



# SITESTAT™

## Family of Thermostats and Sensors

The SiteStat product family is a series of communicating thermostats and sensors, designed for new or retrofit commercial and small office applications. The SiteStat thermostat is an easy-to-use, low profile surface mount unit with built-in functions for flexible environmental control. Using companion remote sensors with the SiteStat thermostat enables features such as room temperature averaging, return air duct temperature sensing, and the display of outdoor temperature. Additional peripherals permit networking SiteStats and sensors together with TAC's network controllers, for the greatest flexibility in installation and configuration.

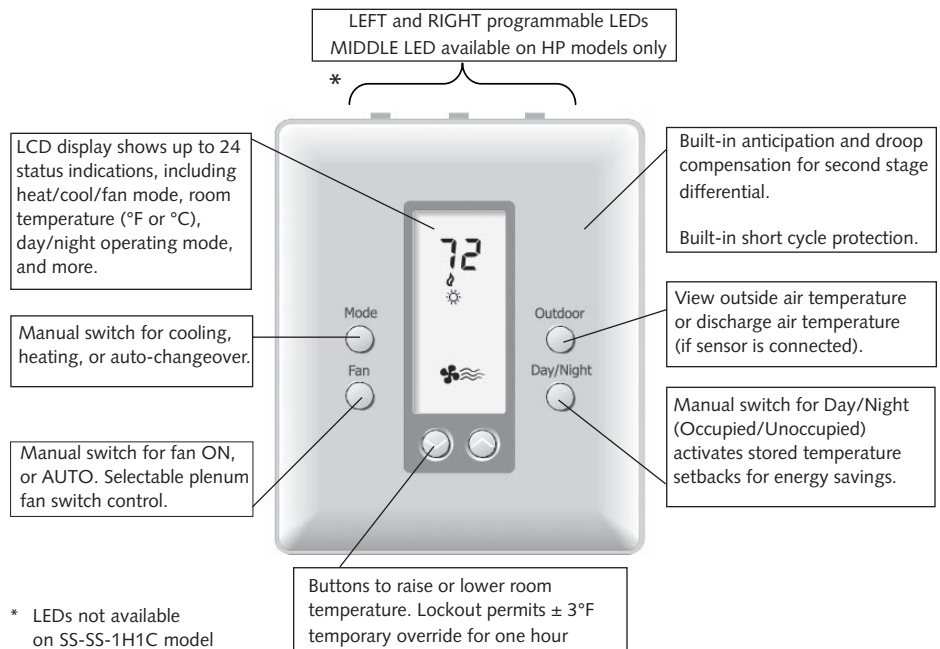
- Easy-to-use thermostat controller
- Applications:
  - Fan Coil Units
  - Heat Pumps
  - Unit Heaters
  - Packaged RTUs
  - Packaged Heating/Cooling
- Easy-to-read vertical display
- Web-based user interface allows simple schedule changes
- View thermostat logs and run trend reports
- Connects directly to HVAC equipment
- Retrofits most old thermostat installations
- Single and multi-stage models
- Fuzzy logic algorithms improve operating efficiency and control
- Retains setpoints and operating modes through power failures
- Supports up to six remote sensors, plus one outdoor air sensor

### SOPHISTICATED CONTROL IN AN ELEGANT PACKAGE

SiteStat thermostats are both communicating thermostats and stand-alone fixed-function HVAC controllers, connected directly to HVAC equipment. Each thermostat is capable of sending and receiving commands from network controllers. These commands control the SiteStat's schedules, setpoints, and operating modes, and also permit room temperature and status to be read from the mounted location.

The SiteStat uses fuzzy logic algorithms to monitor the changes in room temperature and run equipment more efficiently. Additionally, these algorithms provide appropriate control of staged heating and cooling to minimize cycling of equipment.

The SiteStat is easily calibrated and customized using combination button sequences. After installation, thermostats are configured using simple web pages built into the controller. A standard web browser is all that is needed to change setpoints, schedules, and operating parameters.





