



# COMMERCIAL PROGRAMMABLE LIGHT-ACTIVATED THERMOSTAT

# TEMPSURE

## Product Specification

Part Number TSTATBBP250-LA

### DESCRIPTION

The Bryant Tempsure Commercial Programmable Light-Activated Thermostat provides the following features and benefits:

- electric heat, gas heat, and heat pump compatibility
- light-activated operation
- seven-day programmable clock; 4 time periods per day
- holiday programming (up to 99 consecutive days)
- dry contact switch for external devices
- remote temperature sensing
- zone temperature control to 1-degree accuracy
- Neverlost™ non-volatile memory (no batteries required)
- service filter indicator
- energy saving Smart Fan
- large Thermoglow™ display
- three security levels with keypad lockout
- pre-occupancy purge
- schedule override
- five-minute compressor time guard
- soft start/staggered start
- copy command

### STANDARD FEATURES

Tempsure commercial programmable light-activated thermostats provide flexibility for every application, reliability for year-round comfort, and ease of programming for quick installation.

This wall-mounted, low-voltage device maintains room temperature by controlling operation of an HVAC (heating, ventilation, and air conditioning) system. Separate heating and cooling set points and auto-changeover capability allow occupied and unoccupied programming for energy savings.

The thermostat can accept different equipment configurations, including single- and 2-stage heating and cooling, heat pumps, gas or electric heating, and hydronic systems.

The thermostat allows up to 4 time/temperature settings per 24-hour period. Each thermostat stores schedules for 7 independent days. Batteries are not required. During power interruption, the internal memory stores schedules for an unlimited time while the clock will continue to run for at least 48 hours.

**THERMOSTAT** can be used with many different applications including single- and 2-stage heating and cooling, heat pumps, gas or electric heating, and hydronic systems.

**LIGHT-ACTIVATED OPERATION** with built-in sensor maximizes energy savings by placing the thermostat in occupied mode only when lights are on in the room. The thermostat stays in unoccupied mode when lights are off. Sensor sensitivity adjusts quickly and easily with an adjustment screw located on the thermostat. Light activation is a perfect complement to motion sensor light installations.

**A 7-DAY CLOCK** is provided with 3 occupied and unoccupied time periods for scheduling heating and cooling set points.

Occupied and unoccupied schedules save energy by changing zone set points during unoccupied times.

**HOLIDAY PROGRAMMING** allows the thermostat to run under unoccupied temperature set points for up to 99 consecutive days. This is especially beneficial in schools or businesses where long breaks are common.

**DRY CONTACT SWITCH FROM EXTERNAL DEVICES** allows control of the thermostat by an external switch, light or motion sensor, or timeclock. Thermostat enters occupied mode when the switch is energized. Many thermostats can be controlled by one external device.

**REMOTE TEMPERATURE SENSING** accessories are available for remote sensing to areas where public access to the thermostat is not desired. Typical applications include retail stores, classrooms, and other areas where the thermostat will be mounted away from the controlled space. The degree annunciator flashes when the thermostat is using a remote room sensor. A laser-trimmed, solid-state sensor sends the digital signal to the thermostat.

**PREOCCUPANCY PURGE** enhances indoor air quality by initiating the fan before the programmed occupancy time. The purge is user configured from 0 to 3 hours.

**ONE-DEGREE CONTROL ACCURACY** precisely controls room temperature within 1 degree of user set point. The thermostat uses a laser-trimmed, solid-state sensor.

**SCHEDULE OVERRIDE** returns the system to occupied set points if heating or cooling is needed during unoccupied hours. The override is adjustable in 30-minute increments and returns the system to unoccupied mode when override expires.

**NEVERLOST MEMORY PROTECTION** on the thermostat eliminates the need to reprogram the thermostat after power outages. Comfort programming and configuration will remain intact indefinitely. Clock and day of the week settings will be retained for a minimum of 48 hours.

**SERVICE FILTER INDICATOR** lets maintenance personnel know when the filter needs cleaning or replacing, which aids in equipment efficiency and prolongs equipment life.

**ENERGY SAVING SMART FAN** is configured for automatic and continuous operation. During automatic operation, the fan only runs when the system calls for heating or cooling. In continuous operation, the fan runs continuously in occupied time periods, but during unoccupied periods runs only when the system calls for heating or cooling.

**FIVE-MINUTE COMPRESSOR TIME GUARD** protects HVAC equipment by preventing compressor short cycling, and an adjustable cycle limits the number of cycles per hour.

