PROJECT AT A GLANCE

CUSTOMER

Fairfield Area School District

ABOUT

Located in South Central Pennsylvania, FASD is a small, rural public school district serving 1,100 students.

OPPORTUNITY

FASD wanted to save money by turning plug load devices off during nights and weekends when buildings are not occupied.

SOLUTION

250 Bert Smart Plugs with Analysis and Control.

RESULTS

Standby Load Reduction: 65%

OPPORTUNITY

Fairfield Area School District prides itself on providing high quality education to students while remaining focused on delivering high taxpayer value. Since money spent on facilities operations or overhead cannot be spent on students, the district seeks efficiencies of every kind. One such area is plug load energy usage. Before Bert, the district spent $440,00 annually on electricity, of which approximately $100,000 was spent on plug load. FASD realized plug load control would free up money for extra-curricular activities, athletics, and educational supplies.

SOLUTION

In 2012, the District hired Siemens Building Technologies, a performance contracting market leader. Besides implementing major lighting and chiller upgrades and building envelope improvements, Siemens installed Bert for plug load control.

Devices such as classroom electronics, breakroom and office equipment, vending machines and charging carts consume power 24/7, even when placed in standby mode. Bert eliminates this load by turning devices off during nights, weekends and holidays when buildings are not in use. This translates into real savings because schools and other commercial buildings are unoccupied many more hours per year than they are open.

"Bert is ideal for districts like FASD since their buildings are only occupied about 35% of the time. Using Bert, devices are now turned off more than 5,700 hours each year, according to BERT CEO, Scott Yetter.

Meet BERT Your energy control freak.

At FASD, the plug load devices are organized into logical groups for scheduling purposes. Devices are grouped by building (ES, MS, and HS) and by device type (TV's, projectors, etc.). Once devices are grouped, schedules are applied to the groups. Fairfield created unique schedules for each building because each building has different occupancy hours. Yetter adds, "Some districts also create summer schedules to turn plug load devices off entirely during summer vacation months for additional savings".

"We've taken steps to reduce our heating and cooling costs. Based on the suggestion from Siemens, we're now able to control our plug loads as well with Bert. We know that cutting power to those devices lowers our electric bill," says Howie Kessel, Director of Buildings and Grounds at FASD.

RESULTS

FASD reduced their overnight standby plug load energy expense by 65%.

THE POWER OF BERT

When it comes to Intelligent Buildings, Bert controls the small things and delivers big. With 30,000 units installed in over 700 buildings, Bert's end-to-end solution typically lowers plug load expense by 40 percent, saving users over 5 million kWh annually.

Using patented technologies and the facility's existing Wi-Fi network, Bert remotely measures, analyzes and controls plug and hardwired loads, ranging from individual 120V/15A devices to 277V/20A circuits. Frequently installed as a standalone solution, Bert delivers even greater value by integrating miscellaneous electric loads to Building Automation Systems (BAS), enabling the BAS to control all building loads and to collect additional measurement, temperature and other building data for increased efficiency and comfort.

Learn how K-12 schools, colleges, offices, local governments and sporting venues save money and energy by visiting www.bertbrain.com.

MEASUREMENT

Real-time energy usage data by device, group, or building for hour, day, week, month or year. Most recent measurement data also stored locally for backup.

ANALYSIS

Administrative software; analyzes energy consumption; runs M&V reports; creates and stores multiple schedules including; School Year, Vacation, Demand Response and Load Shifting

CONTROL

Mass remote control logic turns loads off nights, weekends and holidays when buildings are unoccupied. Plug devices into Smart Plugs and wire circuits with Inline Series Berts to control plug and hardwired loads.

THRESHOLD

Prevents sensitive equipment from turning off until the shutdown cycle is complete or the compressor has turned off.

TEMPERATURE

Real-time temperature data and temperature-based control using high/low set points.