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–David, District Energy Manager

Making the grade for school comfort.

For one large school district in Florida, the reality of unnecessary energy costs was enough to warrant a change. To meet indoor air quality (IAQ) standards, the district had to constantly monitor their 280 portable classroom units, each with their own thermostat, to maintain relative humidity and temperature for its 62,000 students and 7,400 employees. With no remote access to any readings in these traditional programmable thermostat units, HVAC system run time often exceeded what was needed, costing the district time and money.

129 thousand K-12 school districts in the U.S.¹
 \$8 billion spent annually on energy²
 25 percent can be saved by improving energy efficiency.³
 \$147 thousand each school district could save on average.⁴



DISCOVERY

One of the Florida school district’s Energy Managers began looking for a reliable, flexible solution that would provide full access control. He and his team evaluated several options before choosing Sensi™ thermostats for their reasonable price and the willingness of Emerson to tweak their software and accommodate specific needs.

SOLUTION

The school district installed 280 Sensi Wi-Fi thermostats—one in each of their portable classrooms, and enabled the Sensi Multiple Thermostat Manager software solution to remotely monitor the units. “I was personally a part of the first few installs. When I did the first few with my technicians, I was astounded by how easy it was,” the Energy Manager said.

¹ NCEES @ https://nces.ed.gov/programs/digest/d13/tables/dt13_105.50.as

² US Department of Energy @ https://www.energy.gov/sites/prod/files/2016/05/f31/K-12-ESPC-Primer_April2016.pdf

³ EPA @ https://www.epa.gov/sites/production/files/2015-08/documents/k-12_guide.pdf

⁴ \$2B in savings / 13,588 districts according to # of districts reported by NCEES above



RESULTS

The Sensi Manager software proved to be the most crucial benefit for the school district. "It's given us a level of customer satisfaction that we're able to provide now and couldn't before." The mobile app, specifically, first attracted the team to Sensi, providing a way for them to service the entire district whenever it was needed from any location. "You can't put a price on that," says David, the District Energy Manager. Now, they can change multiple schedules from anywhere, **saving the district more than \$2,500 a weekend** during certain times of the year.

ROI IN UNDER 5 MONTHS

"Of all the projects I've been involved with, the Sensi project has proven to be the most cost-effective. We originally estimated a return on investment of six to eight months. After implementing the project, we found it's actually closer to **4.4 months**," David said. "The savings were so much greater than we projected. When my superiors and the board saw those results after our initial installations, it was, 'How fast can we get this going?' Here we are, 600 thermostats later. I can reasonably suggest to you that **we'll save a quarter of a million dollars a year if this trend continues**," he adds.

FUTURE PLANS

Based on their initial success and quick ROI, the school district plans to expand its use of Sensi thermostats, incorporating Sensi Multiple Thermostat Manager into 10 years of building projects.

280 portable classrooms with Sensi thermostats analyzed.
\$7.29 saved in energy costs per portable unit each weekend
\$2,040 saved weekly in 280 portable classrooms.
133 days to pay off the initial hardware investment with energy savings
320 additional Sensi thermostats installed since the test concluded



Learn more at sensicomfort.com.