
HT-1000 Series

Room Humidity Sensors

The Johnson Controls HT-1000 series room humidity sensors provide active sensing of relative humidity and, on specific models, also active/passive sensing of temperature in HVAC applications.

It features a polymer capacitance humidity sensing element and provides within either $\pm 2\%$ or $\pm 3\%$ accuracy a voltage output signal proportional 0 to 100 % relative humidity.

The HT-1000 series room humidity sensors are designed for use with Johnson Controls System 91 and Facility Explorer controllers or for other systems having compatible input and output voltages.



HT-1xxx-UR
Room Humidity Sensor

- **Humidity output available with 2% accuracy**
More accurate humidity control and energy savings.
- **Modern and attractive cover with mounting base**
Blends in with room decor. Easy installation.
- **All models with wide supply voltage range**
Suitable to a large range of controllers.
- **Senses over the entire range of 0 to 100% RH (non condensing)**
More accurate humidity control.
- **Transmitter can resist many hostile environments**
Suitable for a wide range of applications.
- **Temperature measurement options**
Eliminates the need for a separate temperature sensors.
- **Polymer humidity sensing element is integrated onto a chip**
Provides stability, repeatability and linear response.

Ordering Code

Codes	Humidity Output	Accuracy	Temperature Output
HT-1201-UR	0...10 V DC	2%	0...10 V DC
HT-1300-UR			---
HT-1301-UR		3%	0...10 V DC
HT-1303-UR			NTC K2
HT-1306-UR			Pt1000

Accessories

Codes	Description
TM-1100-8931	Surface Mounting Base
TM-9100-8900	Special Tool to Open the module

Technical Specification

Products	HT-1xxx-UR Series Humidity Sensor
Power supply	12 to 30 V DC or 24 V AC \pm 15% at 50/60 Hz
Output load	5 k Ω min (2 mA max)
Relative humidity range	0...100% RH
Humidity output signal	0...10 V DC
Humidity sensing accuracy	
	HT-1201-UR \pm 4% RH for 0% to 20% RH
	\pm 2% RH for 20% to 80% RH
	\pm 4% RH for 80% to 100% RH
	HT-130x-UR \pm 6% RH for 0% to 10% RH
	\pm 3% RH for 10% to 90% RH
	\pm 6% RH for 90% to 100% RH
Temperature Sensing Outputs (if present)	
	HT-1201-UR and HT-1301-UR 0...10 V DC (range 0...40 °C, accuracy \pm 0.5°C of full range)
	HT-1303-UR NTC thermistor 2.2K: 2252 Ω @ 25 °C (\pm 0.2°C)
	HT-1306-UR Pt1000 Class A (EN 60751)
Hysteresis	\pm 0.8% of maximum span
Linearity	\pm 0.5% RH typical
Repeatability	\pm 0.5% RH
Enclosure Protection Class	IP30 (EN 60529)
Electrical Connections	Terminal block connectors accepting 1 x 1.5 mm ² of 1 x 14 AWG or 2 x 18 AWG wires
Ambient Operating Condition	0 to +50 °C (non condensing)
Ambient Storage Condition	-20° to +70 °C (non condensing)
Enclosure Material	Self-extinguishing UL94HB ABS+PC
Weight	0.15 kg.
Dimensions (H x W x D)	80 x 80 x 32 mm
CE Compliance	EMC Directive: 89/336 EEC (EN 61000-6-3, EN 61000-6-2)

The performance specifications are nominal and conform to acceptable industry standards. For applications at conditions beyond these specifications, consult the local Johnson Controls office or representative. Johnson Controls shall not be liable for damages resulting from misapplication or misuse of its products.

