T-S1 and T-S2 Indoor Remote Sensor

(USE WITH UT32 THERMOSTAT)

APPLICATION

The T-S1 Indoor Temperature Sensor is used with the UT32 thermostat. The S1 model contains a single thermistor and the S2 model contains two (2) thermistors in series. A combination of both sensors can be used for indoor temperature averaging to simplify wiring.

SPECIFICATIONS

Operating Ambient Temperature Range: -40 to 140° F

Indoor Temperature Display Range:

UT32 (42 to 122° F)

Operating Relative Humidity:

5% to 95% RH (non-condensing)

Sensor Type:

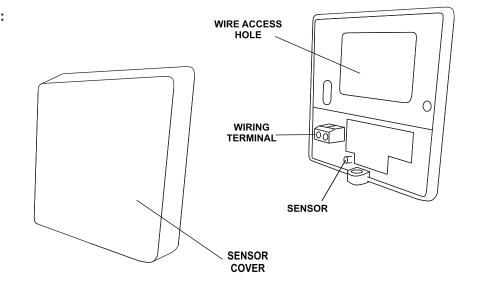
NTC Type 2, 10KΩ @ 77° F

Sensor Accuracy:

+/- 3% @ 77° F

Enclosure Dimensions:

3.125" x 3.125" x 0.875" (H x W x D)



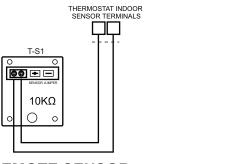
IMPORTANT

- 1. Keep wiring at least one foot away from large inductive loads such as motors, line starters, lighting ballasts and large power distribution panels.
- 2. Use shielded cable to reduce interference when possible.
- 3. Use a separate 18-2 cable when wiring sensor to the thermostat.
- 4. Do not route sensor cable with line voltage power wires or near control contactors, light dimming circuits, electric motors or welding equipment.
- 5. Make sure that all wiring connections are secure.
- 6. Wiring must be in compliance with all applicable codes.

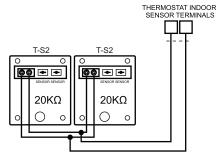
LOCATION AND INSTALLATION

- 1. Mount the sensor(s) in a location that represents the ambient space temperature being controlled.
- 2. Do not install the sensor(s) in an area where drafts are present, near the floor, behind doors or on an external wall.
- 3. Avoid locating the sensor(s) in areas where the air movement is limited, affected by direct sunlight or other areas not typical of the temperature in the space.
- 4. Remove the cover from the subbase.
- 5. Pull the sensor cable through the wire access hole of the subbase and mark the mounting screw locations.
- 6. Use the mounting hardware supplied with the sensor.
- 7. Land the sensor cable to the screw terminals located on the sensor printed circuit board.
- 8. Seal the wire access hole to prevent any drafts that might affect the sensor.
- 9. Replace the sensor cover.
- 10. Refer to UT32 thermostat installation manual for indoor sensor wiring and installer setup options.

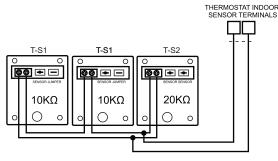
MULTIPLE SENSOR CONFIGURATIONS FOR TEMPERATURE AVERAGING



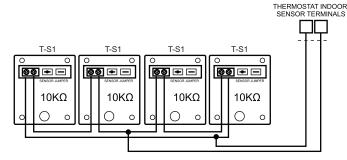
1 REMOTE SENSOR



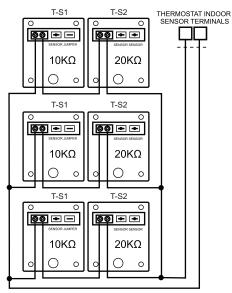
2 REMOTE SENSORS



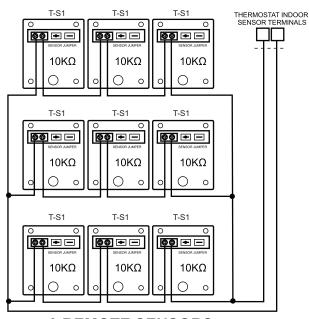
3 REMOTE SENSORS



4 REMOTE SENSORS



6 REMOTE SENSORS



9 REMOTE SENSORS

Multiple remote sensors can be connected to the UT32 for temperature averaging. The S1 sensor contains one (1) $10 \text{K}\Omega$ sensor and the S2 sensor contains two (2) $10 \text{K}\Omega$ sensors wired in series. In the above combination, the sensors are wired in series/parallel and their total value equals $10 \text{K}\Omega$. The internal sensor on the UT32 is automatically disabled when an indoor remote sensor is connected and is not used for temperature averaging.

