



Honeywell Humidity/Temperature Sensors Installation Guide

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Honeywell

H7625, H7726, H7735, H7736
Humidity/Temperature Sensors

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INSTALLATION INSTRUCTIONS



Outdoor



Duct Mount

IMPORTANT WARNINGS

- Only qualified trade installers should install this product.
- This product is not intended for life-safety applications.
- Do not install in hazardous or classified locations.
- The installer is responsible for all applicable codes.
- De-energize power supply prior to installation or service.

AVERTISSEMENTS IMPORTANTS

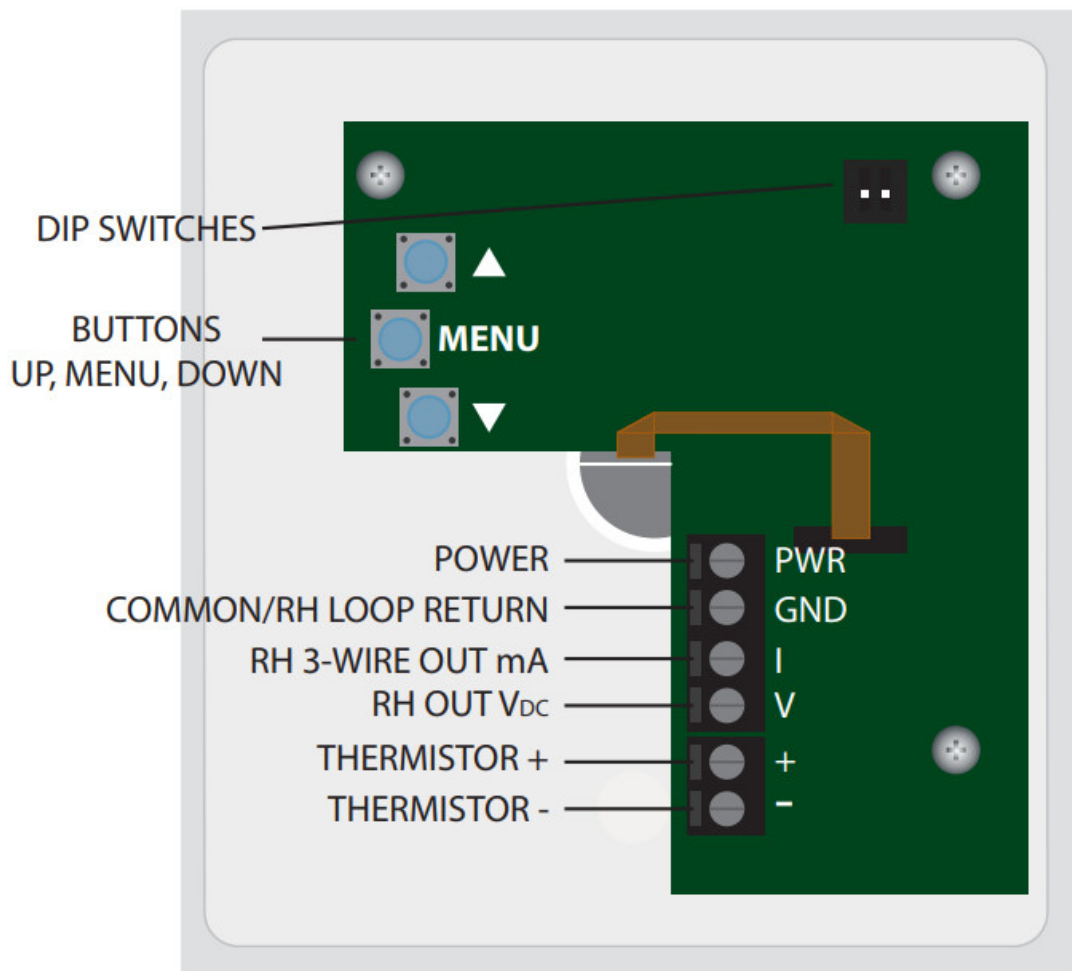
- Seuls les installateurs spécialisés sont autorisés à installer ce produit.
- Ce produit n'est pas destiné aux applications de sécurité ou de sauvetage.
- Ne l'installez pas dans des endroits dangereux ou classés comme tels.
- L'installateur doit respecter tous les codes applicables.
- Coupez l'alimentation électrique avant l'installation ou l'entretien.

