

Description

The Savant® Climate products such as the Savant® Centralized Climate Control Solution or Savant® family of Wireless Thermostats collect temperature and humidity data from a line of remote type precision temperature and humidity sensors. Each sensor is designed for a specific application and used to monitor and control temperature and humidity within a home or facility.

- **CLI-THFM1** - A flush mount combination temperature and humidity sensor that is wired to a Data Sensor Bus network. Each sensor has its own unique ID (UID) and uses the 1-Wire protocol to communicate over this bus.
- **SST-TEMP1** - A flush-mount temperature sensor that provides precision indoor temperature monitoring. The SST-TEMP1 is a Type 2 NTC 10K sensor and is wired using a two-wire twisted pair or Cat 5 cable.
- **SST-OTEMP1** - An outdoor temperature sensor that is mounted in a weatherproof housing and stainless steel fittings to shield the sensor from direct sunlight. The SST-OTEMP1 is a Type 2 NTC 10K sensor and is wired using a two-wire twisted pair or Cat 5 cable.
- **CLI-PLEN1R** - A temperature sensor that measures the air being discharged from an HVAC furnace. The sensor is a Type 2 NTC 10K sensor and is wired using a two-wire twisted pair or Cat 5 cable. The sensor is embedded in a nine inch stainless steel probe. The R indicates it is designed for residential applications.
- **CLI-PLEN1C** - A temperature sensor that mounts to and measures the air being discharged from an HVAC system. The sensor is a Type 2 NTC 10K sensor and is wired using a two-wire twisted pair or Cat 5 cable. The sensor is embedded in a 12 inch stainless steel probe. The C indicates it is designed for commercial applications.
- **CLI-SLAB1** - A floor/slab sensor used to monitor the floor temperature in various floor heating systems. The sensor is a Type 2 NTC 10K sensor and is wired using a two-wire twisted pair or Cat 5 cable. The sensor is embedded in a small 0.6 x 0.196 inch stainless steel sleeve that can be retrofit into spaces between tile grout lines.

Applications

Each of the sensors described above is designed to integrate into one or more of the climate products designed and manufactured by Savant® Systems. Each sensor has its own unique function and the range of applications vary.

Floor Heating - Monitor and transmit the temperature within a floor or slab. Two sensors can be used to find the average temperature over the full flooring surface.

Outdoor Temperature - Monitor and keep a history of the temperature outside. This can be used to determine the efficiency year to year of a home or facility.

Indoor Temperature - Monitor the indoor temperature on a room by room or floor by floor basis. Multiple sensors in each room can be used to control the average temperature over the complete room or over a complete floor of a multi-story building.

Humidity/Temperature - Monitor both the temperature and humidity levels from one sensor. Use the information to increase or decrease the humidity and temperature levels.

These are just a few of the applications where these sensors can be utilized when monitoring climate conditions within a commercial or residential facility

Scan this QR code for additional product information.



Feature Summary

- All sensors integrate seamlessly into the Savant® Centralized Climate Control system.
- The SST-TEMP1 and SST-OTEMP1 two-wire sensors are also supported on the SST series of wireless thermostats.
- Flush mount sensors are small and virtually invisible. Sensors can be painted to blend into the wall.
- The outside temperature can be monitored and used to gather the temperature fluctuations over a range of time. This information can be used to monitor cost and efficiency.
- The air temperature at the discharge point of the furnace is monitored and in the event the temperature rises or falls beyond a set point, the system will be shut down thus saving the heating and/or cooling system from damage.
- The CLI-THFM1 can be configured to monitor temperature, humidity, or both.
- The dimensions of the CLI-SLAB1 floor heating sensor allow it to be retrofit into spaces between tile grout lines.

Available Sensors

The sensors in the table below are supported on the Savant® Centralized Climate Control system.

