

atamate



About Atamate

We are a team of **environmental**, **engineering** and **technology** specialists with significant experience as owners and operators in the construction and property infrastructure industries

Our Vision

Our vision is to be the first and obvious choice for building portfolio managers.

We lead the way. We revolutionise how it's done. Our pioneering technology **lowers carbon use**, **reduces running costs** and **creates comfortable environments** in buildings with minimal intervention.

Our Mission

Our mission is to make building management easy.

One simple install of our product **atBOS** and its innovative software transforms building management potential. It gives you a complete and detailed picture of a building and your portfolio, so you can monitor, control and remotely check occupancy levels and manage climate, natural ventilation, water, shading, door entry and more.

It's affordable, wireless, simple to install and can be retrofitted.

Our Values

Our values sum up the way we think, the way we act and what we do.



We are
Innovators
and tech
focused



We are
Driven by
quality



We are
Building
industry
experts and
understand
our customer

Our Story

We began developing our product, atBOS, to improve control systems for buildings. The options at the time were either very complex and expensive, or single service controls which lacked the capability to impact building performance. Our drive was to bring a holistic, affordable, simple and retrofittable solution, enabled by wireless mesh technology to the market.

We are confident
there is nothing else like atBOS on the market



I have built businesses that develop, build, sell and rent homes, offices and shops. My decades of experience in this industry has made me passionate about making buildings better.

There is so much more we can achieve through using the right technology in the most impactful way. **Our engineers are the very best at making our vision a reality** and we are extremely proud to be helping our customers achieve great things.



Joe Miles
Founder

We believe
buildings can be better

Based
in **Cardiff and**
Oxford

our innovative team develops and deploys intuitive products which meet business needs, are affordable and easy to deploy.

We know
what it takes

to deliver a great product for our customers. and care about our planet and the people in it - we want to make a difference.



Our Customers

We know what it takes to deliver a great **product** for our **customers**. We take great care to create intuitive products that have a high impact and give results.



McCARTHY STONE
Life, well lived

ESP | Empiric Student Property



DOWNING COLLEGE CAMBRIDGE

Loughborough University

EASTLEIGH BOROUGH COUNCIL

assura

Lighthouse

algeco®

UNIVERSITY OF BATH

LAING O'ROURKE

We are very proud to have many long-standing customers across the UK



Customer: Student Accommodation

Location: Edinburgh

Scope: 60 studio buildings

Challenge: Our customer wanted to reduce carbon consumption

Solution: We installed atBOS to

- Control lighting according to occupancy
- Monitor water supply and shut it off automatically if a leak is detected
- Control electric heating according to occupancy (with a boost button for users to select if they need more heat)
- Manage the ventilation according to the air quality

Results: We created a more comfortable living environment delivered by consuming significantly less energy.



Customer: Portable Accommodation

Location: Norwich

Scope: Portable 8 bay modular building

Challenge: Our customer wanted to save energy and create comfort

Solution: We installed atBOS to

- Monitor temperature, humidity, occupancy, ambient light and more
- Analyse the energy use per bay through adding metering units
- Control of electric heating

Results: Through monitoring the energy use alongside the actions of building users we gave a detailed and accurate picture of how performance could be improved. This along with the features installed has led to energy savings of around 35%.

Student Accommodation

Commercial Buildings

Healthcare

Education

Portable Accommodation

Residential



Introducing atBOS

atBOS helps buildings perform through **sensors**, **actuators** and **control software**. It gives users the ability to remotely monitor and control buildings.

atBOS enables building managers to check heating use, occupancy levels, water management, lighting and more, bringing everything to one place.

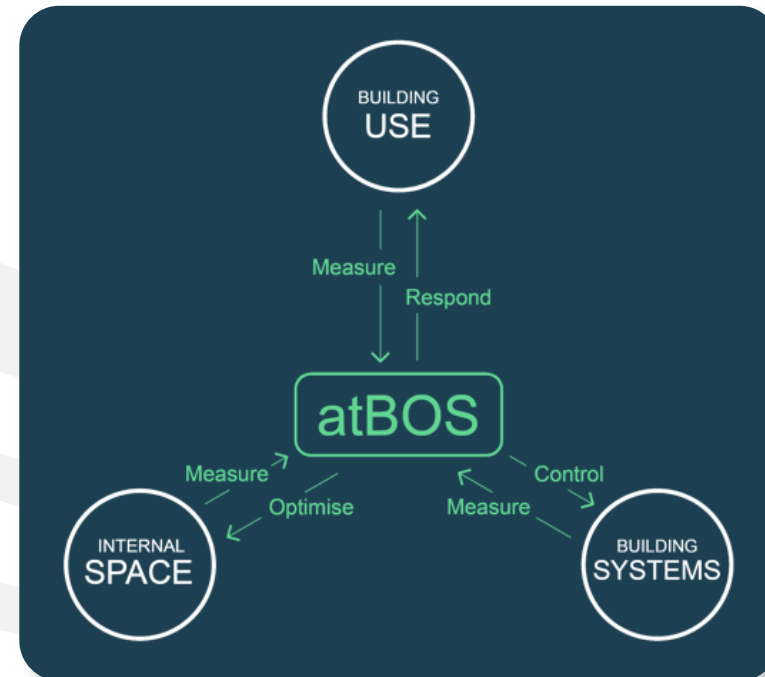
The data collected is transformed to intelligence by our software so users can better understand how to lower carbon, reduce running costs and create comfortable environments.

