# OPERATIONALLY EFFICIENT SCHOOLS ENHANCE STUDENT AND STAFF EXPERIENCES

OPERATIONAL EFFICIENCY IN SCHOOLS APPLICATION BRIEF

Technology automation maximizes operational budgets by improving building system performance, reducing maintenance costs and allowing better energy management.



# BREATHE NEW LIFE INTO OLDER FACILITIES

School buildings across North America are, on average, 42 years old, with many still retaining original operating systems that can't keep pace with today's efficiency requirements. These ageing control systems consume an average of 10kWh of electricity and 50 cubic feet of natural gas per square foot per year, putting pressure on already limited budgets. Moreover, they lack the data capture capabilities necessary for measurement and improvement. Exacerbating the situation is the fact many of the technicians responsible for maintaining these systems are retiring and taking their knowledge with them.

Alerton solutions can help you overcome these challenges. Serving as the 'brain' of a building, a BMS provides facility managers and administrative personnel with comprehensive monitoring and control capabilities through which they can manage energy consumption, reduce maintenance costs, support tightening regulatory requirements and make even the oldest facilities fit for the future.



# PREEMPT ISSUES WITH EQUIPMENT THAT COULD LEAD TO DOWNTIME

## The Challenge

The limited monitoring capabilities of legacy building control systems often make it difficult to know when equipment isn't operating effectively. This poses a challenge to preventive maintenance efforts and increases the risk of a fault that may affect a school's operations.

# **The Solution**

Alerton solutions uses edge-to-cloud capabilities to monitor data from building control systems around the clock, making it easy for facilities managers to identify abnormal patterns of behavior. By acting on these insights, equipment can be kept in optimal condition, reducing the risk of downtime and the cost of maintenance.



# HARNESS ACCURATE DATA FOR DECISION MAKING

# The Challenge

Missing, flawed or corrupt data can lead to inefficiencies, costly mistakes and poor experiences for students, staff and administrative personnel using a school facility. How can facility managers consistently obtain clean, reliable data for decision making?

# **The Solution**

Operating under the principle that only what is measured can be managed, Alerton solutions provide precision data monitoring for confident, accurate decision making. By automating routine tasks and providing quick access to insights, facility management teams can complete work orders more efficiently while reducing downtime and repair costs.

# REDUCE THE IMPACT OF 'PHANTOM LOADS' ON ENERGY CONSUMPTION

### The Challenge

Leaving electronic devices plugged in to sockets when they're not in use leads to unnecessarily high energy consumption. In summer months or holiday periods when school is adjourned, such 'phantom loads' can be particularly costly.

# **The Solution**

Honeywell Connected Power provides visibility into the energy consumption of your power outlets. From a central dashboard, facilities managers can switch off sockets when they're not in use and ensure that actively used equipment gets the power it requires for optimal performance. In addition, power can be switched off with scheduling, and whenever facilities are closed. The result? Reduced energy and repair costs, and lower levels of downtime.

# MITIGATE THE IMPACT OF BUDGET CONSTRAINTS

# The Challenge

Historically, building control systems are maintained by a small number of people. However, when these individuals retire, they take essential knowledge with them.

# **The Solution**

An Alerton solution is an open framework that leverages the Internet of Things and system interoperability to preserve institutional knowledge. The software automates the real-time collection of building data and provides facility managers with guided access to critical information whenever they need it, just as a human would.

### HARNESS ACCURATE DATA FOR DECISION MAKING

# The Challenge

Tightening school budgets make it difficult to prioritize maintenance, repairs and upgrades to facilities

#### **The Solution**

To facilitate preventive maintenance and long-term planning, An Alerton solution automates tasks that were previously manual, such as CO2 emissions monitoring, reporting and submetering/asset level data collection for utility bills. In addition, dynamic maintenance scheduling can be used to reduce energy consumption. Collectively, these measures can help increase the cost efficiency of maintenance programs.

### KEEP PACE WITH THE REQUIREMENTS OF AGEING INFRASTRUCTURE

# The Challenge

With the average age of a school approaching half a century old, many facilities require constant upkeep, retrofit or replacement.

# **The Solution**

Alerton offers technologies that can be used to bring your facility up to modern standards at relatively low cost, from controllers that upgrade communication systems from telephone data speeds to full Internet Protocol (IP) speeds without extensive rewiring, to easy-to-use wall-mounted touchscreens from which personnel can control building functions.

# THE NAME BUILDINGS TRUST: ALERTON

Helping buildings achieve safer, smarter, and more efficient operations has been the bedrock of our business for generations - which is why today, Alerton technologies are in more than 10 million buildings worldwide.

How? Because we've established expertise in each part of the job - from developing the software and equipment, to integrating open systems, and automating the performance that buildings like yours depend on to get results.

Transform the operational efficiency of your educational facility. Book a building assessment today.

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