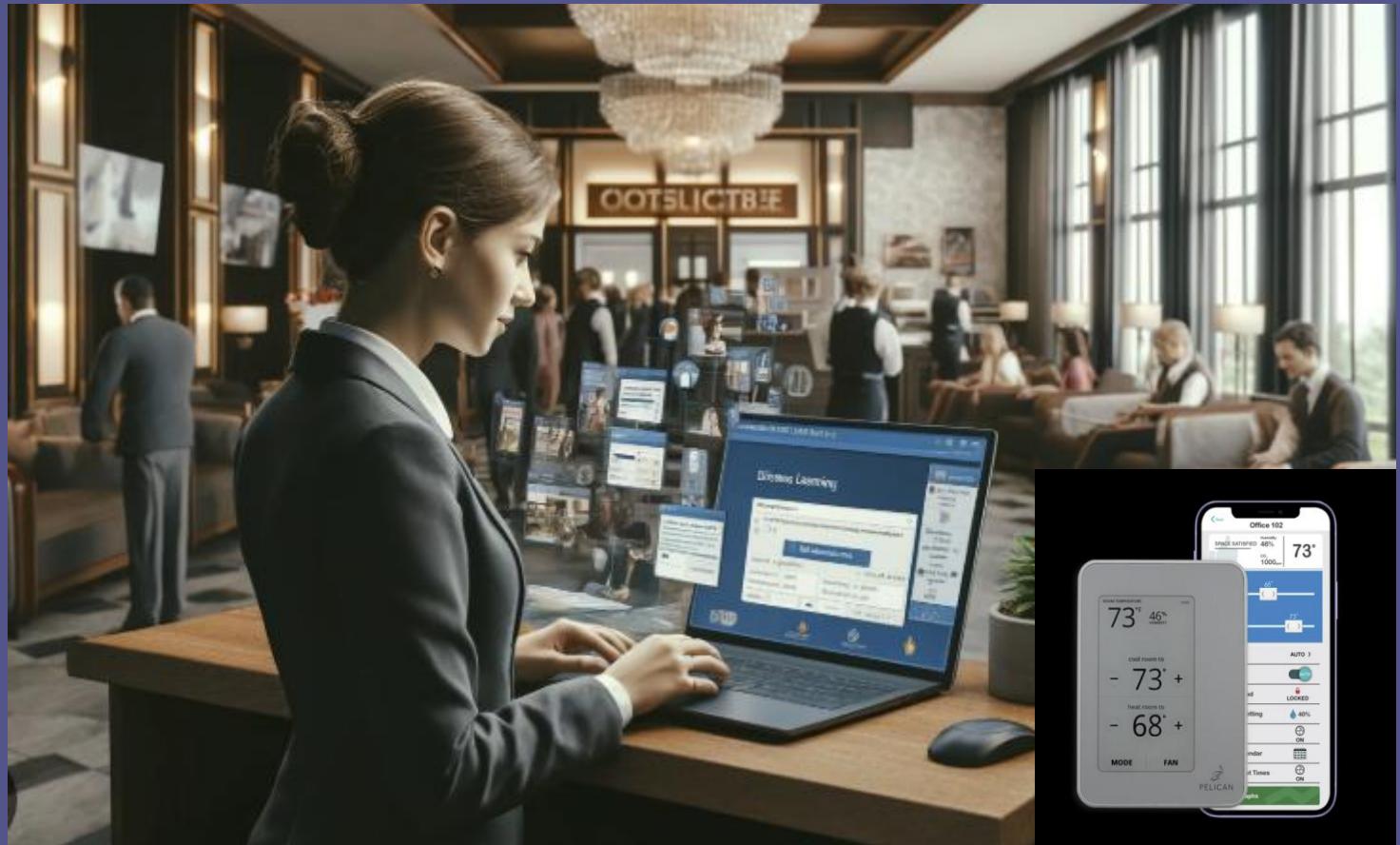


# Energy & Comfort Portal for Hotel HVAC / PTAC Wireless Thermostat Control from the Front Desk



## Pelican Wireless Hospitality HVAC Controls:

- Gives the front desk complete control of the room thermostat
- Allows for occupancy temperature to be controlled when rooms are vacant
- Screen-Lock feature prevents hotel room staff from adjusting the thermostat
- Energy efficiency is a software and hardware solution working together
- Each room receives a new wireless thermostat or PTAC controller
- Each PTAC / HVAC system can be fitted with “Digital Saturation Control”
- Digital Saturation Controls have a proven energy reduction of 20% or more
- Front desk staff have total control to prevent run-on AC in vacant rooms

# FAQ:

## *Does the system need to be integrated with hotel software?*

No. It is an independent freestanding system with a PC located at the front desk.

