

Remote Temperature Sensors

Making Life Comfortable

Often when installing an air conditioning system you may not be able to place the thermostat in the best location for perfect temperature control. In some larger areas it may even be necessary to control the space temperature based on the average temperature of a larger area rather than the temperature measured in a single location.

For these times, Smart Temp has produced a range of remote temperature sensors that are accurate, attractive and perfectly match the performance of the Smart Temp range of thermostats and temperature controllers.

These sensors easily connect to suitable Smart Temp thermostats and permit the monitoring of the outside air temperature, remote room temperature or even individual zone temperatures when used in conjunctions with many of the Smart Temp Zoning systems.

Sensor types are available in either a wired or wireless version. Some provide limited temperature control and if supported by the thermostat, an after hours run timer function.

Features

Perfectly Matches The Range of Smart Temp Thermostats

Attractive & Elegant Design

10K NTC Type II Sensors

90mm x 90mm x 20mm size

Low Cost & Reliable

Use As Indoor, Outdoor or Averaging

Wired & RF Types Available

RS-1/2 Standard 2 Wire Temperature Sensor



When all that is required is a single wall sensor with no frills, then the RS-1/2 is your perfect choice.

It is large enough to cover any marks that may be on the wall caused by mounting screws or wires penetrating the wall cavity.

This sensor is fitted with function switch that permits this sensor to

be used for "averaging". (see the wiring diagram on page 2. This sensor is also fitted with a after hours run button that can be used with the Smart Temp SMT-920 "Viking" or the Smart Temp SMT-770 "Chameleon" thermostat.

RS-A Standard 2 Wire Temperature Sensor

When you need to be able to adjust the current room temperature by a few degrees from the set point at the sensor, then consider the RS-A sensor. This sensor allows an offset of the current room temperature by $\pm 2^{\circ}\text{C}$ permitting the room occupant to have limited control over their comfort level.



The RS-A sensor is also fitted with an after hours run switch so when used with a suitable Smart Temp thermostat, after hour run calls can easy be made from the sensor location.

Perfect for those commercial jobs !

RS-W Wireless Remote Temperature Sensor



For all those times when you need a remote sensor and don't have wiring available, the Smart Temp RS-W may be the solution.

Utilising reliable two way communication and a radio frequency of 433 Mhz, the RS-W provides reliable temperature data to the thermostat over a typical range of 35m indoors and up to 80m outdoors.

The receiver is powered by 24V (taken from the thermostat) while the transmitter operates for a year or more on 2 x AAA batteries.

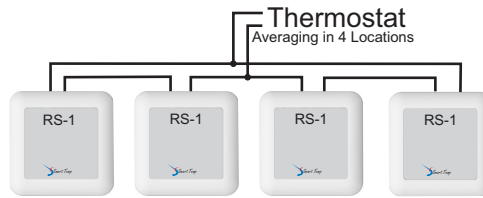
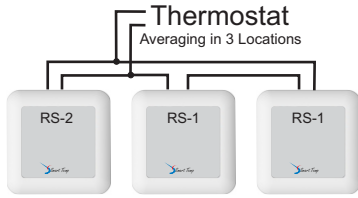
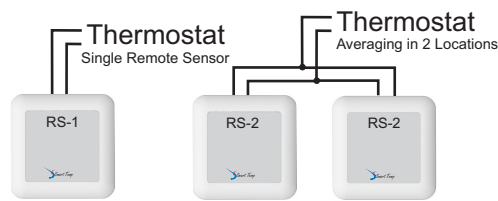
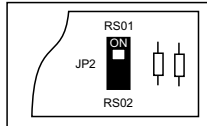
Status LEDs provide information on the sensor function and provides loss of communication as well as low battery indication.

The RS-W can be provided as a basic version or as an adjustable version with adjustment and after hours run timer. (RS-WA)

Wiring Examples

Mode Selection Switch

Inside the RS 01/2 sensor there is a small function switch to select between RS/01 or RS/02 mode. This switch must be set correctly for the configuration shown in these drawings.



The Smart Temp remote temperature sensors can be used as a single, stand alone sensor or by using a combination of sensors in RS-1 or RS-2 mode. You are able to average 2, 3, 4 or even more sensing locations so that the thermostat will control to the average temperature of the space being controlled. This is useful when controlling the temperature of a large area.

For Smart Temp thermostats such as the SMT-770 "Chameleon" and the SMT-920 "Viking" you are still able to place an after hours run switch in circuit with the sensors to control the thermostats integrated after hours run timer.

It is not recommended to use the RS-A adjustable sensors in a temperature averaging network.

Resistance Data

(RS-01 mode)

OHMS Temp C

OHMS	Temp C
32.96	0
31.31	1
29.76	2
28.29	3
26.9	4
25.58	5
24.34	6
23.16	7
22.05	8
20.99	9
20	10
19.05	11
18.16	12
17.32	13
16.286	14
15.34	15
14.395	16
14.36	17
13.76	18
13.09	19
12.51	20
11.96	21
11.43	22
10.93	23
10.45	24
10	25
9.57	26
9.16	27
8.75	28
8.4	29
8.05	30

Specifications

Wired Sensors

Size	90mm x 90mm x 21mm
Mounting	60mm Spaced
Material	ABS/PC Blend UV & Fire Resistant
Sensor	10K NTC Type II
Operating Temp	-5°C to 45°C
Storage Temp	-30°C to 65°C
Adjustable range	+/- 2°C
Terminals	2mm Cage 50V Rated
Warranty	3 Years RTB

RF Sensor

RF Frequency	433 Mhz
Communication	2 Way With Verification
Range	30m In Building Up to 80m Open Air
Transmitter power	<0.1 Watt
LEDS	Power Data (Sending & Receiving) Status - (AH Function Called)
Batteries	Sensor 2 x AAA
Battery life	> 1 Year Typical
Low Bat Warning	Yes - Receiver LEDES Flash
Transmitter	24VAC Powered
Data transmission	5 Minutes or 0.5°C Change

Smart Temp Sensors Work Best With...

SMT-770 "Chameleon" Thermostat



- 7 Day or Manual Operation
- Single or 3 Fan Speed Control
- Residential & Commercial Programming
- Keyboard Locks & After Hours Run Timer
- Remote or Outside Air Sensor Inputs
- MODbus RTU Communications

SMT-920 "Viking" Thermostat



- 7 Day, 365 Day or Manual Operation
- 4 Compressor Control
- Built In After Hours Timer
- Built In Economy Cycle Control
- Remote or Outside Air Sensor Inputs
- MODbus & BACnet Communications
- 24VAC & 240VAC Powered & Relays

44-800 "Apollo" Thermostat



- 7 Day, 5+2 Day or Manual Operation
- Large Backlit Touch Screen
- Multistage Control
- 2 or 4 Daily Events
- 24VAC and/or Battery Powered
- Remote and Outside Air Sensor Inputs
- Intuitive Operation