SiteStat thermostats are made with durable ABS plastic, and housed in an attractive, low profile surface mount kit. A large vertical LCD display provides complete operating status. A direct-wire sub-base mounts to standard vertical outlet boxes or any drywall surface using the hardware provided.

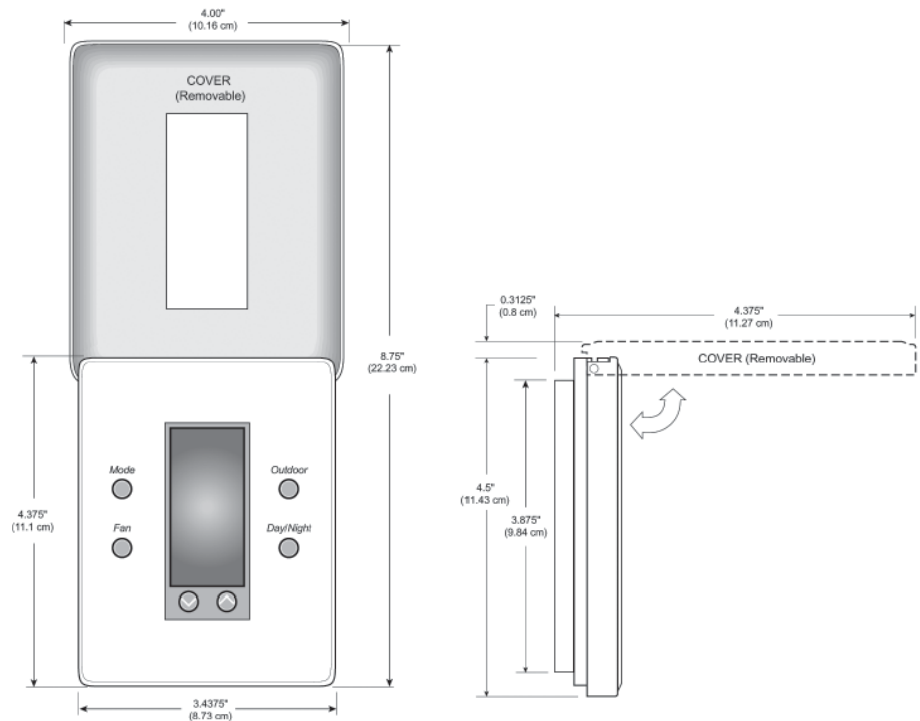
#### FOUR MODELS FOR ANY APPLICATION

Model Number	Description
SS-SS-1H1C:	Single-stage Gas/Electric, 1 Heat / 1 Cool stage, auto changeover
SS-MS-2H2C:	Multi-stage Gas/Electric, 2 Heat / 2 Cool stage, auto changeover
SS-HP-2H1C:	1-Compressor Heat Pump, 2 Heat / 1 Cool stage, auto changeover
SS-HP-3H2C:	2-Compressor Heat Pump, 3 Heat / 2 Cool stage, auto changeover

#### LARGE DISPLAY AND INTUITIVE CONTROLS

A large LCD display and intuitive manual override buttons make the SiteStat simple to use. To prevent tampering or manual changes, simply configure the SiteStat to lockout the keypad. During lockout, occupants can change temperature settings up or down by only 3°F, and for only one hour.

#### DIMENSIONAL DRAWING



# SPECIFICATIONS

## SiteStat Family

### ELECTRICAL

#### Rated Voltage

20 to 30 VAC, 50-60 Hz, Class 2, 24 VDC nominal

#### Rated AC Current

0.05 to 0.75 A continuous per output, with surges to 3 A maximum

#### Rated DC Current

0.0 to 0.75 A continuous per output, with surges to 3 A maximum

#### Power Terminations

24V - power, 24V(c) - power common, (SS-PWR24 not included)

#### Inputs (LED1, LED2, CLK1 & CLK2)

20-30 VAC or 22-30 VDC (negative on 24(c) terminal); Switches at 2 VDC

#### Recommended Wire

Category 5 Unshielded Twisted Pair (CAT5 UTP), 4 pair, 24 AWG

(CAT5 Belden 1583 PVC or Plenum, or CAT5e Belden 1583A PVC or Plenum)

Note: No battery required (maintains last setpoint and returns to day mode of operation following power outages).

