

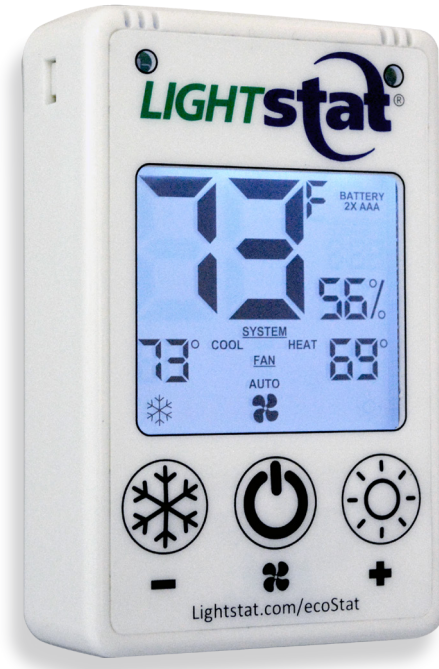


# ecoStat Thermostat

The **ecoStat** is a low cost automated thermostat that provides intelligent energy efficiency in the form of a modern, simple interface. The **ecoStat** is the perfect solution for tenant housing, dormitories and military housing.

## KEY FEATURES

- Up to two stage heating and cooling with auto changeover.
- O/B terminal for heat pump applications.
- Mode independent fan control.
- Detachable backplate for easy installation.
- User interface to control power, mode, setpoints and fan.
- Large LCD to display current temperature, active mode and setpoints.
- Setpoint override functionality with countdown display.
- Pre-configurable setpoints, setback conditions, time delays, override duration and temperature units.
- Onboard digital temperature (and humidity) sensor.
- Custom configurations available - please consult factory at time of order.
- Temperature range 0°-70°C
- Digital temperature sensor maintains a relative accuracy of +/- 1°F.
- Humidity range 5%-95%
- Humidity sensor accuracy of +/- 5 %RH.
- Battery operated or common wire configuration options available.



## APPLICATIONS

Apartments/Condos

Tenant Housing

Dormitories

Assisted Living Families

Military Housing

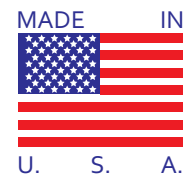
Camp Cabins

Stockrooms

Mechanical Rooms



Limited Lifetime Warranty  
contact Customer Service for details



# ecoStat Thermostat

## Power Options

- Two AAA batteries
- Common Wire

## Heating and Cooling

- Connections for 2 stages of heating and 2 stages of cooling.
- Configurable to allow single mode applications such as heat only or cool only.
- Auto changeover option when both modes are in use.
- O/B connection terminal for heat pump reversing valve control application.
- Automatically controls the Y1/ W1 output for heating and cooling.

## Setpoints

- Setpoints for both heating and cooling to set the desired ambient temperature range.
- Default setpoints are factory configurable based on customer requirements.

## Setback

- When setback is enabled the system will shift to using setback setpoints to conserve energy.

## Time Delays

- Time delays are implemented on the system both to conserve energy as well as promote longevity of the mechanical equipment.
- Time delays implemented are startup delay, output minimum on and output minimum off.
- The output minimum on and output minimum off time delays are configurable based on customer request and the startup delays are randomized based on an internal algorithm. Default lock on/lock off timers are 45 seconds.

## Temperature Units

- The temperature units displayed on the LCD are factory programmable and can be configured to either Fahrenheit or Celsius.

## Temperature Range

- Temperature range 0°-70°C (32°-158°F)

## Humidity Range

- Humidity range 5%-95%

## Sensors

- Temperature and Humidity.
- The digital temperature sensor maintains a relative accuracy of +/- 1°F.
- The humidity sensor accuracy is +/-5%RH.

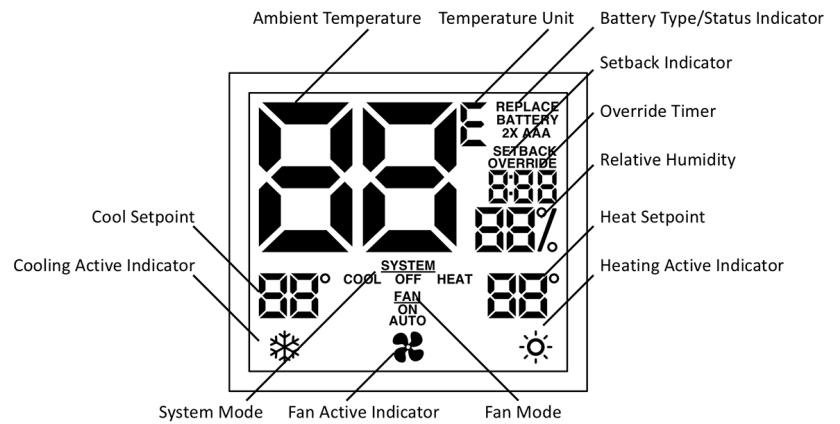
## External Connections

- A terminal block used for all external RTU connections is located on the backplate of the thermostat. The connections available on the terminal block are as follows:

R	(Power/Heating Power)
RC	(Cooling Power)
C	(Common)
G	(Fan)
W1	(Heat Stage 1) / O/B (Reversing Valve)
W2	(Heat Stage 2)
Y1	(Cool Stage 1) / Y (Heat Pump)
Y2	(Cool Stage 2)

## LCD Display

- The LCD display will normally show values for current temperature, relative humidity, heating setpoint, cooling setpoint, fan mode, active outputs, temperature units, override, battery, and setback as shown below.



- When a setpoint override period is in effect, the "Override" segment will illuminate and the override timer will display the remaining override time.
- If configured with setback enabled, the LCD will illuminate "Setback" when active. When the batteries are determined to be low, the word "REPLACE" will be indicated.

## CONFIGURATIONS

<b>Heating and Cooling:</b>	1 Stage Heating 2 Stage Heating 1 Stage Cooling 2 Stage Cooling
<b>O/B Configuration:</b>	Heat Pump -Active Cooling Heat Pump -Active Heating
<b>Default Set Points:*</b>	Heating (°F) Cooling (°F)
<b>Set Point Override:</b>	Enabled - Duration (Minutes) Disabled
<b>Setback:</b>	Light or none
<b>Lock on/Off Delays:</b>	Delay (Seconds) or none
<b>Units:</b>	Fahrenheit Celsius

\* configurable before shipping based on customer request



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