The Savant Remote Temperature and Humidity Flush Mount Sensor (CLI-THFM1) provides precision room temperature and humidity sensing for Heating, Ventilation and Air Conditioning (HVAC) systems. The CLI-THFM1 is designed to integrate seamlessly within the CLI-8000/8000A HVAC architecture. The sensor is flush-mounted and communication is achieved over the Data Sensor Bus through the DSB/1-Wire connection on the front panel.

A total of eight CLI-THFM1 sensors can be wired to the Data Sensor Bus. Of the eight sensors wired to the Data Sensor Bus, up to two sensors can be assigned to each HVAC Relay Bank or Zone.

The CLI-THFM1 sensor has an integrated color LED for ease of identification during set up or troubleshooting.
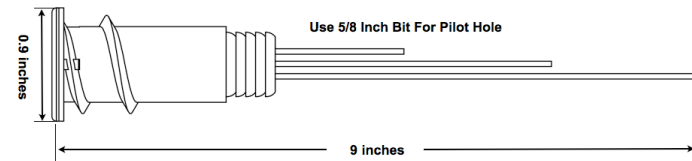
Note: The CLI-THFM1 sensors are factory calibrated and rehydrated, no calibration to the sensor prior to installation is required.

Box Contents
(1) CLI-THFM1
(3) Dolphin Splice Connector (028-0581-xx)
(1) Quick Reference Guide (this document)

Related Components
Savant® CLI-8000/CLI-8000A Eight Zone Centralized Thermostat Processing Unit
Savant® CLI-PLEN1C - Commercial Plenum Sensor (Heat duct sensor)
Savant® CLI-PLEN1R - Residential Plenum Sensor (Heat duct sensor)
Savant® CLI-SLAB1 - SLAB Sensor (Floor Heating Sensor)
Savant® SST-TEMP1 - Remote Indoor Temperature Sensor
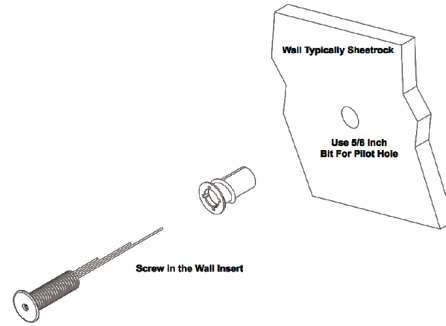Savant® SST-OTEMP1 - Remote Outdoor Temperature Sensor

CLI-THFM1 with measurements

Specifications

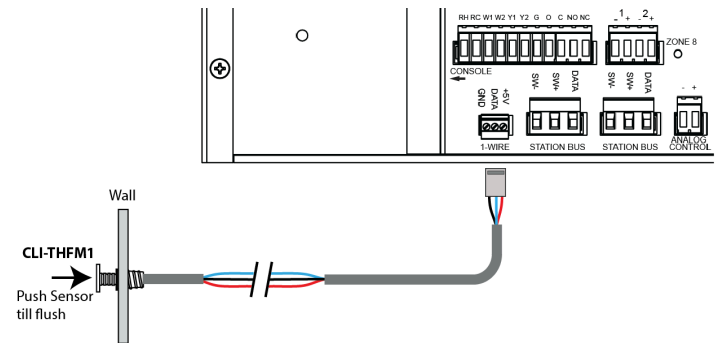| Environmental	
Temperature	32°F to 158°F (0° to 70°C)
Cable Requirements	
Data Sensor Bus (One-Wire)	24 AWG (CAT-5) 600 feet (182 m) maximum (cumulative)
Sensor Property & Features	
Temperature Range	-40°F to 185°F (-40°C to 85°C)
Temperature Accuracy	+/- 0.9°F (.5°C) from 14°F to 176°F (-10°C to 80°C) +/- 2.7°F (1.5°C) Outside this range
Humidity Range	0% to 100% RH, non-condensing 14°F to 140°F (-10°C to 60°C)
Humidity Accuracy	+/- 3.5% RH, max. error (Accuracy 20 - 80% RH), +/- 5% outside this range
# of Bussed Sensors	A total of eight CLI-THFM1 sensors can be wired to the Data Sensor Bus. Of the sensors wired to the Data Sensor Bus, up to two can be assigned to each HVAC Relay Bank or Zone.
Network	Sensors are One-wire compliant.
Integrated LED	Integrated LED for ease of setup and troubleshooting
Compliance	
RoHS	Compliant

Installation of CLI-THFM1 to wall

1. Drill a 5/8" hole into the wall.
2. Pull wires designated for sensor through hole in wall just drilled.
3. Run wires from sensor through the wall anchor included in the install kit.
4. Connect wires from sensor to wires from wall using the splice connectors included in the install kit. Refer to diagram below.
5. Insert all wires and connections through hole and behind wall.
6. Install the flush-mount wall insert into the wall by screwing clockwise until fully seated.
7. After wiring the sensor, the sensor is then pressed into the wall insert.

CLI-THFM1 connection to the TPU

Wiring and Inserting the Sensors
Up to eight sensors can be wired to the Data Sensor Bus with a cumulative length of 600 feet (182 m). This length includes the main run as well as any wiring stubs. When wiring the sensors, use the Dolphin Splice Connectors enclosed in the install kit to terminate any connections.

Important Note: *It is recommended that the Dolphin Ratcheting Crimp Tool DR-4141 or DC-500F be used to terminate the connections.*

Painting the Sensor
If desired, the CLI-THFM1 sensor can be painted to match the color of the wall or flat surface. Prior to painting, prep the sensor by lightly sanding the surface of the sensor.

Important Note: *The hole in the end of the plastic piece that houses the sensor must be covered before painting. Failure to cover the hole will allow paint to get on the sensor and possible damage could occur.*

Plastering over the Sensor
Savant does not recommend plastering over the sensor. The sensor housing is made from a nonporous plastic material and plaster will not bond well to it. In addition, the thermal and humidity properties of the sensor can be affected when embedded under a layer of plaster.

Configuration Information
The CLI-THFM1 humidity/temperature sensors are wired to the Data Sensor Bus and then assigned to each zone on the TPU.

- **Note:** Refer to the Centralized Climate Deployment Guide on the Savant Portal for configuration information.

    CLI-8000 = 009-1073-XX
    CLI-8000A = 009-1154-XX

Additional Information
For additional information related to Climate Control, refer to the Savant Portal located at dealers.savantsystems.com.

Knowledge Base > Savant Hardware > Climate Control