## *How does it function?*

The portal is operated by the front desk who knows the hotel occupancy. They have the complete ability to adjust, create set-backs, and room occupancy. Adjustments are made in just a few seconds.

## *Is there any sacrifice to the guest's room comfort?*

No. Once the room is occupied, the guest controls the HVAC / PTAC.

## *What notifications are there?*

Many. The front desk is being updated every 10 seconds on room comfort. If there is a failure to cool, the front desk is notified instantly. PTAC units have a tendency to “freeze the evaporator”. The software notifications understand this scenario and will provide a defrost and notifications.

## *How long does it take to install?*

A typical 80 room hotel install takes about 3-4 days. There is no interruption of the existing HVAC / PTAC systems. Each room install takes about 30 minutes. All the systems are wireless so there is no need to pull wires anywhere.

## *What are the costs involved?*

It depends on how many features you want, but typically costs start around \$600 per room installed. ROI can be 10 months to 18 months, depending

## *What equipment is at the front desk?*

The front desk receives a small PC, monitor and keyboard/mouse. This becomes the portal where the staff make quick adjustments, usually taking about 3-4 seconds to adjust a room based on occupancy.

## *Does the AC shut off/on or adjust in the room based on motion?*

No. Motion sensors have proven to be ineffective, and card slot systems are equally ineffective. We have found that guests just leave the card in the sensor and leave the room with the AC on providing no energy savings. The only way to have energy savings and better humidity control is to install digital saturation with a wireless thermostat.

## *What is “digital saturation control” or DSC?*

Digital saturation control is giving the PTAC / HVAC an intelligence that allows the air-conditioning to sense both temperature and humidity. When humidity levels are high, it allows the AC to run on past the set point. This effectively dries out the room and provides the AC to have less workload. After the humidity is removed, the AC can work more efficiently and run less. The result is an AC unit that runs about 20%-34% less. The controller is installed inside the PTAC unit. The thermostat is replaced with our wireless unit which is constantly communicating with the front desk. Humidity is reduced by around 15%

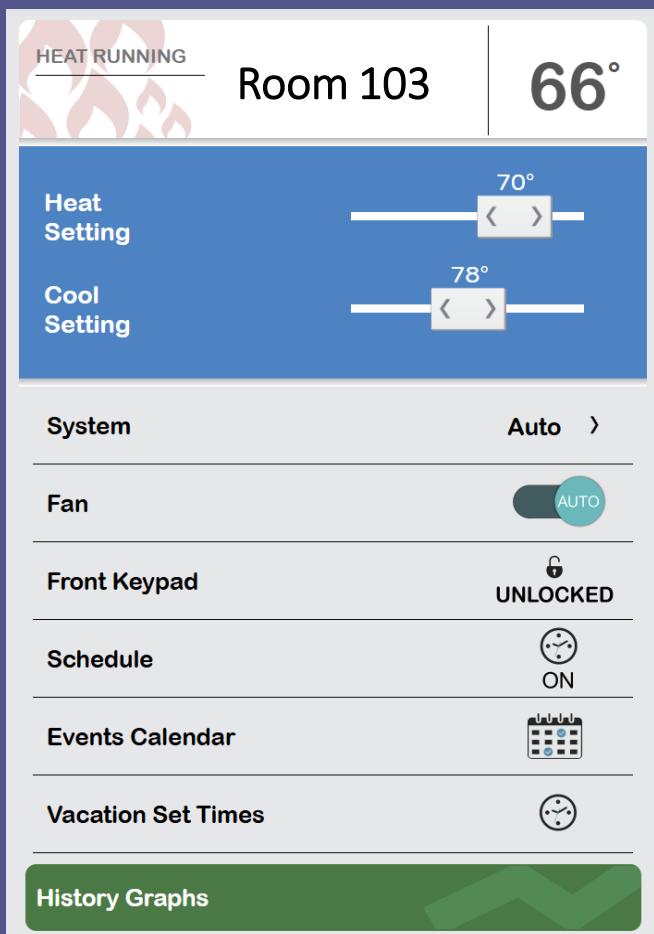
## *Can the front desk occupy the room before the guest gets into the room?*

Yes. Guests really appreciate the staff asking, “What temperature would you like your room mam?” and can occupy the room at the guest’s choice temperature in heating or cooling. Or, if the front desk does not occupy, when the guest touches the thermostat, it instantly goes into occupied mode and allows them to make whatever adjustments. The thermostats are captive and record all adjustments in the data log. Hotel staff can review room temp data graphs and see the history of heating / cooling and daily costs.

