



Temperature and Humidity Sensor Combo - THS-KIT

The THS-KIT includes both an indoor temperature sensor and an indoor humidity sensor. These sensors provide voltages proportional to temperature and relative humidity.

The temperature sensor comes with a 1m (3.3 ft.) long cable, while the humidity sensor comes with 240mm (9.5 in.) wires, both being very easy to connect to any Davicom unit or any analog DC voltage measuring device.

The temperature sensor probe has a measurement range of +2.0°C to +150°C (+36°F to +302°F), with an accuracy equal or better than ±2.0°C (±3.6°F).

The humidity sensor has a measurement range of 0%RH to 100%RH, with an accuracy of ±3%RH.

The A, B, and C coefficients to set in the Davicom unit for the temperature sensor probe are:

For °C degrees: A=0; B=100; C=0
For °F degrees: A=0; B=180; C=32

TEMPERATURE SENSOR PROBE ELECTRICAL CONNECTIONS	
Red wire	Power supply (+4 to +30 VDC)
Yellow wire	Temperature output (0-1.5VDC)
Black wire	Common (GND)

To get the most precise measurements from your Davicom unit when using the temperature sensor probe, select a Metering Input scale of 2.5V or 5V. If none of these two ranges is available with your Davicom model, choose the 10V scale.



Actual product appearance may slightly differ from the image above.

The A, B, and C coefficients to set in the Davicom unit for the humidity sensor are such as:

%RH: A=0; B=33.33; C=0

HUMIDITY SENSOR ELECTRICAL CONNECTIONS	
Red wire	Power supply (+4.75v to +5.5VDC)
Yellow wire	Humidity output (0 to +3VDC)
Black wire	Common (GND)
White wire	Not used

To get the most precise measurements from your Davicom unit when using the humidity sensor, select a Metering Input scale of 5V.



The metal temperature sensor probe dimensions (excluding wires) are 53mm x 6mm. The humidity sensor dimensions (excluding wires) are 40mm x 20mm x 13mm (L x W x H). The mounting hole diameter is 3.19mm (0.125 in.)

If using any of the sensors with a generic DC voltage measuring device, a sensor's output voltage (V_{out}) can easily be converted to either °F, °C, or %RH using the following formulas:

Temperature sensor

$$^{\circ}\text{C} = V_{out} \times 100$$

$$^{\circ}\text{F} = [V_{out} \times 180] + 32$$

Humidity sensor

$$\text{RH}(\%) = V_{out} \times 33.3$$

IMPORTANT: Sensor damage may result if supply voltage is reversed or above the listed chart values, or if a voltage is applied to an output.

Do not extend the wires of any of these sensors beyond 1m (3.3 ft.) as this could cause unstable or erratic measurements. These sensors are not waterproof nor weatherproof, only to be used in a dry indoor environment. Davicom offers a selection of sensors that can be used over longer distances and with/without weather protection, please check with us or with a Davicom dealer for more information.