

Honeywell

H7725, H7726, H7735, H7736 Humidity & Temperature Sensors

PRODUCT DATA



FEATURES

The wall sensors are designed to blend into any room space to provide accuracy for improved occupant comfort.

- Clean looking, low-profile, recessed design
- Comparable accuracy, performance and features as included in duct sensors
- Push-button field calibration – easy adjustment of relative humidity (RH) values

Duct sensors provide interior HVAC zone humidity and temperature measurement and control. Outdoor sensors are designed to be mounted on the building exterior to provide outside air RH measurement.

All humidity sensors provide high accuracy:

- On-board temperature compensation for RH
- Eliminates temperature coefficient errors and achieves an high measurement accuracy and high repeatability
- NIST traceable 3-point calibration, optional duct version with calibration certificate

APPLICATIONS

- HVAC room humidity and temperature measurement and control
- Energy management/building control

DIMENSIONS

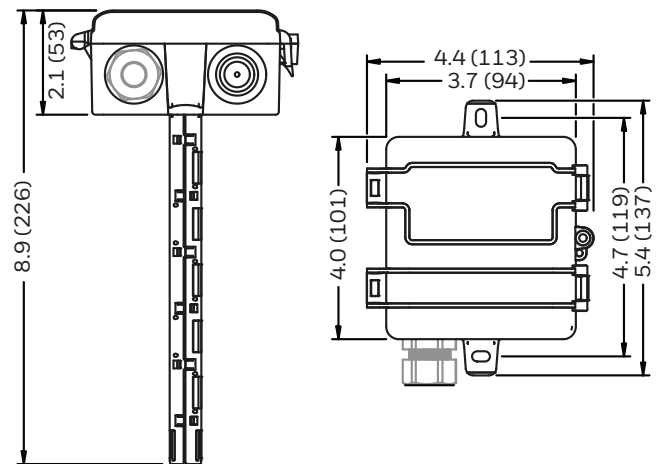


Fig. 1. Duct Mount Model Dimensions in inches (mm).

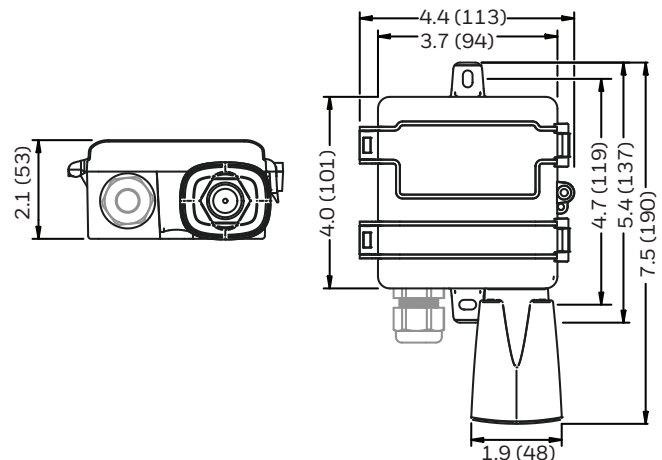


Fig. 2. Outdoor Model Dimensions in inches (mm).



31-00454-01

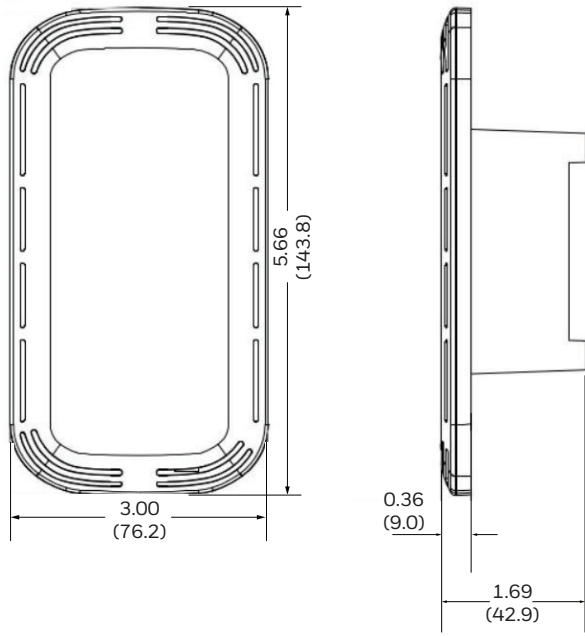


Fig. 3. Wall Mount Model Dimensions in inches (mm).

SPECIFICATIONS

Table 1. Models.

| Model | Humidity Accuracy | Thermistor | Type |
|--------------|-------------------|------------|---------|
| H7726A2020 | 2% | 1097 Ohm | Wall |
| H7725A2010 | 2% | 20 kOhm | Wall |
| H7736A2022 | 3% | 1097 Ohm | Wall |
| H7735A2012 | 3% | 20 kOhm | Wall |
| H7725A2010-C | 2% NIST Certified | 20 kOhm | Wall |
| H7725B2006 | 2% | 20 kOhm | Duct |
| H7725B2006-C | 2% NIST Certified | 20 kOhm | Duct |
| H7726B2024 | 2% | 1097 Ohm | Duct |
| H7735B2018 | 3% | 20 kOhm | Duct |
| H7736B2026 | 3% | 1097 Ohm | Duct |
| H7735C2015 | 3% | 20 kOhm | Outdoor |

Table 2. Specifications.

| | | |
|----------------------|--------------------------------------|---|
| Power supply | AC Supply/ DC Supply | 24VAC, 100mA max. 12-30VDC, 50mA max. |
| Outputs | RH | 3-wire 0-5V/10V ⁴ , 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: ±2% max 0 to 100% RH, ±1.5% typ 0 to 80% RH @25°C 3% models: ±3% max 0 to 100% RH, ±2% typ 0 to 100% RH @25°C |
| | Resolution | 0.01% RH |
| | Hysteresis | ±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 conditions ³ | 41 to 140°F (5 to 60°C) @ 20-80% RH |
| Enclosure | Materials | ABS/Polycarbonate |
| | Dimensions | Duct/Outdoor: 4.0"h x 4.4"w x 2.1"d Duct: (+6.8" probe) Outdoor: (+2.8" Solar Shield) Wall: 5.66"h x 3.00"w x 0.36"d (1.69" depth including recessed components) |
| | Enclosure Rating | Wall/Duct: IP20/NEMA 1 Outdoor: IP20/NEMA 1 *Vent bottom of enclosure to achieve NEMA 3R Rating |
| | Unit Temp Rating | -40°F to 158°F (-40 to 70°C) |

¹ One side of transformer secondary is connected to signal common. Dedicated transformer is recommended.

² Time for reaching 63% of reading at 25 °C and 1 m/s air-flow.

³ Long term exposures to conditions outside normal range or high humidity may temporarily offset the RH reading (+3%RH after 60 hours).

⁴ 15-30 VDC/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