

# SAVANT

## Sensor Module with Two 1-Wire Sensor Interfaces Quick Reference Guide

### Box Contents

- (1) Sensor Module - (CLI-1WIRE2)
- (2) 3 Position Screw Down Plug-In Terminal Block - (028-0736)
- (1) 6 Position Screw Down Plug-In Terminal Block (028-0737)
- (1) 6 Position Screw Down Plug-In Terminal Block (028-9352)
- (1) Product and Regulatory Insert (009-1704)

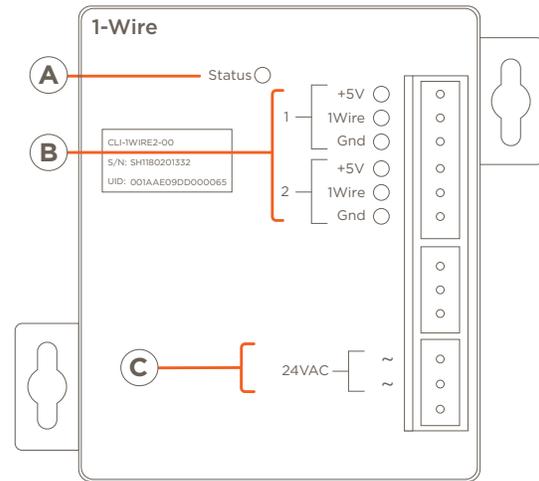
### Supported Sensors (available on the Savant Store)

Temperature and Humidity 1-Wire Smart Sensor - (CLI-THFM1)

### Specifications

Environmental				
Temperature	32° to 104° F (0° to 40° C)			
Humidity	10% to 90% Relative Humidity (non-condensing)			
Dimensions and Weights				
	Height	Width	Depth	Weight
CLI-1WIRE2	3.77 inch (9.58 cm)	3.16 inch (8.03 cm)	.91 inch (2.3114 cm)	< 1 lbs (< .5 kg)
Shipping	6.25 inch (15.88 cm)	4.8 inch (12.19 cm)	1.25 inch (3.175 cm)	< 1 lbs (< .5 kg)
Power				
Input Power	24V AC (19.2 - 28.8V AC)			
Max Current Draw	0.1 amps (rms)			
Maximum Wiring Distances				
RS-485	Up to 1000 feet (304.8 m) cumulative			
	#24 AWG - 20 feet (6.10 meters)			
	#20 AWG - 57 feet (17.37 meters)			
Power	#18 AWG - 90 feet (27.43 meters)			
	#16 AWG - 143 feet (43.59 meters)			
	#14 AWG - 228 feet (69.49 meters)			
Regulatory				
Safety and Emissions	FCC Part 15			
				
Contains FCC ID:	2AEHU-MESHTEK-H52			
Contains IC:	20059-MESHTEK52			
RoHS	Compliant			
Minimum Supported Release				
Climate Config App	Version 1.1.2			

### Top Panel



#### Blinking Green

RS-485 communications is not established. Once powered is applied, it can take up to 20 seconds to establish communications.



**HELPFUL!** If communications was established and subsequently lost, the LED will stay solid for about 1 minute before the LED starts blinking.

#### Solid Green



RS-485 communication is established and the module is communicating with thermostat.

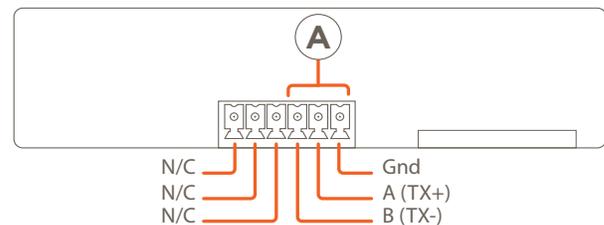
**(B)**

**Smart Sensor 1-Wire Inputs** - Each 1-wire input supports connecting up to two 1-wire sensors (CLI-THFM1) for a total of four sensors per module.

**(C)**

**24V AC input** - Connect 24V AC to the two ~ input ports.

### Left Side Panel



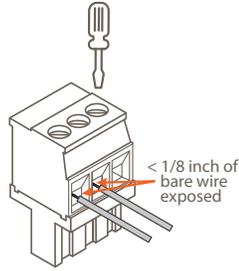
**(A)**

**RS-485 port** - As shown in the image above, the right three pins connect to the RS-485 connections on the thermostat. Refer to the [RS-485 Connections](#) section for more information on wiring.