## *What software is used in the system?*

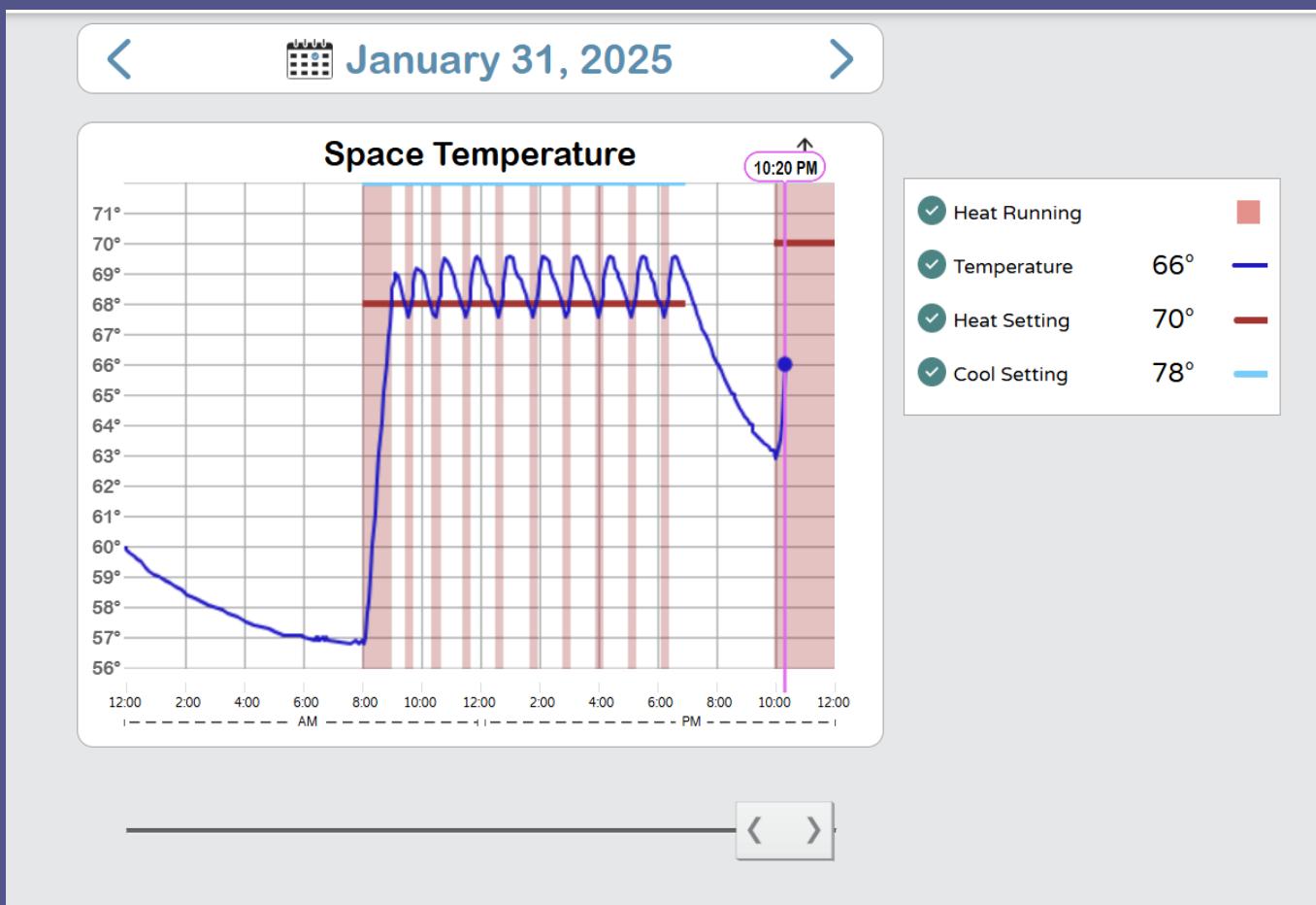
It was developed by a group from California called *Pelican Wireless*. It is the most advance temperature control software ever designed. Other hotel managers and staff have access to the front desk portal through the phone app if desired and receive alarms.

## The Control Portal:



Front desk staff have direct access to each thermostat based on room number.

As you can see in the graph, the unit was set back in heating mode by the front desk until the guest occupies the room. All temperatures are logged and graphed with energy calculators that provide real time expense of energy use. At 6 pm the hotel guest made their own adjustment and turned the heat down. Note the screen-lock feature with each thermostat.



## *Saving energy costs through advanced controls and digital saturation:*

Overall energy reductions can vary, but typical installs see reductions around 22%-34% or more, depending on how hotel staff react to room vacancies and how thermostats are managed.

With a well managed portal from front desks staff, and digital saturation combined you will have total control over your energy use as opposed to guess work and staff who manipulate thermostats or guests that leave AC running .

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