Description	Model Number
Indoor Flush-Mount Temp. Sensor	SST-TEMP1-XX
Outdoor Temp. Sensor	SST-OTEMP1-XX
Plenum Sensor (Residential)	CLI-PLEN1R-XX
Plenum Sensor (Commercial)	CLI-PLEN1C-XX
Floor Heating Sensor	CLI-SLAB1-XX
Indoor Flush-Mount Hum/Temp. Sensor	CLI-THFM1-XX

The sensors in the table below are supported on the Savant® Series of Wireless Thermostats.

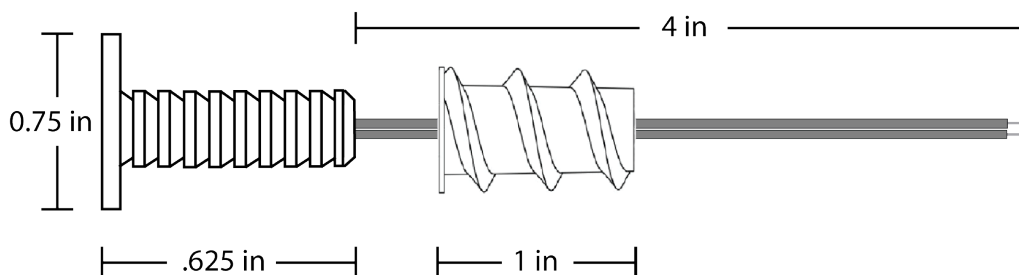
Description	Model Number
Indoor Flush Mount Temp. Sensor	SST-TEMP1-XX
Outdoor Temp. Sensor	SST-OTEMP1-XX

SST-TEMP1

Specifications

Environmental	
Temperature	32° to 158°F (0° to 70°C)
Cable Requirements	
Cat 5 (24 AWG)	500 feet (152.4 m) (maximum)
Sensor Properties	
Thermistor Accuracy	+/- 0.36°F (0.2°C)
Platinum RTD Accuracy	+/- 0.72°F (0.4°C)
Thermistor Range	-94°F to 302°F (-70°C to 150°C)
Platinum RTD Range	-328°F to 572°F (-200°C to 300°C)
Probe Material	Stainless Steel (Sensor is embedded in a plastic enclosure)
Sensor Enclosure Length (Plastic)	.625 inches (15.875 mm)
Sensor Face Diameter (Plastic)	0.750 inches (19.05 mm)
Anchor Length (Plastic)	1 inch (25.4 mm)
Wire Length (From Sensor)	4 inches (101.6 mm)
Thermistor Style	10K ohm@77°F (25°C), Type 2
Cable Properties	FT4, 176°F (80°C), 600V
Compliance	
RoHS	Compliant

Dimensions



Included Items

Description	Quantity
SST-TEMP1-00 Temperature Sensor	1
009-0800-xx Quick Reference Guide	1

Design Considerations

For details on the use of the SST-TEMP1 temperature sensor, refer to the following documents located on the Savant Portal at dealers.savantsystems.com. (**Knowledge Base > Savant Hardware > Climate Control**)

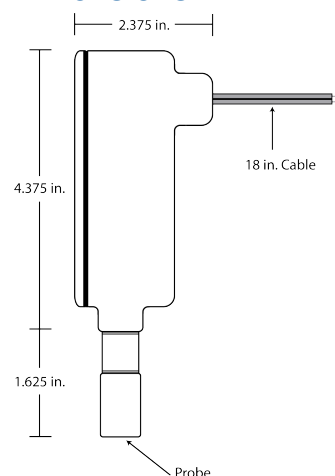
- 009-1073-xx Centralized Climate Control Deployment Guide (CLI-8000)
- 009-1154-xx Centralized Climate Control Deployment Guide (CLI-8000A)
- 009-0802-xx Savant Wireless Thermostat (SST-W100)
- 009-0800-xx Quick Reference Guide (SST-TEMP1)