PRODUCT APPLICATION LIMITATION

Honeywell products are not designed for life or safety applications. Honeywell products are not intended for use in critical applications such as nuclear facilities, human implantable devices, or life support. Honeywell is not liable, in whole or in part, for any claims or damages arising from such uses.

INSTALLATION

1. Drill a 3/4" hole in the duct. Install sensor using gasket and screws provided. The pickup tube will ensure adequate airflow regardless of airflow direction.
2. If installing with a conduit adapter, remove and replace the factory-installed cable gland.
3. Wire sensor as shown. Wiring for 2 and 3-wire
4. 20mA signals are shown in the next column



Activate Windows
Go to Settings to activate

Fig. 1.



31-00444M-01

1. Set DIP switch positions to accommodate your application. DIP switch 2 is not used.
Apply power to the sensor.
2. Tighten the cable gland firmly around wires. If installing with a conduit adapter, seal wire entry to prevent conduit air from affecting sensor readings or operation.
3. Close the lid and tighten the screw. The cover must be securely installed to prevent moisture from entering the enclosure.

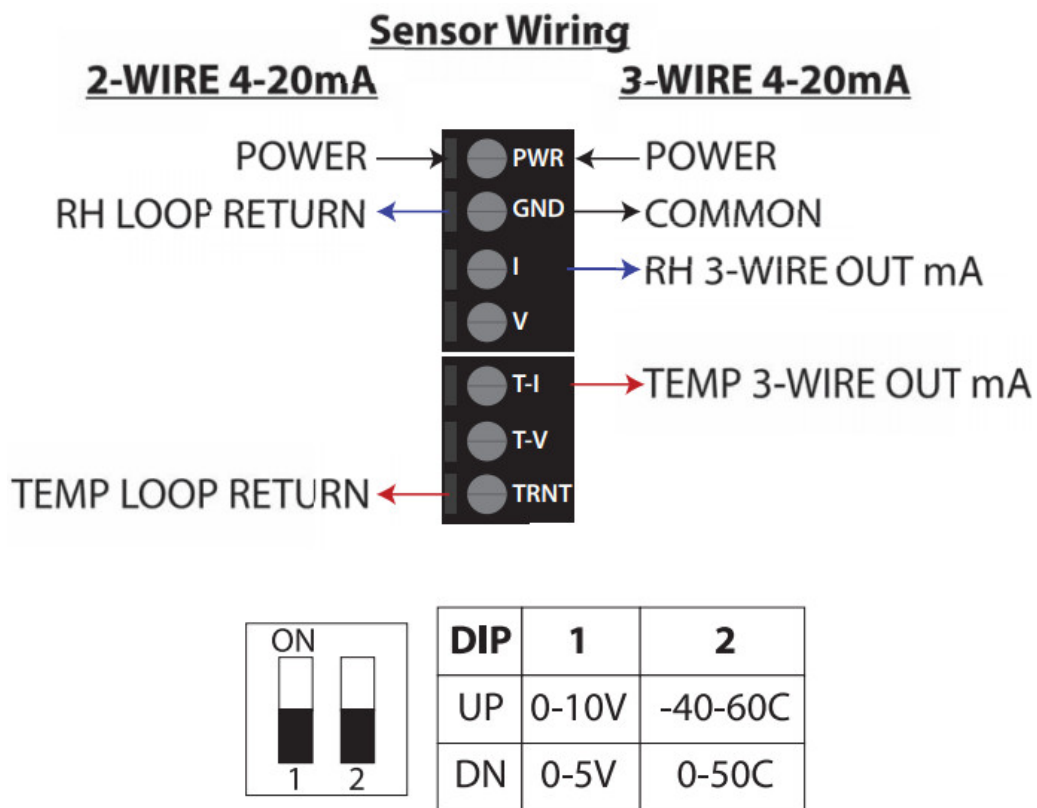


Fig. 2. Sensor Wiring.

