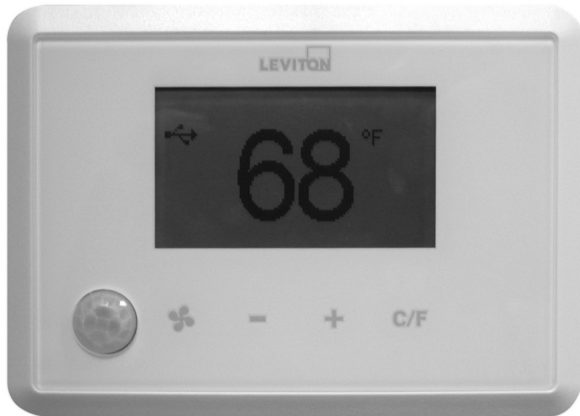


# Omnistat3 Hospitality Energy Management Thermostat



RC500 Thermostat, white

## APPLICATION

Designed for hotel rooms and lodging areas, the Omnistat3 Hospitality Thermostat boasts a compact form factor with a clean capacitive touch interface. The Omnistat3 is designed to achieve Title 24 compliance to accurately detect if a hospitality room is occupied, adjusting heat and cool setpoints based on vacancy or occupancy, and to control room loads or circuits if the room is vacant or occupied.

The thermostat is directly compatible with the Lumina RF sensor network, combining a built-in occupancy sensor in the face of the thermostat with battery powered RF sensors to monitor activity throughout the room.

The secure wireless technology also provides communication with load control modules, allowing devices to be turned off when the room is unoccupied. The Omnistat3 is designed to have an easily replicable installation process, utilizing the USB port to quickly push unified programming logic into each device with free software.

## HOW IT WORKS

The Omnistat3 uses a door/window sensor or hardwired key card switch at the main entrance combined with wireless RF sensors to determine room occupancy. Once occupancy is established, the room remains in an occupied state until the entry door is opened. If the room becomes unoccupied key loads in the room are turned off

and the temperature is set back within 10 minutes (adjustable). When the room becomes occupied, key loads are turned on and the temperature returns to the desired set points. For rooms with balcony sensors the HVAC can be turned off or setback when a balcony door is left open. The combination of sensors and logic allow the RC500 thermostat to provide maximum energy savings while allowing occupants to stay comfortable during their stay.

## OPTIONAL ATTACHMENTS

### Sensors:

- The on-board sensor combined with optional wireless sensors can detect occupancy and adjust temperatures and loads. The ceiling mount occupancy sensors have wide coverage (either 450 or 1,500 square feet) to detect occupancy. Additionally, a wireless corner mount motion detector, part number LURMD, has 16' of coverage at 90 degrees. The wireless door/window contact has a small form factor for discreet attachment.

### Load Control:

- A heavy duty 30A load control module provides control of electrical branch circuits including receptacles, while a 15A plug-in appliance module provides control of small electrical devices that plug-in to receptacles

### Switches:

- The ZSS10 wall switch is available in versions with and without a neutral connection, for switched loads including lighting or fans

### Hardwired Key Card Switch:

- Available for applications when a key card is used to determine occupancy instead of sensors
- The Omnistat3 can accept a key card switch input
- The thermostat will ignore the sensor inputs and instead rely on the state of the card reader
- When a card is inserted, the thermostat will move to an occupied state
- When the card is removed, the room will move to unoccupied

**ENERGY MANAGEMENT MODES**

Various modes exist to meet code and application-based expectations.

**Saving Energy Mode**

- When the room is determined to be unoccupied, the temperature set points are changed to 5°F (adjustable) and controlled loads are turned off

**Comfort Mode**

- When the room is determined to be occupied, the temperature set points return to the guest's previous settings or a predetermined setting depending on how long the room was unoccupied
- During setup, the thermostat can be programmed to turn controlled loads on when occupancy occurs or allow them to remain turned off

**Balcony Door Mode**

- For rooms with a balcony, the door/window sensor can be used to control the thermostat settings
- Through programming, an open balcony door can change the thermostat mode to off or move the temperature set points
- When the balcony door is closed, the room will return to occupied mode

**HVAC SYSTEM TYPES**

There are five relays to support most HVAC systems. This includes 24VAC thermostat applications with 1 or 2 stage conventional, heatpump including multistage, 2-pipe, 4-pipe, and multiple fan speeds. The RC500 does not have batteries and instead features power stealing support where a common wire can be used. Applications without a common wire may require a 30A00-2 Thermostat Power Supply Module. Also compatible with Goodman and Amana PTAC heat pump units.

**Installation Notes**

For ease of installation, all thermostat connections are in the back base, with the front interface simply snapping to the base via high quality push connectors.