### CONTROL RANGES

#### Heating Range

38 to 88°F in 1° steps (6 to 30°C in 1° steps)

#### Cooling Range

60 to 108°F in 1° steps (16 to 40°C in 1° steps)

#### Measurement Range

28 to 124°F or 0 to 48°C

#### Measurement Units

°F or °C, configurable using keypad

#### Outdoor Indication

-50 to 124°F or -48 to 48°C

#### Control Accuracy

± 1°F @ 68°F (0.5°C @ 20°C)

#### Minimum Deadband

2°F or 1°C (between heating and cooling)

#### Changeover

Automatic from heat-to-cool and cool-to-heat

#### Override

One hour or three hour

### On/off time

Selectable minimum time (2 or 4 minutes)

### Addressing

Selectable between 01 and 32

### MECHANICAL

#### Dimensions

4.5" H x 4" W x 7/8" D  
(114mm x 102mm x 22mm)

#### Button Lockout

Internal dip switch disables all buttons except temperature up/down by 3°F

#### Cover Lock

Adapter included for optional locking

### AGENCY LISTINGS

#### UL and cUL Listing

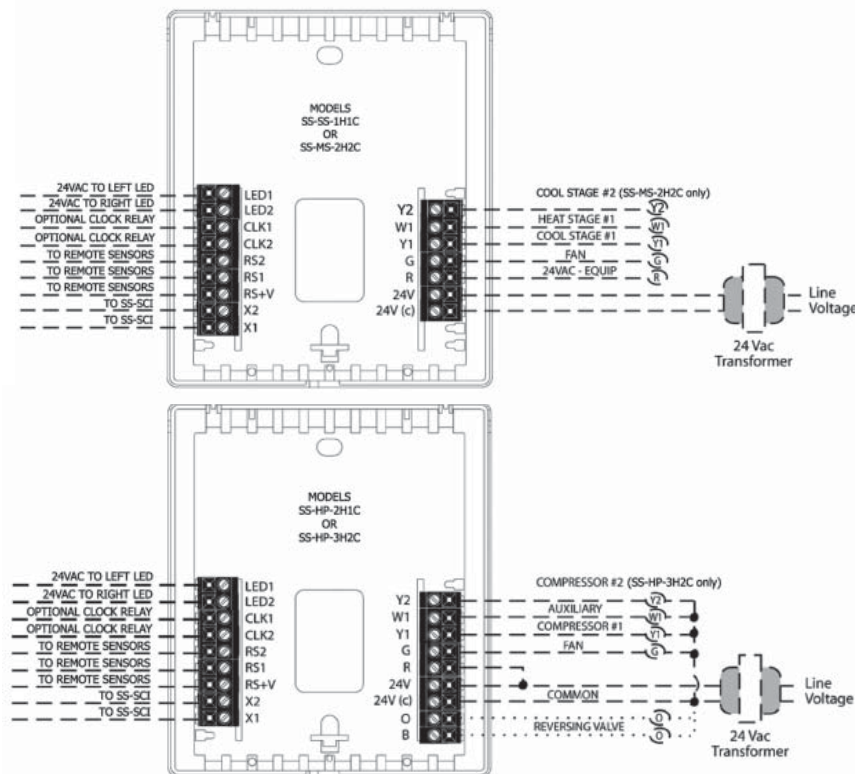
UL 873 Multiple Class 2 Device, UL94HB Plastic Enclosure

#### FCC Compliance

Class A digital device, Class B Part 15



### TERMINATION DRAWINGS



## SITESTAT CONTROLLER INTERFACE

The SiteStat Controller Interface (SCI) is a serial communications device that enables the controller to send and receive commands to and from each SiteStat thermostat. One end of the SCI connects to the RS-232 serial port on a network controller. Two-wire communications then link the SCI to each thermostat using one or more networking options shown below.