SST-OTEMP1

Specifications

Environmental	
Temperature	-40°F to 248°F (-40°C to 120°C)
Cable Requirements	
Cat 5 (24 AWG)	500 ft (152.4 m) (maximum)
Sensor Wire length (From end of probe in housing)	18 in (457.2 mm)
Sensor Properties	
Thermistor Accuracy	+/- 0.36°F (0.2°C)
Platinum RTD Accuracy	+/- 0.72°F (0.4°C)
Thermistor Range	-94°F to 302°F (-70°C to 150°C)
Platinum RTD Range	-328°F to 572°F (-200°C to 300°C)
Probe Material	Stainless Steel
Probe Length (Total)	3.375 inches (85.73 mm)
Housing Length (Including probe housing)	6 inches (152.4 mm)
Thermistor Style	10K ohm@77°F (25°C), Type 2
Cable Properties	FT4, 176°F (80°C), 600V
Compliance	
RoHS	Compliant

Dimensions



Included Items

Description	Quantity
SST-OTEMP1-00 Outdoor Remote Temperature Sensor	1
009-0989-xx Quick Reference Guide	1

Design Considerations

For details on the use of the SST-OTEMP1 temperature sensor, refer to the following documents located on the Savant Portal at dealers.savantsystems.com. (**Knowledge Base > Savant Hardware > Climate Control**)

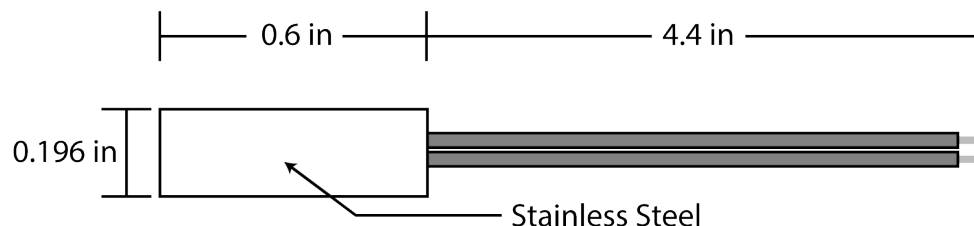
- 009-1073-xx Centralized Climate Control Deployment Guide (CLI-8000)
- 009-1154-xx Centralized Climate Control Deployment Guide (CLI-8000A)
- 009-0802-xx Wireless Thermostat (SST-W100)
- 009-0989-xx Quick Reference Guide (SST-OTEMP1)

CLI-SLAB1

Specifications

Environmental	
Temperature	32°F to 158°F (0° to 70°C)
Cable Requirements	
Cat 5 (24 AWG)	24 AWG 500 feet (152.4 m) maximum
Sensor Properties	
Temperature Range (Thermistor)	-94°F to 302°F (-70°C to 150°C)
Temperature Accuracy (Thermistor)	+/- 0.36°F (.2°C)
Probe Size (l x w)	0.6 inches (15.24 mm) x 0.196 inches (4.98 mm)
Probe Material	Stainless Steel
Probe Wire Length	4.4 in (111.76 mm)
Probe Wire Properties	UL2468 26 AWG
Compliance	
RoHS	Compliant

Dimensions



Included Items

Description	Quantity
CLI-SLAB1- Floor Heating Sensor	1
Dolphin Splice Connectors	2
009-1097-xx Quick Reference Guide	1

Design Considerations

For details on the use of the CLI-SLAB1 temperature sensor, refer to the following documents located on the Savant Portal at dealers.savantsystems.com. (**Knowledge Base > Savant Hardware > Climate Control**)

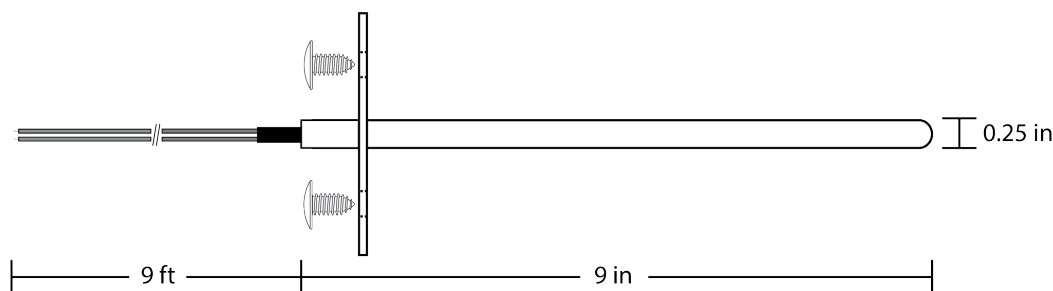
- 009-1073-xx Centralized Climate Control Deployment Guide (CLI-8000)
- 009-1154-xx Centralized Climate Control Deployment Guide (CLI-8000A)
- 009-1097-xx Quick Reference Guide (CLI-SLAB1)

