

Rocklin School District Maintains Control, Comfort with Pelican Wireless Thermostats

By Ted Rieger, Northern California Correspondent

Rocklin Unified School District in Placer County east of Sacramento, Calif. faced a major HVAC control system upgrade when controls for a classroom building on a school campus ceased operation and parts were no longer available to fix the existing energy management system. However, with assistance from contractor Climate Control, Inc., of Sacramento, the school was able to affordably install Pelican Wireless Thermostats in each classroom to control comfort levels. The Pelican units soon proved they were more adaptable to reprogramming for varied classroom occupancy times, even on a day-to-day basis when necessary, due to different school-day schedules. Overall, the Pelican controls enabled better energy efficiency, and reduced school district staff time and costs in managing the control system.

Pelican controls were subsequently added to buildings at two additional schools in the district, and they are being used to control lighting at one school. Gib Benthin, assistant director of maintenance and facilities for Rocklin Unified, said: "We added two new portable classroom buildings last summer at Whitney High School. Our technician put the Pelican system in the buildings and it was operational in four to five hours. Once the end-user is shown how to use it, they don't have problems with operation." Benthin added, "This is a very easy conversion." Each classroom in the portable buildings has its own individual



Pelican's TS200 wireless thermostat is suitable for new building construction, or as an affordable replacement control system. – Photo by Ted Rieger

Bard HVAC unit, that is controlled with an individual Pelican thermostat.

Pelican Wireless Control Technology

Pelican Wireless Systems, headquartered in Livermore, Calif., manufactures wireless HVAC control products that have been installed in hotels, schools and universities, business and office complexes, and are well-suited to building properties with multiple spaces served by individual HVAC units. A Pelican system is suitable for new building construction, or as an affordable replacement control system.

Pelican's main thermostat product is the Internet Programmable Thermostat (TS200). Multiple TS200s can be accessed through a single Pelican Wireless Gateway (GW200) that is easily installed and plugged-in. The Gateway unit is small (2.5"W x 3.5" L x 1.25" D) enabling many options for placement. It comes with an Ethernet cable to connect to an Internet router or LAN. The Gateway auto-

matically connects with any Pelican products within range, and there is no additional software to buy. The

system is monitored and operated through a cloud-based web app, and users can easily set up an Internet account to access at any time. The Pelican Gateway and thermostat system can be accessed from any type of Internet-connected device--PC, tablet, pad or smart phone.

Jason Carrere, president of Climate Control said, "The Pelican system is designed to control almost any HVAC equipment sized 10 tons or less, including both package and split systems." The TS200 controls up to 3-stage heating and 2-stage cooling for heat pump systems, and two-stage cooling and two-stage heating for conventional systems. Carrere said, "The software is extremely user-friendly, and the operating screens to adjust parameters look the same whether they're on a PC or on a smart phone." The user/operator can also be sent alarms by e-mail or text message when a room's temperature is above or below a set point for an unusual length of time, indicating a problem with the HVAC unit.

Carrere observed: "We've found with other wireless control systems on the market that communication has to be line-of-sight and is usually not very far. With the Pelican wireless units we can do program-



Gib Benthin (L) of Rocklin Unified School District, and contractor Jason Carrere of Climate Control Inc., with a Pelican Wireless TS200 Thermostat (center) installed in a classroom. – Photo by Ted Rieger

ming up to 100 feet and it doesn't have to be direct line-of-sight, and it still works pretty reliably." Carrere also said, "Many features that come standard with a Pelican thermostat, are things you'd have to program in at the front-end during installation for other control systems."

According to information provided by Pelican, the unobstructed range of the wireless signal is up to 300 feet. Since each thermostat acts as a wireless repeater, thermostats installed throughout a building or complex can act as a mesh network. One Gateway can support up to 2,000 thermostats, therefore, only one Gateway is usually needed for an entire site.

Pelican Thermostats are designed to have four main operational functions:

1. To be a user-friendly thermostat for the customer.
2. To gather real-time information about the installed environment and upload this data to cloud-based servers.
3. To have wireless router functionality.
4. To serve as network repeaters.

Benthin said Rocklin Unified applied for grant funding through the California Energy Commission

(CEC) under the Proposition 39 Clean Energy Jobs Act to install Pelican systems at additional schools in the district. The district hopes to begin installing these systems in 2015. Ultimately, Benthin plans to have Pelican controls at 10 of the district's 21 school campuses. Benthin summarized, "It's a much more reasonably priced system to install and operate, providing the opportunity to save significant costs for the end-user."

Climate Control, Inc. is a licensed HVAC contractor in business since 2003. In addition to its Sacramento headquarters, the company has a branch office in Colusa. The company specializes in installation and maintenance of commercial HVAC and control systems and serves Northern California from Redding to Modesto. The Pelican products for the Rocklin schools were supplied through the Refrigeration Supplies Distributor (RSD) branch in Roseville. RSD serves as the Pelican supplier through its branches located in 10 western states.

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CSLB Names Cindi Christenson as New CSLB Registrar

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Under Sands' leadership, CSLB programs for licensing, examinations, enforcement and public affairs were recognized as models by the National Association of State Contractors Licensing Agencies, and CSLB practices have been implement-

ed by other licensing agencies within California's Department of Consumer Affairs to improve operations.

Sands achieved success in spite of serving during a period of state budget deficits that created significant challenges to CSLB operations due to staff cuts and hiring freezes.

The CSLB licenses and regulates about 290,000 contractors in California licensed under 43 different classifications. CSLB has a current budget of \$60 million and more than 400 employees with headquarters in Sacramento and ten regional field offices.