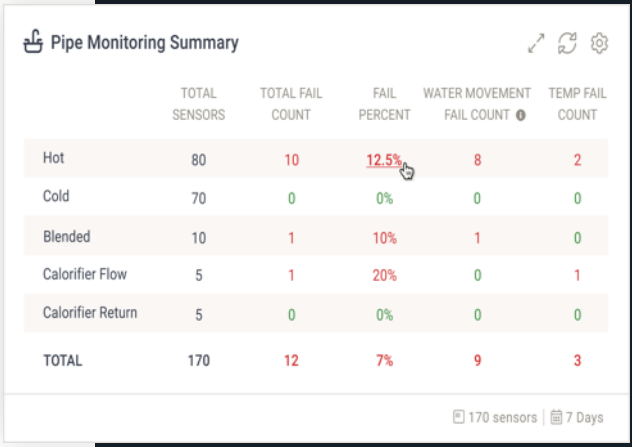
Introducing Pipe Monitoring

Automatically track water movement and temperature

Traditional Old Way	New Innovative Way
ENGINEER CALLED TO MANUALLY FLUSH EVERY TAP EACH MONTH (OR MORE OFTEN)	LIVE ALERTING SYSTEM TO ONLY FLUSH THE TAPS THAT NEED IT (TYPICALLY 2% OF ALL TAPS)
MANUAL TEMPERATURE CHECK	5 MINUTE READINGS DELIVERED 24/7, 365 DAYS A YEAR
MANUALLY GENERATE LEGIONELLA REPORT FOR COMPLIANCE	ONE CLICK REPORTING FOR LEGIONELLA COMPLIANCE
LIMITED INFORMATION ON CALORIFIER PERFORMANCE	ONGOING INSIGHTS AND PREVENTATIVE ALERTS E.G. UNEXPECTED DROPS IN TEMPERATURE



USE CASE

Pipe Monitoring (L8)

Automate legionella prevention and compliance. Monitor the movement and temperature of water to determine when pipes require flushing.

Increased efficiency: Automated reporting

24/7 monitoring is more reliable, consistent and efficient vs manual.

Reduced risk of bacterial growth

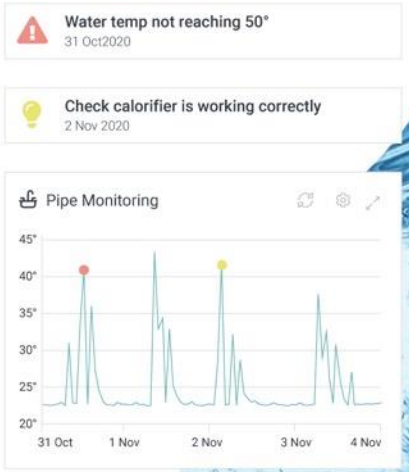
Protect employees by ensuring safety standards are met.

Cost reduction

91% reduction in engineer car trips.

Drive sustainability: Energy saving

Annual savings of >600 litres of water per tap and >2900 kg of carbon per building being eliminated.



Install in minutes

1.Install Cloud Connector

Plug socket only required, connects via mobile network (2G/3G/4G)

Range - 20-75m environment dependent, average c. 40m

1.Identify sensors

Identify sensors using QR code/touch/sensor ID
Name, configure and allocate sensors to buildings/floors at point of installation

1.Physically install

Bracket -> Sensor -> Thermal pad -> Cable tie

1.Apply Offsets

Take manual temperature reading (freshly calibrated probe essential) vs sensor reading

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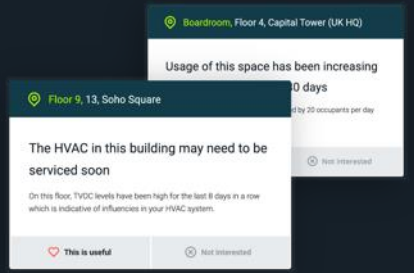
What's in it for you ?

Combine data sets for greater context

Overlay and compare different solution's data, such as IAQ and occupancy, to get full context and a true picture of what is happening across your estate.



Drive action with Automated AI insights

Building upon the vast data and contextual analysis, our AI generates automated insights to explain what is happening to help you make better decisions faster.

Benchmark building performance

Compare and rank the performance of every building in your estate to identify where to focus your efforts and lift the overall performance of your estate.

Report automation, alerting, and insights

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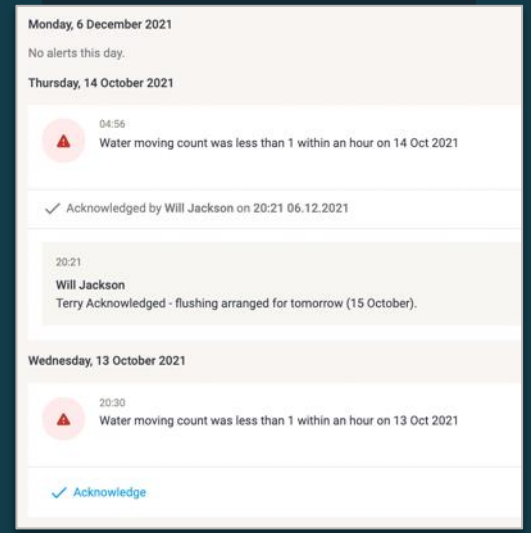
The dashboard shows a high level overview of outlet performance across an estate/building/floor

