

## Descriptions and Applications

The KMC STE-1400 Series 10,000 ohm thermistor temperature sensors are available in different housings for surface, duct, duct averaging, immersion, strap-on, and outside air applications.

All probes are constructed to provide good heat transfer and fast response. The averaging sensors are available in both plenum-rated cable or with a copper probe.

Each **duct sensor** is encapsulated in a 1/4-inch O.D. stainless-steel probe. The probe protrudes from the bottom of the sensor housing, minimizing lead-length error. The probe can be inserted directly into the duct for single-point monitoring, and mounting holes are provided to rigidly support the assembly.

The **averaging duct sensor** incorporates numerous sensors inside a copper tube and is available in a 5/16-inch O.D. bendable copper probe or in a flexible plenum-rated cable. The completed assembly acts as a single sensor and any temperature change is averaged across the sensor. The probes can be bent to fit any size duct.

The **immersion sensor** is encapsulated in a 1/4-inch O.D. 304 stainless-steel probe. The probe protrudes from the bottom of the sensor housing, minimizing lead length error. The probe has a 1/2-inch NPT fitting to be screwed into the HMO-4533/4543 brass well or HMO-4534/4544 stainless-steel well.

The **strap-on sensor** is encapsulated in a two-inch-long, 1/4-inch O.D. stainless-steel probe. The probe has a five-foot lead wire and comes standard with an enclosure.

The **outside air sensor** is mounted in a weatherproof gasketed enclosure with a sun shield for protection against the outdoor elements. It comes with an LB c/w 1/2" NPT fitting for connection to conduit.

The **room sensor**, designed for temperature measurement of occupied spaces, can be mounted on an interior hollow wall in a standard single-gang electrical box. The sensor is mounted behind a flat brushed stainless-steel plate.



## Features

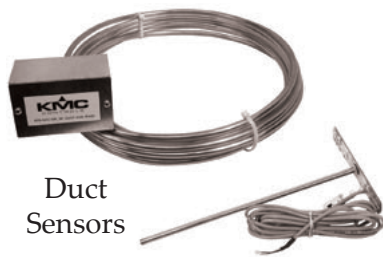
- ◆ Type III 10,000 ohm thermistor encapsulated temperature sensors.
- ◆ Available in several models to accommodate various installation applications.
- ◆ Outside air model includes weatherproofing and sun shield.
- ◆ Some models are available in either a black ABS plastic utility box or optional metal enclosure.

## Models

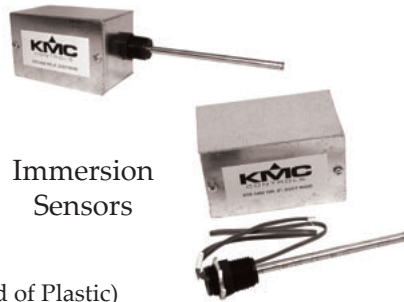
The following models are available

STE-1401	8" Duct Rigid (w/o handy box)
STE-1402	8" Duct Rigid
STE-1404	12" Duct Rigid
STE-1405	4" Duct Rigid (w/o handy box)
STE-1411	6' Duct Averaging (copper)
STE-1412	12' Duct Averaging (copper)
STE-1413	24' Duct Averaging (copper)
STE-1414	20' Duct Averaging (copper)
STE-1415	6' Duct Averaging (flexible)
STE-1416	12' Duct Averaging (flexible)
STE-1417	24' Duct Averaging (flexible)
STE-1421	4" Immersion (without well)
STE-1422	6" Immersion (without well)
STE-1430	Room, Flat Plate
STE-1451	Outside Air
STE-1454	2" Strap-On

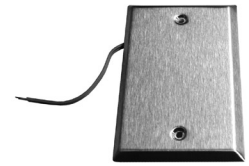
## Sensor Types



Duct Sensors



Immersion Sensors



Room Sensor

(Shown with Optional Metal Enclosures Instead of Plastic)



Strap-On Sensor



Flex-Duct Sensor



Duct Averaging Sensor



Outdoor Air Sensor

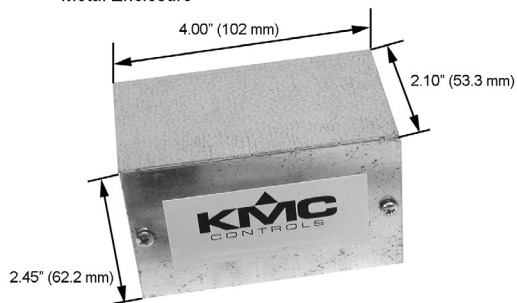
## Enclosures

A stamped black ABS plastic utility box comes as the standard enclosure for the:

STE-1402	STE-1412	STE-1422
STE-1403	STE-1413	STE-1454
STE-1404	STE-1414	
STE-1411	STE-1421	

To order the optional metal enclosure in place of plastic, add an M to the end of the part number.

Metal Enclosure

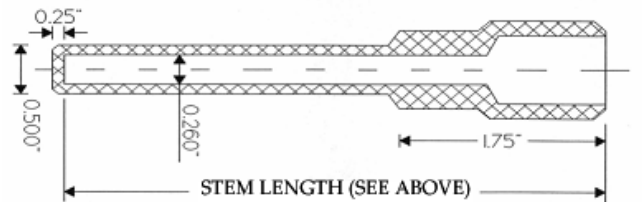


## Accessories

The following thermowells are available for the STE-1421 and STE-1422:

HMO-4533	4" Brass well
HMO-4534	4" 304 Stainless-steel well
HMO-4543	6" Brass well
HMO-4544	6" 304 Stainless-steel well

NOTE: NPT Thread Size = 1/2"



## Specifications

<b>Sensor</b>	Type III, 10K ohm @ 77° F (25° C)
<b>Accuracy</b>	± 0.36° F (± 0.20° C)
<b>Temperature Limits</b>	
Std. Limits:	-4° to 221° F (-20° to 105° C)
Outdoor Air only:	-40° to 221° F (-40° to 105° C)
<b>Wiring</b>	22 AWG wire leads
<b>Mfg. Process</b>	ISO 9001 certified

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