AKRON ENERGY SYSTEMS

CITY ENERGY PROVIDER CUTS ESTIMATED 80% OF DIAGNOSTIC SITE VISITS WITH IOT-BASED BMS



66 We wanted to really look at how we could save our customers money across their whole building platform. Furthermore, we really wanted a controls solution that would be a long-term replacement strategy. 75F hit just about everything we needed.

Kevin Hohlefelder | Vice President of Sales





CHALLENGE

Akron Energy Systems (AES) is the city of Akron, Ohio's community energy system operator. Community energy systems utilize a central plant to produce steam and chilled water that are then distributed to buildings through a network of underground pipes, eliminating the need for onsite equipment and lowering buildings' total energy use.

AES facilitates the change from on-site energy production to the community energy system, and from there, reduces building owners' total cost of ownership by taking over building system upkeep and maintenance. Prior to selecting 75F as a controls partner, AES was working with whichever controls solution already existed at customer locations and frequently needed to make site visits to diagnose and correct system issues.

To simultaneously enhance customer service and make their own internal processes more efficient, AES sought a controls solution that could provide remote access, analytics, and alert capabilities under a single pane of glass. Ultimately, these features would allow AES to quickly diagnose customer problems without needing to visit the site first and provide their customers powerful portfolio-wide insight.

AT A GLANCE

Location	Akron, Ohio
Business Need	Unified remote analytics & control
Business Impact	Reduced site visits & operational costs

SOLUTION

AES considered numerous control providers during their selection process. The organization landed on 75F due to the system's cloud-enabled remote control and robust analytics, pre-packaged control sequences with ASHRAE GPC 36 built in, and potential to scale, all at an accessible price point for all players involved.

AES has since installed 75F in sites ranging from Canal Park Stadium — home to the RubberDucks baseball team — to a network of city fire stations. At each location, AES can leverage 75F's user portal, Facilisight, to remotely monitor their customers' buildings and diagnose problems without having to leave their office. Depending on the severity of the issue, AES may also make remote adjustments to solve site problems as well.

For example, the city's fire stations operated relatively cold prior to having 75F installed. After the installation, the system setpoint was configured to a more normal temperature, leading occupants to believe there was something wrong with the building system because it was warmer in the space than usual. AES was able to remotely confirm building systems and equipment were operating normally and that the issue was just a matter of setpoint preference, saving a trip out to troubleshoot a simple problem.

AES has improved air quality and lowered energy use with simple and scalable economizer control. At Canal Park, the park's system was previously either open or closed, leading to high energy bills and poorly optimized airflow. By installing 75F's Outside Air Optimization, AES immediately reduced technician calls and occupant discomfort. This has resulted in an annual cost reduction of 19% across their HVAC business at the site. Better yet, AES installed 75F for 8 to 10X less than other control systems available on the market.

RESULT

AES calculates that after installing 75F controls, 80 percent of the calls that used to result in a site visit are now diagnosed remotely. This not only saves AES time and money but has resulted in improved customer service and speed.

Previously problematic customers on old control systems are now running smoothly with 75F. An airport that used to generate multiple temperature calls per week is now radio silent, signaling improved building operation there. AES customers benefit from consistent and standardized installs and uniform operation across the portfolio. Instead of fire stations having a range of control systems and parameters, AES was able to quickly and affordably standardize any number of locations in a single pane of glass, improving efficiency of their buildings—and their business.



We're just starting to put 75F in a million square-foot office space. Getting everyone aligned so we can watch not just the single building, but the tenants and the occupied spaces as well, and doing it all from the office has been great.





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75F[®] Facilisight[™]

Facilisight is 75F's building intelligence suite of web and mobile apps. Facility managers and building owners will use Facilisight hand in hand with application profiles such as 75F® Dynamic Airflow Balancing[™] (DAB) or 75F® Variable Air Volume[™] (VAV) with Reheat to remotely monitor and control their building portfolio.

The Facilisight application offers invaluable insight into your buildings' performance and simple, intuitive control over complex parameters. 75F's IoT-based Building Management System (BMS) delivers over a million data points daily per fifty thousand square feet of space, including temperature, humidity, volatile organic compound (VOC), CO2, light, sound, and optional particulate matter levels taken every 60 seconds. Facilisight's heatmaps reflect this data in real time and can help users understand energy performance and how their buildings react to thermal loads. Facilisight users may also use any of this data for custom analytics that can share across platforms — both internally and externally — for sustainability or IAQ goal tracking.

Beyond superior data visualization, Facilisight makes tailoring building parameters fast and efficient. Alter building and granular schedules, and use tuners to adjust operating algorithms, setup floor plans, and more – all remotely from the web or a mobile device. And, customizable alerts keep building operators informed of any equipment failures or system issues so they can solve the problem before it becomes expensive.

To learn more about 75F's IoT-based Building Management System, visit www.75f.io.



