



<12
months
typical ROI

15+
years battery
life

The Internet of Things (IoT) is becoming more present in our every-day lives whether we know it or not, sensors and devices are all around us whether standalone or embedded within 'things' such as cars, mobiles laptops and kitchen appliances. It is now possible to take the optimisation of BeMS systems to a new level by utilising new and disruptive technologies. This gives us more tools and data in our arsenal to improve the way buildings are managed and ultimately optimised.

Sensors are becoming more advanced, smaller, cheaper and more practical for large scale roll-out, with applications that are only limited by your own imagination. By placing them in varied locations we can map such elements as buildings usage, occupancy and temperatures, behaviour, targeting low and high usage areas and anomalies in temperature but to mention a few.

Our complete sensing solution for simple, scalable IoT provides a small footprint and unobtrusive sensing with 15+ year battery life where all the devices self-configure to the cloud. These are highly reactive to the environment and occupancy, allowing instant adjustments and changes to be made with ongoing monitoring.

With fixed wiring systems sensors may not always be placed in the best place, due to convenience of cable runs, etc., and as a result not fully optimising assets and systems. We may also wish to move sensors around to address hot/cold spots or to improve comfort, well-being and ultimately occupant productivity. Such technology provides new insights that has never previously been available to building operators, landlords and occupiers.

This IoT technology creates new opportunities, applications and business cases to optimise facilities to the next level

By using IoT technologies, it is possible to optimise smaller or more isolated buildings, without major capital investment or disruption of hardwired systems. They come into their own in buildings of less than 50,000 sq.ft allowing for simple installation and a quicker payback period. When using this technology we are able to link smaller sites to larger BeMS systems and enabling estate wide optimisation.

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Key Benefits

-  Unlock value from data to enable smart decisions to be made
-  Optimise asset performance, lower operating costs while improving safety and occupant comfort
-  15+ Years battery life, 50-100m range, Self-configuring
-  Simple, non-intrusive installation
-  'Sensor as a Service' commercial model – minimal Capex required
-  Insights through customisable dashboards and analytics
-  Link data into other enterprise systems through API integration providing end-to-end solutions
-  Data can be integrated into BeMS via Optimised Buildings BACnet gateway

Smart Buildings

Buildings will become more intelligent at a local level, learning the behaviour of the occupants, reacting to their changing requirements. Systems will be linked and 'speak' to one-another, co-ordinating the intuitive learned information and taking onboard user intervention. Room booking systems will tell us when and what a room is to be used for and alter the environment accordingly.

The opportunities are immense and diverse for systems to be streamlined. Overall the technology will enable us to operate facilities more efficiently, deliver an improved working environment for the occupants, while meeting compliance and legislation requirements.

What we offer

We will work with you to find the right solution to maximise the value and business outcome for your needs. This will include understanding your business challenges to trials and development of the business case for a wider rollout. We provide the sensing technology, analytics portals, insights and integration to other applications where value can be derived from the data.

Once your solution is deployed we can also provide you a managed service to manage your sensors, data and insights as your service provider. Our deep knowledge of buildings, HVAC, controls, BeMS and integration means we are in a great place to help you develop your IoT aspirations and turn them into reality.



Application		Benefit
Commercial Offices	Monitoring temperature in problematic hot/cold spots	Occupant satisfaction/Reduced FM time/cost
	Greater HVAC control through better temperature sensing across a zone/floor	Occupant satisfaction/Reduced FM time/cost
	Monitor soap dispenser in washrooms and only have them refilled when empty	Occupant satisfaction/Reduced FM time/cost
	Understand space utilisation through sensors in chairs	Maximise space utilisation and minimise Opex
	Have cleaners empty waste paper bins that actually need emptying	Occupant satisfaction/Reduced FM time/cost
	Optimise energy consumption through better monitoring of temperatures	Reduce energy consumption/costs
	Temperature sensing for Legionella monitoring	Compliance Health & Safety
Retail	Monitor walk-in fridge/freezer doors and see the impact of them being left open	Reduce energy consumption/costs and improve quality
	Temperature sensing of standalone fridge cabinets	Compliance (HACCP) Customer Satisfaction
Hotels	Independent monitoring of guest room temperatures	Guest satisfaction and reduce energy consumption/costs
	Leak detection in bathrooms, avoiding significant losses/costs in refurbishment	Minimise financial losses/ Minimise insurance costs
	Monitor safe door - avoiding passports/valuables being left by guests	Guest Satisfaction Management Time
Healthcare	Blood/drug fridge monitoring	Minimise financial losses/Compliance
	Monitoring temperature in problematic hot/cold spots	Patient Satisfaction/Reduced FM time/cost



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DISRUPTIVE
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