Best of all, it can even automate how the building is used so it's always working at its best with minimal intervention.

Made in Britain

All of our hardware is designed and manufactured in the UK, the software is developed by our in-house development team so that we can be responsive to your requirements.

A compelling alternative to building management systems that is affordable, can be retrofitted, is able to control all building services and is simple to use and maintain



atBOS is a digital platform that connects traditionally siloed building elements

atBOS Products

When you choose **atBOS** you get the latest hardware to install in your building, a wireless hub which communicates with our cutting-edge software and access to our latest and ever evolving suite of apps from your dashboard.



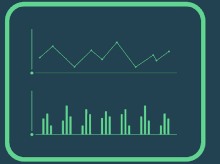
atBOS Devices

The hardware installed in your building.
Designed by us, made in the UK



Wireless Hub

To be placed in your building



Exclusive App Software

An exclusive suite of apps to monitor and control your building, set automations and alerts

Lower carbon

Clearly see how you can reduce carbon output and use control set points and automated triggers to make it happen.

Reduce running costs

Bring all your building management to the one system, spot arising problems before they happen, maximise efficiencies.

Create comfortable environments

Run buildings at their optimum levels to prevent issues, provide comfortable spaces for building users, monitor security and welfare.

It's a modular system
that can be built up as you need it



Why atBOS

It is a complete **eco-system** for the management and control of buildings, all-in-one simple and affordable solution.

Reduce energy consumption

Data will identify savings and atBOS control will take action. Occupancy based control ensures spaces are not heated, cooled or ventilated if unused, and equipment can be turned off out of hours.

Optermising the route to Net Zero

Collect fabric and building use data prior to replacing gas or oil boilers. Use this data to optimise fabric improvements, specification of appropriate mechanical systems, renewables and energy storage. Will result in lower capital costs, lower ongoing energy bills and higher user comfort.

Reduce operational cost

Opex savings are realised from reduced energy consumption and better maintenance information.

Provide healthier buildgings

Monitor and control indoor air quality, reducing sickness and improving users performance.

Increase security

Have alerts sent if the building is unexpectedly occupied. Remotely manage entry to a building through entry control.

Did you know?
Occupancy based heating can lead to
expected savings of around 25-30%

Increase comfort

Use automations to predict the users needs and provide a seamless experience. Such as setting an automation for warming up a meeting space when a particular door is activated.

Better asset / building management

Alerts will give real time notification to staff, building users or a CAFM system of any issues. Reactive maintenance will reduce costs and improve user experience.

Quicker response time

If a device fails on site an alert can be sent to nominated people for faster response times.

Wireless and easy to retrofit or extend

atBOS uses wireless mesh technology so there is no need to run additional cables. Making it simple to install.

Greater user experience

It enables you to control your building in a way that creates comfortable environments for those using it and makes it safer.

Modular

You can build up and add to your system at any time. Start with a few areas or a full building, or a few functions or them all - it's up to you.

Improved portfolio management

Extensive data collection and insight gives you a full picture of your building. Easy to understand dashboards gives rich intelligence that can be actioned to improve performance and set plans.



What atBOS Does

With our technology you can **lower carbon** and **reduce running costs** through being smart about how buildings operate, prevent issues before they arise, manage the environment and demonstrate that your building is **healthy and safe** for users.



Climate

Controls heating, ventilation and air conditioning systems in your building.

Putting you in control of providing optimal comfort whilst maximising energy savings. When linked to the monitoring systems, such as occupancy detection and air quality it can help to lower energy costs. The atBOS algorithms will also prevent issues caused by high humidity levels such as condensation, damp and mould.



Metering and Energy

Meter your electricity, gas, heat or water.

Providing real time information, you can see where and how energy is being used to inform reduction plans or increase comfort for building users. When linked to alerts, metering can also be used for early detection of maintenance issues, such as component failure.



Door Entry

Enables the electronic control of locks to doors and gates in your building.