CLI-PLEN1R

Specifications

Environmental	
Temperature	32°F to 158°F (0° to 70°C)
Cable Requirements	
Cat 5 (24 AWG)	500 feet (152.4 m) maximum
Sensor Properties	
Temperature Range (Thermistor)	-94°F to 302°F (-70°C to 150°C)
Temperature Accuracy (Thermistor)	+/- 0.36°F (.2°C)
Probe Material	Stainless Steel
Probe Size (l x w)	9 inches (228.6 mm) x 0.25 inches (6.35 mm)
Probe Wire Length	9 feet (2.74 m)
Probe Wire Properties	FT4, 176°F (80°C), 600V
Compliance	
RoHS	Compliant

Dimensions



Included Items

Description	Quantity
CLI-PLEN1R-00 Residential Plenum Temperature Sensor	1
Dolphin Splice Connectors	2
009-1096-xx Quick Reference Guide	1

Design Considerations

For details on the use of the CLI-PLEN1R temperature sensor, refer to the following documents located on the Savant Portal at dealers.savantsystems.com. (**Knowledge Base > Savant Hardware > Climate Control**)

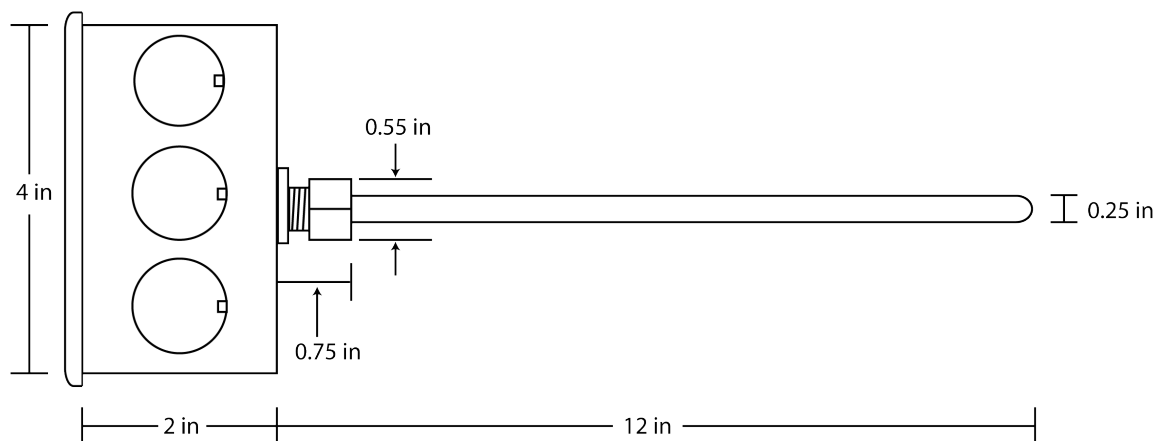
- 009-1073-xx Centralized Climate Control Deployment Guide (CLI-8000)
- 009-1154-xx Centralized Climate Control Deployment Guide (CLI-8000A)
- 009-1096-xx Quick Reference Guide (CLI-PLEN1R)

CLI-PLEN1C

Specifications

Environmental	
Temperature	32°F to 158°F (0° to 70°C)
Cable Requirements	
CAT-5 (24 AWG)	500 feet (152.4 m) maximum
Sensor Properties	
Temperature Range (Thermistor)	-94°F to 302°F (-70°C to 150°C)
Temperature Accuracy (Thermistor)	+/- 0.36°F (.2°C)
Probe Size (l x w)	12 inches (304.8 mm) x 0.25 inches (6.35 mm)
Probe Material	Stainless Steel
Probe Wire Length	8 inches (203.2 mm)
Probe Housing (l x w)	4 inches (101.6 mm) x 2.125 inches (53.975 mm)
Probe Housing Depth (Not including cover)	1.5 inches (38.1 mm)
Probe Housing Depth (including cover)	1.625 inches (41.275 mm)
Probe Wire Properties	FT4, 176°F (80°C), 600V
Compliance	
RoHS	Compliant

