

# Wireless Remote Thermostats (RT1-AC/DC) weighted temperature averaging



## Overview

The Pelican Remote Thermostat extends the temperature sensing range of your master Pelican Thermostat. Thermostats are typically limited to sensing temperature at a single location; however air



RT1-AC/DC

conditioning systems typically service multiple rooms or large spaces. The Remote Thermostat is easily installed in one of these locations to enhance the operation of your HVAC system. Once installed, the Remote Thermostat is linked wireless to the master thermostat providing the current temperature in the remote location. This temperature is combined with the temperature being measured at the master thermostat to maintain proper temperature throughout the space being conditioned.

## Multiple Sensing Locations

Up to eight Remote Thermostats can be linked to a single master Thermostat. This provides maximum flexibility when managing a large space.

## Managed Weighted Averaging

The intuitive temperature weighting functionality provided by the Pelican Site Manager web-app allows you to set the importance of each location where temperature is being measured. Locations with more importance will have their temperature maintained more closely to the thermostat set point. This is accomplished by calculating a weighted average temperature which directs the master Pelican Thermostat to run the heating or cooling at the right times. At times when a specific room or location is in high use (ie. a large number of people meeting in a conference room) the weighting of the high density location can be increased to assure maximum comfort.

## Automatic Circulation Balancing

At times when temperatures become out of balance at different sensing locations the master Pelican Thermostat will automatically operate the fan to recirculate air throughout the conditioned space. This automatic re-balancing saves energy by moving warm air to cool locations and cool air to warm locations without the need to operate the heating or cooling system.

## Real-time Graphical Display

Temperatures from each location where a Remote Thermostat is installed are stored in real-time and can be displayed on a historical graph. This helps you manage your HVAC system and allows you to identify areas where changing the air supply balance will improve room comfort.

## Key Customer Benefits

- Increase Space Climate Management
- Wireless Temperature Monitoring
- Retrofit Friendly
- Personalize Weighted Averages
- No Wires To Run
- Up to 8 Remotes per Thermostat
- Increase in Comfort
- Graphic Historical Temperature Tracking
- Advanced Alarm Notifications
- 24/7 Email Technical Support
- Monday thru Friday, 8am-5pm PST Live Support
- 5 Year Warranty

# Temperature Display and Keypad

Each Remote Thermostat displays current temperature as well as the active setting of the master thermostat. This allows people to be informed and minimizes confusion about the active settings. The keypad can be optionally enabled to allow for local control of the HVAC system or kept disabled to eliminate undesirable tampering.

## Temperature Only Mode

The Remote Thermostat can be configured to provide temperature monitoring in climate critical locations like computer server rooms. In this mode, instead of being linked to a thermostat, the device continually tracks real-time temperature in the location where it is installed. Safe temperature ranges can be configured. When the Remote Thermostat detects a temperature outside of the safe temperature range it will automatically generate a notification using email or a text message to alert management personnel that action is required.

## Multiple Power Options

For maximum flexibility two versions of the Remote Thermostat are available. The RT1-AC is powered by 24 VAC low voltage wiring. A low voltage transformer can be installed close to the device installation location providing power to the unit. The RT1-DC is a battery powered device (2 AA batteries) for locations where wired power is not available. The RT1-AC has the advantage of never needing to have its batteries replaced. In addition, the RT1-AC has a built-in wireless repeater which will extend the range of your Pelican network.

# Specifications

### Compatibility

- Wireless Communication with TS200, TS200H, or ECM
- 8 Remotes per Master

### Electrical

- RT1-AC: Power - hardwire 24VAC; 50mA
- RT1-DC: Power - 2 AA batteries

### Wireless

- IEEE 802.15.4
- Pelican's wireless network
- RT1-AC: Repeats Wireless Signal
- RT1-DC: Does NOT Repeat Wireless Signal

### System Regulation and Protection

- Keypad lockout
- Temperature Averaging set by Admin or User

### Thermostat Range

- Setting Temperature Range – heat: 40°F to 90°F (4.5°C to 32°C), cool: 50°F to 99°F (10°C to 37°C)
- Differential Temperature –  $\pm 0.5$  F ( $\pm 0.25$  C)
- Operating Humidity Range (%RH) – 5 to 90% RH, non-condensing

### Size

- Dimensions (in.) H 3.5" X W 5.875" X D 1.5"
- Dimensions (mm) H 89 X W 150 X D 38
- Mounting – Horizontal
- Display Size – 4 square inches



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