## Making Connections

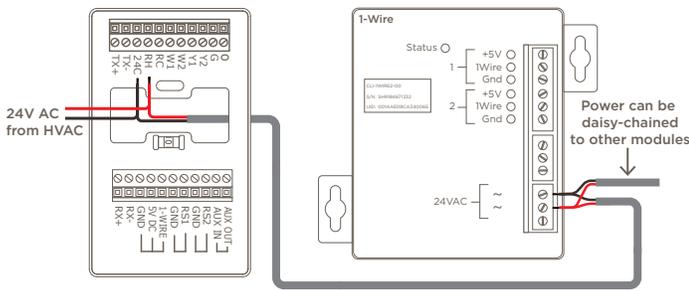
When making connections, follow the guidelines set below to ensure a safe and secure connection.

1. With a small slotted screwdriver, turn the screws on the connector counterclockwise (CCW) until the silver crimps open enough to slide a wire into the square slots.
2. Strip back insulation on each wire to 1/4 inch and insert the stripped wire into the proper connection.
3. Turn the screw clockwise (CW) until the crimps tighten around each wire. Tug on each wire a bit to verify they are secure.



## Power Connections

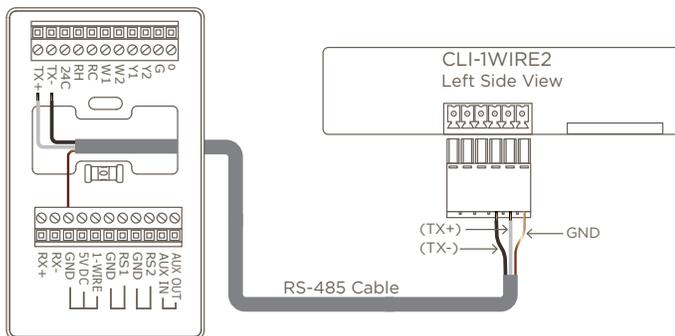
Use the diagrams below when making the power connections between the thermostat and CLI-1WIRE2 climate module.



- Power can be daisy-chained between modules.
- The cable lengths vary depending on the size of the wire. See the specifications table on page 1 for more information.

## RS-485 Connections

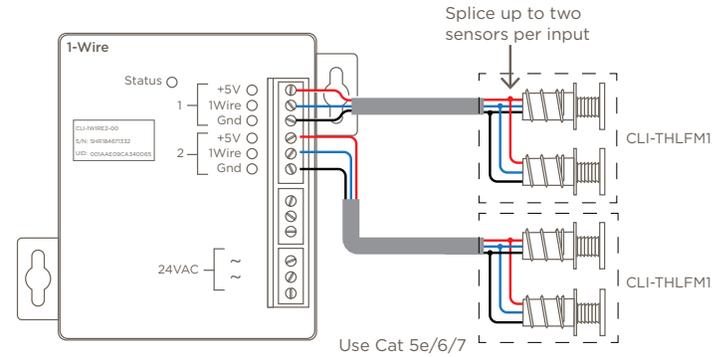
Use the diagrams below when making the RS-485 connections between the thermostat and CLI-1WIRE2 climate module.



- Max cable length is 1000 feet (304.8 meters).
- Savant recommends using standard RS-485 cable for wire runs.

## 1-Wire Smart Sensor Connections

Use the diagram below when wiring the 1-Wire smart sensors.



- Up to two sensors can be wired per input port with a cumulative length of 600 feet (182 meters)
- Savant recommends using Cat 5e/6/7 when making connections.
- The table below shows the recommended connections when using a Cat 5e/6/7 cable.

CLI-THFM1	Cat 5e/6/7 cable	Description
Black	White/Blue Stripe	Gnd
Blue	Blue	Data
Red	Orange	+5V DC

## Additional Information

Refer to the following documents located on the [Savant Customer Community](#) for additional information.

- Multistat Smart Thermostat Deployment Guide (009-1636)
- Multistat Thermostat with Touchscreen (009-1593)