**FEATURES & BENEFITS**

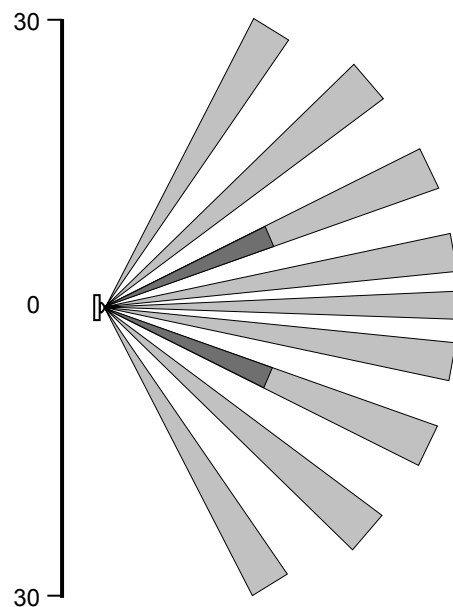
- Provides Energy Management for hotel rooms by adjusting temperature set points after accurately determining if a room is unoccupied
- Meets Title 24 and ASHRAE 90.1 2010 standards
- Provides wireless load control turning loads off

when a room is unoccupied and on when occupied

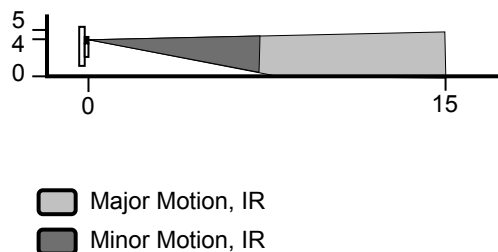
- State-Of-The-Art logic combines door activity with occupancy sensors to accurately determine if a room is occupied or vacant
- Compatible with nearly all 24VAC thermostat applications including 2 and 4 pipe systems
- Quick installation software allows rooms to be replicated quickly and easily via a USB connector
- Reliable wireless technology
- Sensor battery life exceeds 5 years.

**FIELD-OF-VIEW**

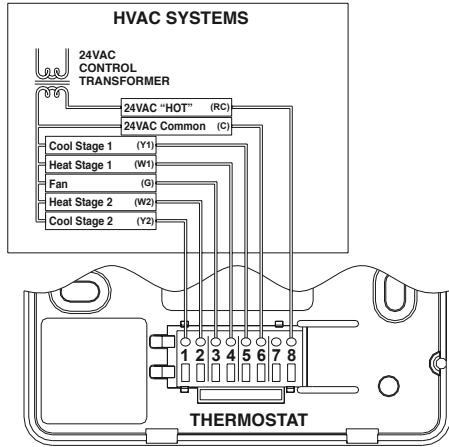
TOP VIEW (in feet)



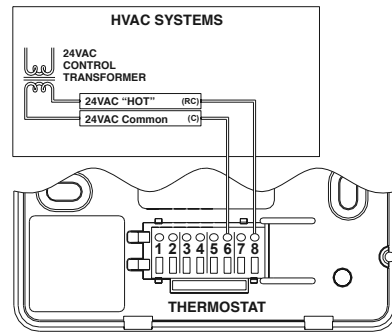
SIDE VIEW (in feet)



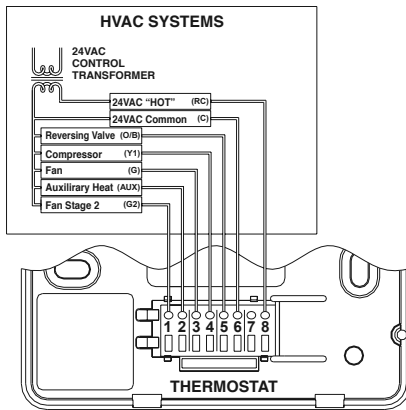
**2-STAGE CONVENTIONAL THERMOSTAT**



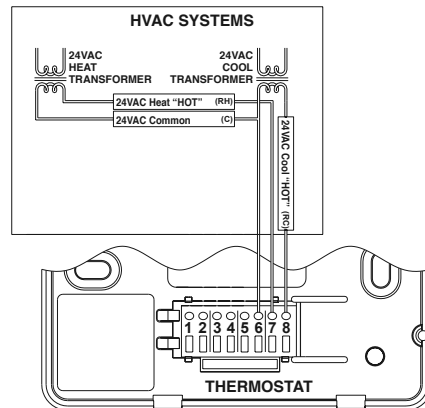
**THERMOSTAT POWER UP FOR TEST OR CONFIGURATION**



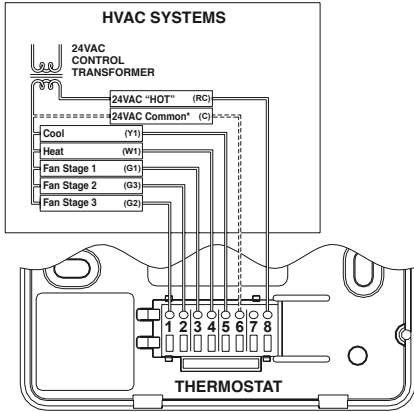
**HEAT PUMP (2 STAGE HEAT/1STAGE COOL)**