Pipe Monitoring Summary

	TOTAL SENSORS	TOTAL FAIL COUNT	FAIL PERCENT	WATER MOVEMENT FAIL COUNT	TEMP FAIL COUNT
Hot	80	10	12.5%	8	2
Cold	70	0	0%	0	0
Blended	10	1	10%	1	0
Calorifier Flow	5	1	20%	0	1
Calorifier Return	5	0	0%	0	0
TOTAL	170	12	7%	9	3

170 sensors | 7 Days

Alerts can be set for temperature or flushing conditions to direct engineers to issues/actions as soon as they arise



Reports mimic those currently being filled out by hand but are generated in seconds; can be stored in the Infogrid system

Simple, affordable, scalable

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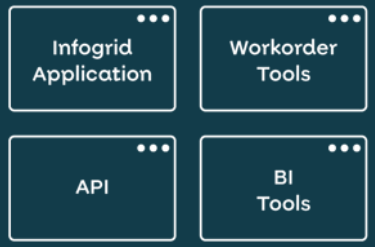
Sensor agnostic data

- ✓ We source the best sensor technology to collect the broadest set of building data.
- ✓ We've made installation simple so clients and 3rd party installers can self-serve at scale.



Access the data your way

- ✓ Access analysis, reporting and alerting via our platform.
- ✓ Integrate into your own systems for further analysis or to generate work orders.

Subscription-based pricing

- ✓ A flexible approach ensures pricing is tailored to only the solutions you require.
- ✓ Spread the cost over to gain greater value from your contract.

Across our <6K clients will have saved...

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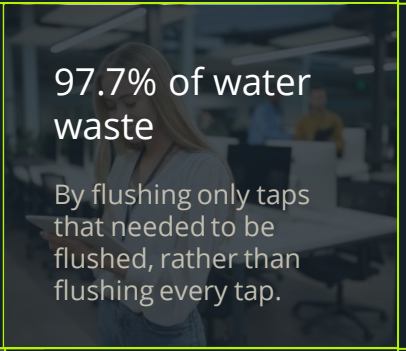
39 days per month

In flush time (traveling to and from the site and flushing each and every tap)

97.7% of water waste

By flushing only taps that needed to be flushed, rather than flushing every tap.



3 tonnes of carbon per building per year

On remote engineer car journeys

>600L of water saved per year, per tap

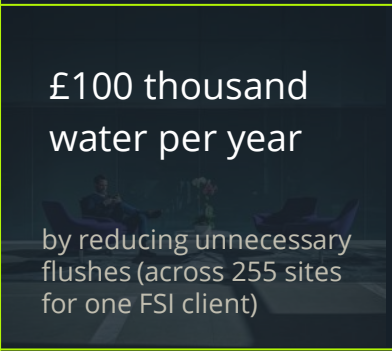
Reduced flushes, mean less water wasted

81% of labour time

By building engineers in filling out forms, taking temperatures and flushing taps

£100 thousand water per year

by reducing unnecessary flushes (across 255 sites for one FSI client)



Private Care Provider

Legionella risk management

Problem Solving

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THE CHALLENGE

Our client, a private care provider, has hundreds of branches across the country that require engineers to check for legionella bacteria. They are checking manually each month and recording by hand in a spreadsheet.

One particular site was of major concern having to constantly battle legionella positive results.

OUR SOLUTION

Pipe Monitoring Solution.

We implemented real-time monitoring from tiny wireless sensors to track temperature and water movement. Using our AI-powered Building Intelligence platform we enabled our client to track spikes in temperature change in real time, set alerts for irregular activity and easily download a monthly report.

Adding to the pipe monitoring solution we have our own healthcare specialist who understands the HTM and the estate.

RESULTS

- ✓ **Data was gathered enough to point to the temperature issues in return pipework**
- ✓ **Identified areas of thermal ingress due to a lack of insulation**
- ✓ **Proven manual test results were inaccurate.**

Additional discussion

- ✓ **4,455,642 litres of water** saved per annum
- ✓ **14,521 Kg CO2 saved** (heating water)
- ✓ **13,794 KwH saved** (heating water) per annum
- ✓ **>£100,000 in cost of water** and electricity savings p.a. to the client

What else we can measure?

Electricity

Appliance energy usage

Sub-metering

Smart meter readings

Occupancy

People entering / leaving

Desk occupancy

Room / cubicle occupancy

Heating

Ambient temperature

Water system temperature

Calorifier / boiler performance

Cold storage temperature

Sub-metering

Predictive Maintenance

Air Filters

Emergency Lighting

HVAC

Pumps & Equipment (Vibration)

Lighting & noise

Light levels

Noise levels

Emergency Lighting

Air quality

Radon

CO2

TVOCs

Humidity

PMs

Water

Water temperature

Water flow/ flushing

Drainage

Leaks

Feedback

Touch / presses (individual buttons or touch panels)

Waste**

Waste level / depth

Weight

Security

External doors

Fire doors

Windows

*** Emissions data** calculated either based on overall CO2 tonnage or gCO2eq/kWh

**** Trial stages**

Thank You

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