

Use modern tools to upgrade current systems

The convergence is real: environmental, social and governance (ESG) goals, operating cost targets, safety and security needs, and occupant expectations are all coming together. And the solution is at your fingertips: OpenBlue Enterprise Manager brings you a single-pane-of-glass solution that unifies a patchwork of systems to improve uptime, resiliency, comfort and sustainability.

Enterprise Manager digital tools cover your entire operation. Start with Plant Monitor for eight excellent reasons.



1. Give your building a healthy heart

Whether it's a simple chilled water plant or a complex heating, cooling and power generation plant, the mechanical heart of your building or facility is critical to comfort, efficiency and sustainability. Yet because it's located away from occupant spaces and is highly technical, the central plant often doesn't get the attention it deserves.

Keeping your plant healthy protects your organization as a whole. Plant Monitor enables regular monitoring and maintenance to ensure reliable heating and cooling—as well as a continuous supply of chilled water for equipment in spaces such as data centers, surgical suites and manufacturing facilities.

2. Drive sustainability to combat climate change

Buildings represent about 40% of the world's energy consumption and a third of global carbon emissions. In the fight against climate change, regulators, investors and communities now expect you to make your building more sustainable.

Your central plant is the logical starting point. It typically consumes 30% to 50% of the electricity required for the building, uses the highest kWh per gross floor area, and is a primary source of indirect and direct CO2 emissions. Taking steps to maximize your central plant delivers measurable sustainability improvements and helps fulfill your social responsibilities.

3. Support compliance & sustainability reporting

Building owners increasingly require continuous access to central plant performance data to comply with regulatory reporting requirements. Plant Monitor streamlines information gathering and helps organize data. An added benefit: With the right data in hand, you may also qualify for rebates and government incentives for plant improvements, creating a path toward autonomous, artificially intelligent, decarbonized buildings.

4. Speed troubleshooting & manage risk

Easy access to relevant data also minimizes central plant downtime. Plant Monitor creates a 24/7 feedback loop, empowering operators to quickly detect, diagnose and resolve issues before faults turn into alarms. Even better, condition-based Al and machine learning algorithms enable predictive maintenance, minimizing contractor time on site and optimizing plant operation day after day after day.

5. Enhance facilities team productivity

Most facilities teams today must do more with less. Tighter budgets and increased responsibilities are a given, and a generational shift in the workforce means staff may lack site or plant knowledge. Enterprise Manager's suite of easy-to-use apps enables even inexperienced staff to better manage day-to-day tasks. Boost team productivity while protecting central plant operations and ensuring reliable, optimized building performance.

6. Fight BAS alarm fatigue

Facilities using an older building automation system (BAS) to manage the central plant may lack cloud connectivity, which means the system can access only limited historical data. That can lead to excessive alarms, making it easy to miss key performance indicators. What's more, by the time a key alarm is triggered, it's too late for proactive adjustments. Enterprise Manager helps your team shift from putting out fires to pursuing strategic improvements.

7. Sustain performance with continuous commissioning

Normal wear and tear on plant equipment and accessories leads to performance deterioration of 1% to 2% per year. That adds up if left unchecked. Use Plant Monitor as the basis for continuous commissioning—ongoing data collection and analysis to resolve operating issues, optimize energy use and improve comfort. You also gain insights for energy conservation measures (ECMs) to improve the plant's energy efficiency.

8. Ensure customer satisfaction

Your "customers" may be tenants, employees, purchasers or partners—but they all expect smooth building operation. Ensure a positive experience with Enterprise Manager, starting with the central plant and reaching across your entire facility or campus. Balance energy spend with space use, IAQ and reduced infection risk. Protect people and assets with cyber security capabilities. And meet operational, sustainability and customer satisfaction goals.

Get connected, get insights and get optimized with OpenBlue Enterprise Manager

Johnson Controls OpenBlue Enterprise Manager addresses your most urgent challenges to advance sustainability. Enterprise Manager includes Plant Monitor, offering these key benefits:

Transparent, comprehensive data

Plant Monitor gathers data to analyze, benchmark and display every aspect of the central plant's performance. Setup is easy, bringing you quick access to insights for better decisions. Optimize plant operations, maintenance and energy savings for rapid ROI.

Advanced fault detection & diagnostics (FDD)

Plant Monitor incorporates a comprehensive FDD library that helps uncover abnormalities before they turn into problems. Proactive response and predictive maintenance increase your plant's uptime, energy efficiency and resiliency, while extending asset life.

Customized reporting

Plant Monitor is built with Power BI, making it easy to customize reports for different users inside and outside your organization.

Optional Remote Advisory Service

Supplement local staff with our Remote Advisory Service to help interpret data and submit monthly or quarterly reports.

Flexibility & scalability

Plant Monitor takes a software-as-a-service (SaaS) approach, with the potential to add Enterprise Manager apps and expand control across your entire building or campus. As an expert in central utility plants, Johnson Controls also provides maintenance and retrofit services, as well as chillers, cooling towers, flow meters, variable speed drives and air handling units. We can also help you develop a clean air strategy that fits your facility and budget.

Plant Monitor is just the first tier available with Enterprise Manager. Our full digital offering helps you unify even outdated systems, tapping big data, IoT, and AI to improve metrics without having to upgrade building systems. Choose from five tiers.

Plant Monitor + FDD visualizes and monitors plant and equipment performance, improving energy efficiency and maintenance.

Advisory Mode Basic Points uses basic data to guide plant personnel on optimizing current state point or operating conditions.

Advisory Mode Advanced uses new meters and sensors to gather advanced data for improved recommendations, increasing plant availability while decreasing workloads.

Command & Control Energy Optimization enables secure, direct control of the plant, optimizing for current conditions to enhance plant availability and asset life.

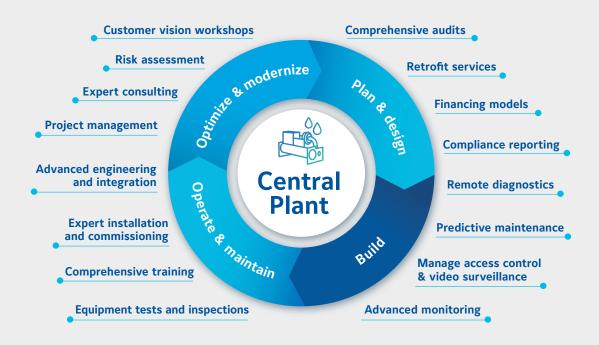
Predictive Cost Optimization looks ahead via Al and machine learning to predict loads and rates, minimizing energy use, utility costs, and required staff time while improving asset life and capital asset planning.



Start your digital transformation here

See how OpenBlue Enterprise Manager can help you reach every business and ESG target faster. Talk with Johnson Controls today about your building and your challenges.

Powering innovative and customized solutions across the full life cycle of your central plant



The Johnson Controls difference

Deep subject matter experts

Experienced service specialists at your fingertips. Providing best-in-class services is in our DNA.

OpenBlue technology

OpenBlue Al technology empowers you to manage your operations more systematically for greater visibility, enhanced performance, proactive planning and overall building optimization.

Tailored and flexible offerings

We offer scalable service options across a comprehensive range of HVAC, fire protection and security services, delivering the services you want, the way you want them.

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, Al-infused service solutions such as remote diagnostics, predictive maintenance, compliance monitoring, and advanced risk assessments. A dynamic new space from Johnson Controls, OpenBlue is how buildings come alive. To read more about OpenBlue, visit: www.johnsoncontrols.com/OpenBlue

About Johnson Controls

At Johnson Controls, we transform the environments where people live, work, learn and play. From optimizing 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 130 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®.