**SOFT START/STAGGERED START** staggers the start of HVAC equipment. This prevents sudden power peak if multiple units energize simultaneously, such as after a power failure.

**TITLE 24 COMPLIANCE** meets specified requirements for all California commercial installations.

**COPY COMMAND** for programming schedules saves time when multiple daily schedules are similar.

**THERMOGLOW DISPLAY** is large and easy to read. Backlit display allows programming in poorly lit areas and can be button activated or continuously lit. A single adjustment shows temperature in Celsius or Fahrenheit.

**FOUR TIME PERIODS** per day allow flexible scheduling for every application. Start and stop times along with heating and cooling set points are easily entered into the schedule.

**THREE LEVELS OF SECURITY AND KEYPAD LOCKOUT** protect against unauthorized usage of the thermostat. Unattractive and bulky locking covers are not necessary. Schedules, set points, and thermostat configurations are protected by locking out keypad operation. An easily memorized button sequence unlocks the keypad and allows access to configuration, set point, and scheduling information.

**AGENCY APPROVALS**

**Complies with FCC Part 15** rules. Thermostat does not cause harmful interference and accepts all interference received.

**Underwriters' Laboratories (UL) and UL, Canada Approval** for thermostats. These thermostats are considered low voltage devices by UL and do not require UL approval. As an added

assurance to the quality of the thermostats, these thermostats are UL listed.

**Title 24 Compliance** meets specified requirements of programming capability for all California commercial installations.

**Meets European Community (CE) Standards.** Thermostat conforms to European (CE) requirements and is designed in accordance with IEC (International Electrotechnical Commission) standards.

**SPECIFICATIONS**

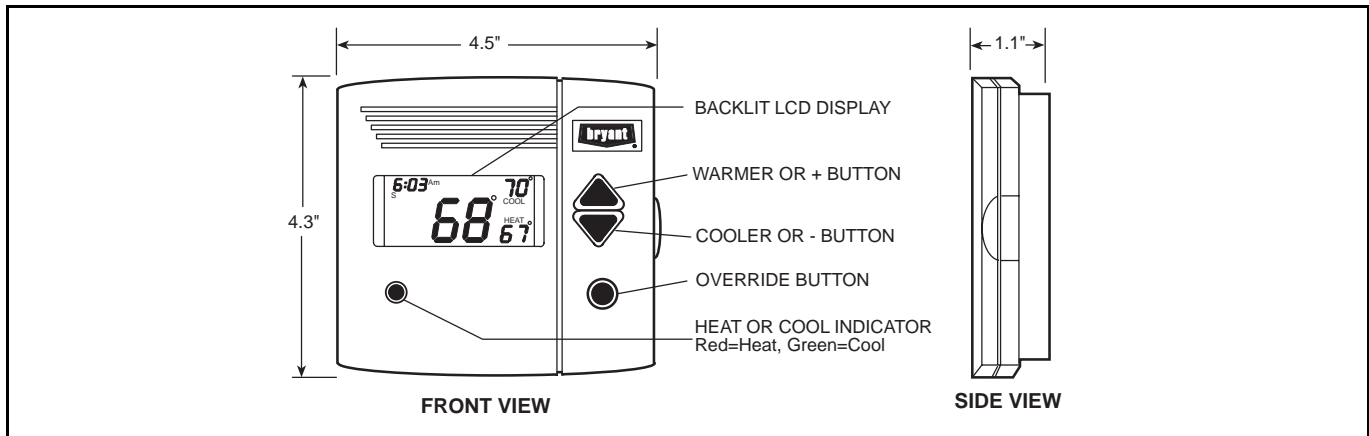
<b>Recommended Wiring</b>	22 AWG (36 ft max) 18 AWG (100 ft max)
<b>Operation Temperature F (C)</b>	41 to 104 (5 to 40)
<b>Storage Temperature F (C)</b>	-40 to 135 (-40 to 57)
<b>Operating Relative Humidity</b>	0 to 95% (non-condensing)
<b>Dimensions (in.)</b>	4.5 x 4.3 x 1.1
<b>Power</b>	5 va at 24 vac, 60 Hz

**LEGEND**

AWG — American Wire Gage



**DIMENSIONS**



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE  
UNIT MUST BE INSTALLED IN ACCORDANCE  
WITH INSTALLATION INSTRUCTIONS