Dimensions



Included Items

Description	Quantity
CLI-PLEN1C-00 Commercial Plenum Temperature Sensor	1
Dolphin Splice Connectors	2
009-1100-xx Quick Reference Guide	1

Design Considerations

For details on the use of the CLI-PLEN1C temperature sensor, refer to the following documents located on the Savant Portal at dealers.savantsystems.com. (**Knowledge Base > Savant Hardware > Climate Control**)

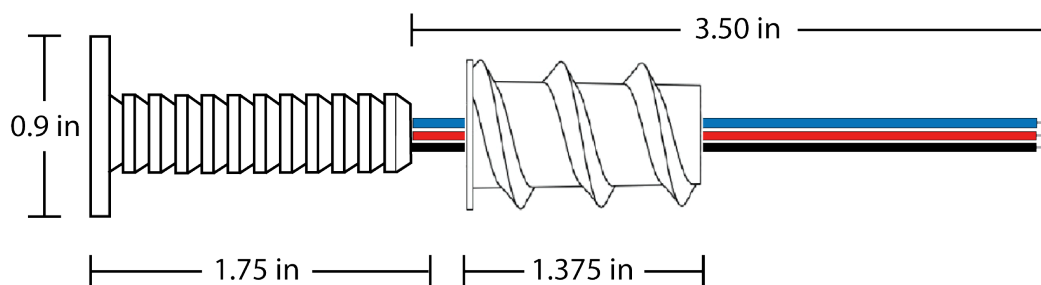
- 009-1073-xx Centralized Climate Control Deployment Guide (CLI-8000)
- 009-1154-xx Centralized Climate Control Deployment Guide (CLI-8000A)
- 009-1100-xx Quick Reference Guide (CLI-PLEN1C)

CLI-THFM1

Specifications

Environmental	
Temperature	32°F to 158°F (0° to 70°C)
Cable Requirements	
24 AWG (Cat 5)	600 feet (182.88 m) maximum (cumulative)
Sensor Property & Features	
Temperature Accuracy	+/- 0.9°F (0.5°C) from 14° to 176°F (-10° to 80°C) +/- 2.7°F (1.5°C) Outside this range
Temperature Range	-40°F to 185°F (-40°C to 85°C)
Humidity Accuracy	+/- 3.5% RH, max. error (Accuracy 20 - 80% RH), +/- 5% Outside this range
Humidity Range	0% to 100% RH, non-condensing 14°F to 140°F (-10°C to 60°C)
Sensor Enclosure Length (Plastic)	1.750 inches (44.45 mm)
Sensor Face Diameter (Plastic)	0.9 inches (22.86 mm)
Anchor Length (Plastic)	1.375 inches (34.925 mm)
Wire length (From connection on sensor)	4 inches (101.6 mm)
# 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 1-Wire compliant.
Integrated LED	Integrated LED for ease of setup and troubleshooting
Compliance	
RoHS	Compliant

Dimensions



Included Items

Description	Quantity
CLI-THFM1-00 Temperature/Humidity Sensor	1
Dolphin Splice Connectors	3
009-1064-xx Quick Reference Guide	1

Design Considerations

For details on the use of the CLI-THFM1 temperature sensor, refer to the following documents located on the Savant Portal at dealers.savantsystems.com. (**Knowledge Base > Savant Hardware > Climate Control**)

- 009-1073-xx Centralized Climate Control Deployment Guide (CLI-8000)
- 009-1154-xx Centralized Climate Control Deployment Guide (CLI-8000A)
- 009-1064-XX Quick Reference Guide (CLI-THFM1)