4. Set DIP switch positions to accommodate your application. DIP switch 2 is not used.
5. Apply power to the sensor.
6. Tighten the cable gland firmly around wires. If installing with a conduit adapter, seal wire entry to prevent conduit air from affecting sensor readings or operation.
7. Close the lid and tighten the screw. The cover must be securely installed to prevent moisture from entering the enclosure.

OPERATION

Press the center MENU button once to access the %RH offset. A red LED will blink to indicate the %RH offset setting can be adjusted.

The down arrow and up arrow can be used to decrease or increase offset values in 0.1 increments up to $\pm 5\%$.

DIMENSIONS

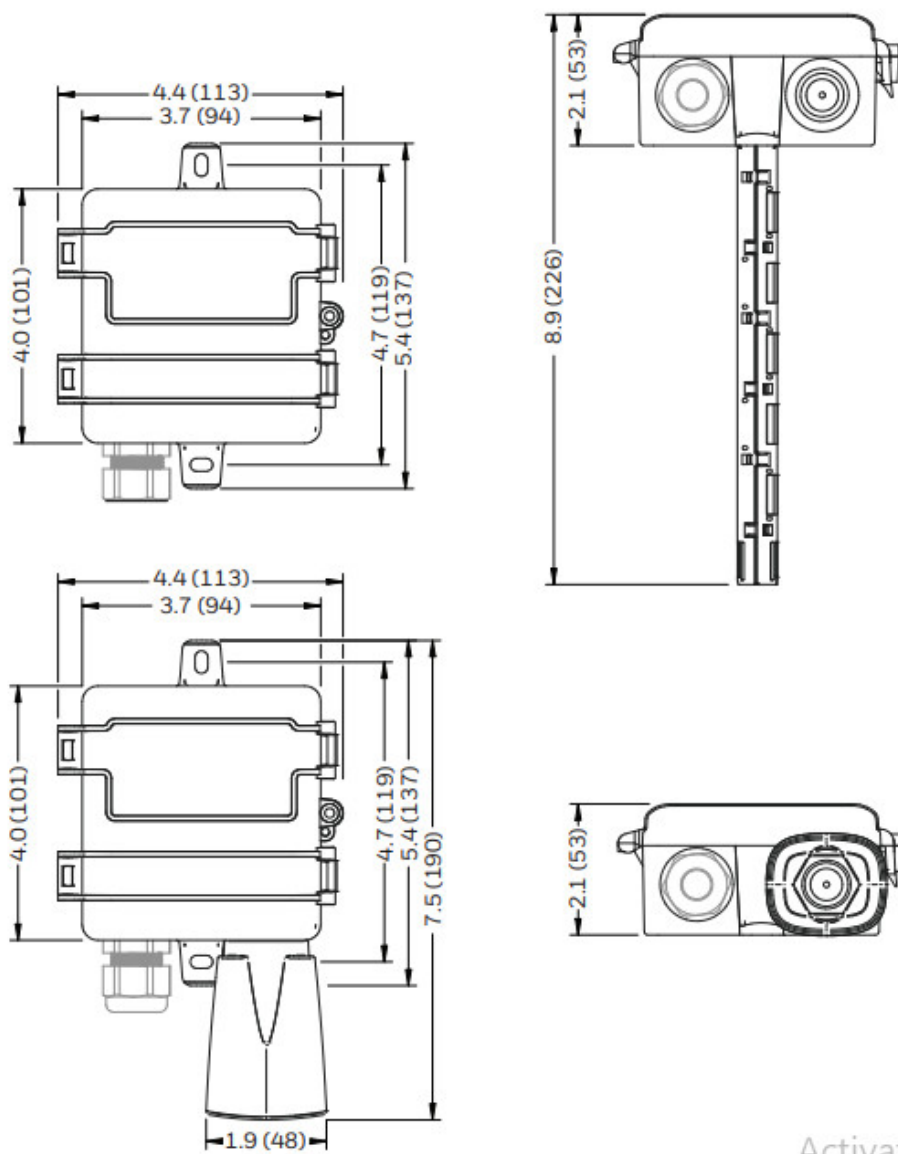


Fig. 3. Dimensions in inches (mm).

Activati
Go to Set

TROUBLESHOOTING

Table 1. Troubleshooting.