One SCI is required for each network controller, and supports communications for up to 32 thermostats.

### SS-SCI SPECIFICATIONS:

<b>Power Terminals:</b>	16 VAC nominal, $\pm 15\%$ , 16 VAC power wall pack included
<b>Rated AC Current:</b>	200 mA maximum
<b>Green PWR LED:</b>	blinking = normal operation steady = system interruption occurred
<b>Red SS LED:</b>	flashing = normal communications
<b>Dimensions:</b>	3.6" H x 6.25" W x 0.875" D (91mm x 159mm x 22mm)
<b>X2 Terminal:</b>	Common (-) from thermostats
<b>X1 Terminals (2):</b>	Data (+) from thermostats
<b>RS-232 Ports (2):</b>	1) Controller DB9 female, 2) For future use
<b>Cable Supplied:</b>	RJ-45 to DB9 male serial cable included, 3' (914 mm)



Model Number : SS-SCI



### REMOTE SENSORS

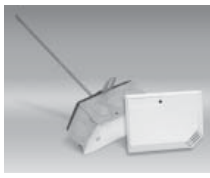
#### SiteStat Remote Indoor Air Temperature Sensor: Model Number: SS-IDS

Connects directly to SiteStat. Up to 6 sensors can be daisy-chained together. Automatic averaging for multiple sensors. 3-wire connection to SiteStat. Use CAT5 UTP cable. Dimensions: 3.5" x 2.5" x  $\frac{3}{4}$ " (88.9mm x 63.5mm x 19.0mm).



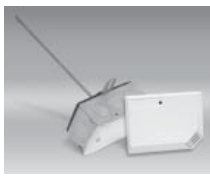
#### SiteStat Remote Outdoor Air Temperature Sensor: Model Number: SS-ODT

Connects directly to SiteStat. One sensor per SiteStat. Outdoor Temperature displays on SiteStat. Works with or without Remote Indoor Sensor. 3-wire connection to SiteStat. Use CAT5 UTP cable. Dimensions: 3.5" x 2.5" x  $\frac{3}{4}$ " (88.9mm x 63.5mm x 19.0mm).



#### SiteStat Remote Indoor Return Air Duct Temperature Sensor: Model Number: SS-DUCT

Return air duct sensor assembly with  $7\frac{1}{2}$ " (190.5mm) probe. Connects directly to SiteStat. Up to six sensors can be daisy-chained together. Automatic averaging for multiple sensors. 3-wire connection to SiteStat. Use CAT5 UTP cable. Standard gangbox. Sensor dimensions: 3.5" x 2.5" x  $\frac{3}{4}$ " (88.9mm x 63.5mm x 19.0mm).



#### SiteStat Remote Discharge Air Temperature Sensor: Model Number: SS-DSCHG

Discharge air sensor assembly with  $7\frac{1}{2}$ " (190.5mm) probe. Connects directly to SiteStat. Displays discharge air temperature on LCD. 3-wire connection to SiteStat. Use CAT5 UTP cable. Standard gangbox. Sensor dimensions: 3.5" x 2.5" x  $\frac{3}{4}$ " (88.9mm x 63.5mm x 19.0mm).



### ACCESSORIES

#### SiteStat Terminal Board: Model Number: SS-TB45

Supports up to eight addressable SiteStat thermostats and provides terminators for both communications and power. Screw terminal connections for 24 AWG CAT5 wire. Use for any SiteStat wiring need. Dimensions: 5" x 3" x 1" (127.0mm x 76.2mm x 25.4mm).

#### Auxillary Power Supplies

Model Number: SS-PWR16

Model Number: SS-PWR24

Spare 16 VAC Power Supply for SS-SCI (Serial Communications Interface)  
24 VAC power wall pack for SiteStat Thermostats. Converts 110 VAC to 24 VAC @883 mA

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