Pelican Wireless Systems’ HVAC Energy Saving Solutions for Universities

CLAREMON T GRADUATE UNIVERSITY CUTS ENERGY COSTS BY GAINING CONTROL OVER THEIR BUILDING’S CLIMATE

Claremont University Goes Wireless

In 1995 Claremont Graduate University (CGU) installed a wired Barrington/Microstar HVAC Controller System into their buildings. This electronic solution was costly and very complex, but at the time there were only a few options available. In 2011, when one of their graduate buildings had to replace some faulty HVAC controls, Claremont University decided to branch out and look for a simpler, less expensive HVAC energy management solution: “Pelican Wireless Systems did not only offered us a low cost wireless solution, but one that would provide us with complete management, through innovation, and simplicity. It was truly unlike anything we had seen before,” stated DeWayne Hurst, Director of Facilities at Claremont Graduate University.

About Claremont Graduate University

Claremont Graduate University is a private, all-graduate research university located in Claremont, California. Founded in 1925, CGU is a member of the Claremont Colleges consortium that includes five undergraduate and two graduate institutions of higher education. They have 2,265 graduate students enrolled; 240 of which live on campus. CGU has a total of 45 buildings, 37 of them are residential houses that have been modified or renovated and used for research or administration. They have eight main buildings that are classroom and academic generated. Five have chillers and cooling towers and the other three have split systems and package units.

Overcoming HVAC Management Challenges on a Limited Budget

In 2011 the University’s budgets were significantly cut. Facing the need to replace a building’s HVAC controls system, CGU had a challenge placed in front of them: replace the solution they had been using in the past with an upgraded version or branch out to new technology? Their past solution was installed in 1995 and to replace it was going to be approximately $150,000 to purchase and another $1,500 to $1,800 dollars a month for support. The University did not have the budget necessary to commit to these costs. In addition, their previous system was limited to a 7 day programmable thermostat and only the ability to turn their thermostats up or down and on or off. These limited features were heightened by the fact that students had free access to change the thermostat’s temperatures, which was costing them a significant amount of energy.

Mr. DeWayne Hurst, Director of Facilities, decided it was time to research alternatives to these expensive yet limited technologies: “I looked into Honeywell’s BACnet solution, but they were too pricey,” stated DeWayne, “Fortunately in a conversation with my architect, he brought up Pelican’s solution and it immediately sparked my interest.” Brian Bloom, DeWayne’s architect, has installed and used Pelican’s HVAC Energy Management Solution in a variety of other commercial properties. Brian stated, “I have been an architect for over 30 years and have reviewed a ton of HVAC building management systems. With Pelican I have found that wireless building management can not only be economical, but reliable. Plus, their advanced tracking and monitoring capabilities allow my customers to see information about their HVAC systems that other companies just cannot provide.”

CGU was able to easily fit Pelican’s solution into their budget. They replaced a portion of their graduate building’s HVAC energy management system with Pelican’s solution and plan to continue replacing other sections when needed. CGU’s total cost to install Pelican’s solution was only $6,000, and there was no set-up, software, or support cost. Moreover, their return on investment was only 4-5 months.
Pelican’s Solution Benefits Exceed Expectations

Pelican Wireless Systems installed a total of 34 Thermostats and 4 Wireless Gateways into 7 of CGU facilities. CGU was able to install the units themselves; which helped keep costs down. As soon as they were installed, CGU immediately experience the following benefits:

- Central and Remote management over their HVAC from any location at anytime
- Intelligent HVAC energy tracking, monitoring and reporting
  - Viewing real-time temperature data
  - Review maintenance alerts and problems
- Advanced facility/classroom scheduling
- Immediate maintenance alerts via text message or email
- Increased staff and student satisfaction due to better climate management
- Ability to lock thermostats to keep students from changing thermostat temperatures

“Pelican Wireless Systems far exceeded my expectations. The fact that I can control our building’s thermostats on my smartphone, from home, has been invaluable. Also, their simple scheduling tool allows more flexibility than I ever imagined was possible. CGU plans to add additional Pelican thermostats in the future and continues to promote Pelican as the HVAC solution of choice as renovations evolve,” says DeWayne in a final remark.

Pelican Solution

Pelican rethought and redesigned what a wireless HVAC Energy Management System (EMS) should entail. By building from the ground up, Pelican is able to offer a solution that transmits wireless reliably, is economical to buy/retrofit, and intuitive to manage. With over 35 years of experiences in telecommunication networking and wireless, the technology that Pelican produces is above and beyond what the rest of the HVAC industry is able to provide.

Pelican’s technology is designed by Pelican Wireless Systems in Livermore, California. Every product offered is assembled and manufactured in Silicon Valley California, with final assembly and testing done in house. This gives Pelican the advantage of never shipping a product that has been untested or unverified to work as designed.

Once the solution is installed, Pelican delivers advanced cloud based management capabilities that is designed for anyone to be able to use; helping to reduce energy consumption through proactive management and temperature/HVAC unit analysis. There is no extra equipment or software to install or buy. Pelican solution is a simple replacement from your previous thermostats to one of their wireless thermostats. Install a single plug and play wireless gateway, and you now have a highly intelligent EMS always available to you on any PC, smartphone, or tablet.