

OpenBlue

Healthy Buildings

OpenBlue Indoor Air
Quality as a Service
Unlock the full value of
your people, resources
and investments



One simple monthly fee increases the productivity, health and happiness of your people and buildings

More than just a breath of fresh air

The COVID-19 pandemic made us more aware than ever of the importance of the air we breathe. But even before the crisis hit, smart building managers were looking for ways to boost health, happiness and productivity in their spaces by deploying advanced HVAC solutions to increase Indoor Air Quality (IAQ).

Johnson Controls understands it can be difficult to know what to do in the IAQ space. Resources are tighter than ever, health and safety compliance becomes ever more complex, and you don't want any short-term fix – you want a proactive, long-lasting solution from a partner you can trust. We can give you all that – and more.

OpenBlue Indoor Air Quality as a Service (IAQaaS)

OpenBlue IAQaaS is a unique, turnkey solution that addresses your key pain points and empowers an impressive range of benefits for your business and your people.

This sounds complicated, but is actually very simple, with just one predictable monthly fee required to set you on the path to IAQ success.

Did you know?

A mere **one percent** increase in indoor air quality can provide a financial impact **equivalent to a building's annual utility bill.**¹



OpenBlue IAQaaS Technical flow

Building IAQ values:

- CO₂
- Particulate matter (PM2.5 and PM10)
- Volatile organic compounds (VOCs)
- Temperature
- Humidity

IAQ sensor



Monitoring, Display, Compliance, Control Options

Metasys Building Automation Systems (BAS)

- Control of IAQ devices (dampers, UV lights, air handlers, etc.)
- Display of IAQ data, alarm trends

OpenBlue Enterprise Manager (OBEM):

- Display of IAQ in OBEM IAQ dashboard
- Optimization of IAQ and energy spend
- AI-powered recommendation engine for IAQ improvements
- Dashboards and recommendation engine for third-party BAS

Remote Operations Center (ROC):

- Remote monitoring of IAQ data
- Remote advisory of IAQ improvements
- Standardized customer reporting against IAQ outcomes
- Metasys operational changes (Optional)

¹Improvements in IAQ were shown to produce at least a 1% improvement in cognitive function. (Jose Guillermo Cedeño Laurent et al., 2021. Associations between acute exposures to PM2.5 and carbon dioxide indoors and cognitive function in office workers: a multi-country longitudinal prospective observational study. Environ. Res. Lett.16 094047. <https://www.hsph.harvard.edu/news/press-releases/office-air-quality-may-affect-employees-cognition-productivity/>). Utility bill savings based on the proforma statement in "Healthy Buildings: How Indoor Spaces Drive Performance and Productivity: Allen, Joseph G., Macomber, John D" and the theory that energy costs represent 1% of the salary of workers in the building, hence a 1% increase in productivity, in an average commercial building would lead to the financial impact equivalent of the building's annual utility bill.

Features and benefits

- Data-driven outcomes for better-informed decision-making
- Science-backed building baseline for smarter benchmarking
- Subscription model means no major upfront costs and predictable monthly fee
- Air quality guaranteed through tried-and-tested clean air technologies and strategies
- 24/7/365 advisory services means we are always on hand to help
- Solutions tailored to your needs to meet your specific pain points
- Single provider means one point of contact for simplified processes



Why Johnson Controls?



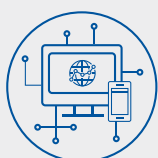
IAQ research

We have invested billions of dollars over the history of our business in the search for the next great idea. This dedication to innovation and productive partnerships has given us a knowledge of the science behind IAQ that you simply cannot find anywhere else.



Clean air experts

We have the theory covered, but we also excel at the practical aspects of IAQ optimization. We have led the charge towards increased IAQ by driving clean air solutions and projects that mitigate infection risk in an attempt to get people back to their workplaces.



End-to-end capabilities from a trusted partner

We are your IAQ one-stop shop. We do it all, including advisory, roadmaps, contracting, risk transfer, delivery monitoring, servicing and maintenance. Our desire for continuous improvement means we develop regular upgrades to future-proof your technology and keep your operations at the cutting edge.



Solutions validated and in use with customers

Our solutions are present in 90 percent of the world's most iconic buildings. This means our products are tried and tested in the field, and that's how you get the sterling reputation for excellence and customer satisfaction that Johnson Controls has across the globe.



Global network with local presence

We have it covered everywhere, combining the network and resources of a global powerhouse with the timely, knowledgeable and responsive service of a local partner. Our 100,000 building experts stand ready to help you improve your operations to meet the demands of today and tomorrow.

Reduce building costs, increase productivity and enhance revenue

IAQaaS – a key element of OpenBlue Healthy Buildings

OpenBlue Healthy Buildings delivers the market's most comprehensive portfolio of solutions, plus expert guidance, to help you cut building costs, raise productivity and exploit new revenue opportunities – all while delivering on your sustainability goals.

Unlock the full value of your people, resources and investments today with OpenBlue Indoor Air Quality as a Service from Johnson Controls.

Please visit www.johnsoncontrols.com/IAQaaS to discuss how our IAQ expertise can help boost productivity, health and happiness in your places and spaces.





www.johnsoncontrols.com

About OpenBlue

OpenBlue is a complete suite of connected solutions that serves industries from workplaces to schools, hospitals to campuses, and beyond. This platform includes tailored, AI-infused service solutions such as remote diagnostics, predictive maintenance, compliance monitoring, advanced risk assessments, and more. A dynamic new space from Johnson Controls, OpenBlue is how buildings come alive.

About Johnson Controls

At Johnson Controls, we transform the environments where people live, work, learn and play. From optimising building performance to improving safety and enhancing comfort, we drive the outcomes that matter most. We deliver our promise in industries such as healthcare, education, data centers, and manufacturing. With a global team of over 100,000 experts in more than 150 countries and over 135 years of innovation experience, we are the power behind our customers' mission. Our leading portfolio of building technology and solutions includes some of the most trusted names in the industry, such as Tyco®, YORK®, Metasys®, Ruskin®, Titus®, Frick®, PENN®, Sabroe®, Simplex® and Grinnell®.

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