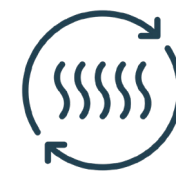
Giving you control of security and the ability to manage any failures or issues promptly. Access can be enabled through a PIN entry or using Near Field Communication (NFC). Simple to install, there is no control cabling or batteries and building users can retain key entry. For portfolio landlords, building users and visitors there are significant savings in time and management when there are no keys.



Water

Manages your hot and cold water supply.

Including metering, heating, secondary circulation, leak detection, legionella, pump control and maintenance reporting. Managing building safety and preventing any significant damage, it surfaces issues quickly and keeps running costs low.



Natural Ventilation

Gives you control of dampers and windows to manage natural ventilation. Providing healthy background air supply or passive cooling. It reduces the risk associated with opening and closing high level windows, keeping building users safe.



Lighting

Controls all types of lighting, dimmable switched and more.

Gives the ability to control depending upon occupancy and reacts to weather conditions to eliminate unnecessary use. Making buildings safer and more secure, lighting can also be linked to fire or security alarms.



Shading

Gives you intelligent control of blinds, shutters or curtains.

Reduces carbon consumption and prevents overheating in buildings. When automated it increases comfort and security, and safely manages hard to reach shading.



Monitoring

Collects information from sensors, meters and the operation of mechanical systems in your building. Combining building data with data from third parties, such as weather files, enables a full picture of how the building is being used and is performing.

All of the data can be used to automate actions and set alerts so your building can perform with minimal intervention

Analyse

Our software analyses the data to provide valuable insights and highlight where improvements can be made. From this you can put strategies and plans in place to improve the performance of your building.

Automate

Add bespoke automation to any device or data source in your building, giving you the power to focus on creating value where you wish to focus your efforts. The possibilities are endless. Create sequences such as turning heating off on exit and triggering shading on sunny days.

Alert

Set alerts to detect failures and trigger early warning issues direct to the people who need to know.

The atBOS Technology

Atamate was born out of a belief that **buildings should be better**, and that key to this is improved control and monitoring technology.

atBOS

A holistic, affordable and retrofittable solution, enabled by wireless mesh technology

atBOS is the Atamate Building Operating System.

It is a platform that connects our sensors and our hardware to our cloud software, which combined provides a totally integrated system that offers you data, analysis, automation and control – our system optimises the performance of your buildings.

It gives you the ability to remotely monitor and control your building. This means you can check the health and condition of your building by monitoring climate conditions, occupancy levels, improving the internal environment quality, water usage, lighting and more, bringing everything together under a single system.

The data collected is transformed to insights by our software so we can better analyse the data and understand how to lower carbon, reduce running energy costs and create comfortable environments.

The **atBOS** platform utilises a **Bluetooth™** Mesh communication network. This technology achieves the highest industry supported benchmark which is secure by design and allows high data rates to be transmitted wirelessly over ranges suitable to buildings. **This wireless Mesh significantly simplifies the installation of components because they do not require data cabling, only mains power.**

Data Security and Privacy

Atamate takes data security seriously, and as a result the Mesh protocol that Atamate uses incorporates finance regulatory grade encryption which makes it impossible for any device to be connected to the network without being provisioned by the owner. Any wired component such as gateway devices which connect to the **atBOS** Hub sit on a structured cabling network we refer to as the HAN (**Hub Area Network**) which is physically separate from the building Local Area Network (**LAN**). The only point of connection to the LAN is at the Hub itself in order to gain access to the internet.

The **atBOS** platform always initiates a connection to the cloud from the Hub as a message out of the building, this means that the Hub will not accept any incoming connection making the system intrinsically secure from cyber attack. A firewall in the Hub protects **atBOS** by preventing any inward connection other than through the Atamate cloud. Incoming connections from the user interface are routed through a proxy which protects the Hub from direct attack. From the perspective of the user, the most obvious approach to security is through password protection of the user interface. The user interface itself uses transport layer security (**TLS**) certified by Let's Encrypt.

Each installation has a designated owner, who can issue, limit and revoke the control privileges of any other users.

Our Sensor Unit

Is a ceiling mounted device, similar in appearance to a smoke detector which monitors a host of occupancy and environmental factors including

- Temperature (Local air temperature and wall temperature in occupied zone)
- Occupancy (PIR detector)
- Carbon dioxide concentration – air quality indicator
- Relative humidity – Prevention of damp and mould
- Volatile Organic Compounds (VOC) – air quality indicator
- Ambient light level
- Noise sensor – Can detect high ambient noise in corridors for example
- Air pressure
- Power detection
- Vibration



It can also be used for control. Two relays enable direct control of electrical loads and an auxiliary port gives connection to additional sensors or gateways (eg Modbus) to control third party devices.



Head Office
Celtic House
Caxton Place
Penwyn
Cardiff CF23 8HA



ICIBSE
JOURNAL

