

# Room Air Temperature Sensors

## Wall-mounted sensors

### Compact Wall-mount

Dimensions:  
W 3.12" (79mm)  
H 2.09" (54mm)  
D 1.80" (46mm)



### Full-Size Wall-mount

Dimensions:  
W 2.75" (70mm)  
H 4.50" (114mm)  
D 1.56" (40mm)



### Explosionproof Wall-mount

Dimensions:  
W 1.60" (41mm)  
H 5.55" (141mm)  
D 2.05" (52mm)



### Flush Wall-mount

Dimensions:  
W 2.75" (70mm)  
H 4.50" (114mm)  
D 0.18" (5mm)



**Moisture resistance:** Meets MIL-STD-202, Method 104, Test Condition B.

**Transmitters:** Full size sensors with 2 leads can use Tempran transmitter model TT115 installed within the sensor enclosure. A variety of transmitters are available for all other sensor models with transmitters installed in a separate enclosure from the sensor.

## Overview

Mod-tronic's room air sensors are available with a variety of enclosures that meet most standard and explosion-proof HVAC/R installations. The sensors can be match calibrated with a Mod-tronic Tempran temperature transmitter for increased accuracy and reliability.

Room air sensors are designed for wall mounting. Choose from two plastic enclosure styles with brushed aluminum faceplates or a flush-mount stainless steel model.

The full-size enclosure and flushmount fit over standard junction boxes. The full size enclosure has optional knockouts for Wiremold raceway surface wiring. Just remove knockouts with pliers. This enclosure may also include a 4-20 mA temperature transmitter; specify model AS200655.

The explosion-proof sensor housing is UL listed and CSA approved for Class I, Groups C and D; Class II, Groups E, F, and G; and Class III. Download Application Aid #19 for more hazardous area information and the various standards and agencies (including FM, CSA, and ATEX) at [www.mod-tronic.com](http://www.mod-tronic.com).

## Specifications

### Temperature range:

-45.5 to 100°C (-50 to 212°F)

### Temperature range (with TT115 transmitter):

Zero: -40 to 10°C (-40 to 50°F)

Span: 25 to 100°C (45 to 180°F)

### Max upper temperature: 85°C (185°F)

### Leadwires:

Full size and compact: AWG 22, PTFE insulated, 4" (100 mm) long.

Explosion-proof and flush mount: AWG 26, PTFE insulated, 6" (150 mm) inside cover.

## Specification and order options

S472PB	Model number from table
Y	<b>Number of leads:</b> Y = 2 leads Z = 3 leads
	Lead length in inches: 4
4	Lead length in inches: 4
K0	<b>Knockouts (full size only):</b> K0 = No knockouts K1 = Knockouts for Wiremold raceway
	S472PBY4K0 = Sample part number

S100147PD	Model number from table
Y	<b>Number of leads:</b> Y = 2 leads Z = 3 leads
	S100147PDY = Sample part number

Element	TCR	Compact wall-mount sensors	Full-size wall-mount sensors	Explosionproof wall-mount sensors	Flush wall-mount sensors
<b>RTDs</b>					
Platinum 100 Ω +/-0.1% at 0°C	0.00391	S405PB	S472PB		
Platinum 100 Ω +/-0.1% at 0°C (Meets EN60751, Class B)	0.00385	S448PD	S473PD	S100147PD	S101456PD
Platinum 1000 Ω +/-0.1% at 0°C	0.00385	S449PF	S474PF	S100148PF	S101456PF
Platinum 1000 Ω +/-0.1% at 0°C	0.00375	S483PW	S489PW	S101608PW	S101456PW
Nickel-iron 1000 Ω +/-0.12% at 70°F	0.00527	S403FB	S470PB		
Nickel-iron 2000 Ω +/-0.12% at 70°F	0.00527	S404FC	S471FC		
HW 3000 Ω at -30.2°C	0.00262	S100064PX	S100063PX		
<b>Thermistors</b>					
Thermistor 2,252 Ω at +/-1% at 25°C	R <sub>25</sub> /R <sub>125</sub> 29.2	TS426TA	TS424TA	TS100149TA	TS101769A
Thermistor 10,000 Ω at +/-1% at 25°C	23.5	TS427TB	TS425TB	TS100150TB	TS101769TB