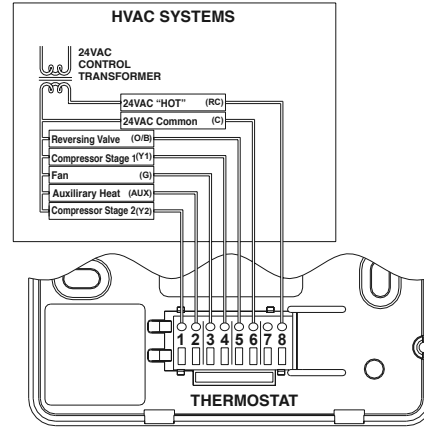
**CONNECTIONS FOR HEAT AND COOL TRANSFORMERS - APPLIES TO ALL SYSTEMS**



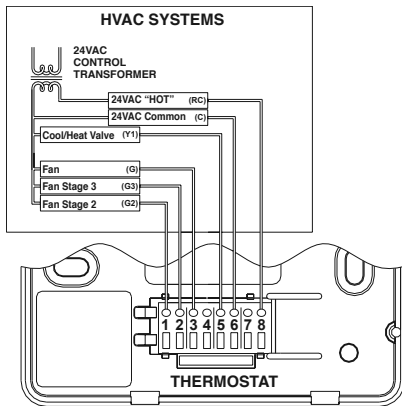
**SINGLE STAGE HEAT/COOL THERMOSTAT**



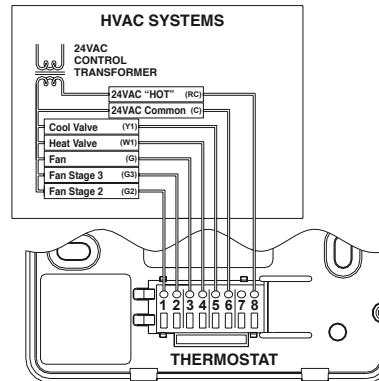
**TWO SPEED HEAT PUMP THERMOSTAT**



**2-PIPE THERMOSTAT**



**4-PIPE THERMOSTAT**



## PRODUCT DATA



ELECTRICAL	
Line Voltage	24 VAC
Power Consumption	2 Amp max
Operational Frequency	50/60 Hz
Load Rating	2 Amp max total
ENVIRONMENTAL	
Operating Temperature Range	0°C to 40°C (32°F to 104°F)
Storage Temperature Range	-10°C to 60°C (14°F to 140°F)
Relative Humidity	0% to 90% non-condensing
OTHER	
Dimensions	4.4in x 3.1in x 0.8in (112mm x 80mm x 21mm)
Agency Standards and Compliance	Meets requirements for Title 24 2013 and ASHRAE 90.1, cETLus, CE, C-Tick
Warranty Information	Two-Year Limited Warranty

## ORDERING INFORMATION

DESCRIPTION	CAT. NO.
Omnistat3 Hospitality Thermostat	RC500 -2EW

## ACCESSORIES

DESCRIPTION	CAT. NO.
Lumina RF Wireless Ceiling Mount PIR Occupancy Sensors - Coverage of up to 450 sq/ft	ZSC04-INW
Lumina RF Wireless Ceiling Mount PIR Occupancy Sensors - Coverage of up to 1,500 sq/ft	ZSC15-INW
Lumina RF Wireless Corner Mount Motion Sensor	LURMD-00W
Lumina RF Wireless Door / Window / Balcony Sensor	LURDW-00W
Lumina RF 30 Amp Load Control Module - 96-250VAC (50/60 Hz)	73A00-3ZB
Lumina RF Plug-in Appliance Module - 120VAC 15A	89A00-1ZB
Lumina RF Wall Switch - 120-277VAC 10A	ZSS10-N0Z
Lumina RF Wall Switch - 120-277VAC 10A, No Neutral	ZSS10-G0Z
Hardwired Hospitality Key Card Switch - 24V Key Switch Interface	HKSWP-0LX*

\* HKSWP ships with a Color Change Kit - includes a White, Ivory and Light Almond faceplate.

**Leviton Manufacturing Co., Inc. Global Headquarters**  
201 N. Service Rd. Melville, NY 11747-3138 • Tech Line: 1-800-824-3005 • Fax: 1-800-832-9538

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