Symptom	Solution
No output	Check to wire. Ensure power supply meets requirements.
Temp or RH reading error	Verify control panel software is configured for correct output scaling.
	Verify the accuracy of the test instrument. Observe installation and calibration guidelines.
	Verify unit is securely installed on duct without excessive air leakage.
	Offset calibration only if necessary.
Sensor damage, contamination, or long-term drift	Replace sensor element. Consult the factory for ordering information.

CALIBRATION

Honeywell RH sensors are factory calibrated to NIST traceable standards. No field calibration is necessary or recommended. However, to facilitate compliance with commissioning requirements field calibration offsets are allowed.

1. Locate calibration instrument and sensor in close proximity to each other in a controlled environment free of drafts, people, and equipment to reduce the influence on RH and temperature.
2. Allow both readings to stabilize (10-30 minutes). Compare the reading of the sensor to the calibration instrument, and calculate the difference.
3. Refer to the OPERATION section to change offsets as needed. Setting an offset of zero restores factory calibration.

RECYCLING

The product should not be thrown away in the regular trash. Instead, it should be recycled according to the local municipality.

SPECIFICATIONS

Table 2. Models.

Model	Humidity Accuracy	Thermistor	Enclosure
H7725B2006	2°/o	20 kOhm	Duct
H7725B2006-C	2°/o NIST Certified	20 kOhm	Duct
H7726B2024	2°/o	1097 Ohm	Duct
H7735B2018	3%	20 kOhm	Duct
H7736B2026	3%	1097 Ohm	Duct
H7735C2015	3%	20 kOhm	Outdoor

Table 3. Specifications.

Power supply	AC Supply/ DC Supply	24VAC, 100mA max. 12-30VDC, 50mA max.
Outputs	RH	3-wire 0-5V/10V4, 3-wire or 2-wire 4-20mA (Selectable)
Output scaling	RH	0-100%RH
Thermistor/ RTD	Nominal resistance * 25 °C	20 kOhm 1097 kOhm
Media filter		PBT with water vapor-permeable membrane
Relative Humidity	Accuracy	2% models: $\pm 2\%$ max 0 to 100% RH, $\pm 1.5\%$ typ 0 to 80 % RH *25°C
		3% models: $\pm 3\%$ max 0 to 100% RH, 120/0 typ 0 to 100 % RH *25°C
	Resolution	0.01% RH
	Hysteresis	$\pm 0.8\%$ RH
	Repeatability	0.08% RH
	Non-linearity	Factory linearized $< 1\%$ RH
	Temperature coefficient	Fully compensated by on-board sensor
	Response time 2	8s
	Output update	0.5s
	Operating range	0 to 100% RH (non-condensing)
	Long term drift	$< 0.25\%$ RH per year
	Operating 3 conditions	41 to 140°F (5 to 60°C) *20-80% RH
Enclosure	Materials	ABS/Polycarbonate
	Dimensions	4.0-11x 4.4"w x 2.1"d Duct (•6.8" probe) Outdoor. (.2M* Solar Shield)
	Enclosure Rating	Duct IP20/NEMA 1 Outdoor. IP20/NE MA 1 *Vent bottom of the enclosure to achieve NEMA 3R Rating
	Unit Temp Rating	-40°F to 158°F (-40 to 70°C)

One side of transformer secondary is connected to signal common. A dedicated transformer is recommended. Time for reaching 63% of reading at 25°C and 1 m/s airflow. Long term exposures to conditions outside the normal range or high humidity may temporarily offset the RH reading (+3%RH after 60 hours). 415-30VDC/24VAC power supply voltage required for 10 volt output.

Honeywell Building Technologies

In the U.S.: Honeywell 715 Peachtree Street NE Atlanta, GA 30308 customer.honeywell.com
buildingcontrols.honeywell.com

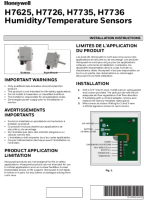
H7625, H7726, H7735, H7736 HUMIDITY/TEMPERATURE SENSORS

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Documents / Resources

	<p>Honeywell Humidity/Temperature Sensors [pdf] Installation Guide Humidity, Temperature Sensors, H7625, H7726, H7735, H7736</p>
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References

- [H Honeywell Building Management Systems \(BMS\)](#)