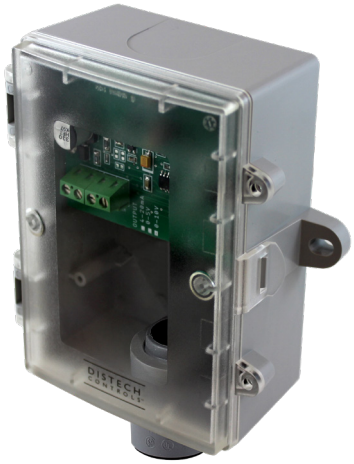
HS-OT_2X Series

Outside Air Humidity and Temperature Transmitters, Nema 4X



Overview

The HS-OT_2X Series of relative humidity and temperature transmitters for outdoor air use a highly accurate and reliable Thermoset-Polymer-based capacitance humidity sensor and a Platinum RTD. By combining the sensors with state-of-the-art digital linearization and temperature compensated circuitry, humidity and temperature are intricately monitored. Excellent long-term stability and quick response time combined with temperature compensation make the HS-OT_2X Series the ideal choice for the HVAC market.

Applications

- HVAC
- Clean rooms
- Museums / Archives
- Hospitals and Pharmaceuticals

Features & Benefits

- Economical
- Ease of installation
- Highly stable humidity sensor
- Proven long stability and performance
- Field-selectable analog signals

Accessories

HS-TNIST	NIST Calibration Certificate

Note: Calibration certificates must be purchased at the time of Transmitter purchase.

Model Selection

		HS-	OT	2	C04	2X	R1
Transmitter Mounting Style	OT = Outdoor Humidity and Temperature						
Humidity Sensing Accuracy	2 = 2%						
	3 = 3%						
	5 = 5%						
Control Signal Output	C04 = Current, 4-20mA						
	V05 = Voltage, 0-5VDC						
	V10 = Voltage, 0-10VDC						
Enclosure	2X = Nema 4X enclosure						
Temperature Range	R1 = 0° - 35°C (32° - 95°F)						
	R2 = 0° - 50°C (32° - 122°F)						
	R3 = 0° - 100°C (32° - 212°F)						
	R4 = -50° - 50°C (-58° - 122°F)						

Product Specifications

Environmental

Operating Temperature	-40 °C to 85 °C (-40 °F to 185 °F)
Storage Temperature	-40 °C to 85 °C (-40 °F to 185 °F)
Ambient Humidity	0 to 95% Non-condensing

Humidity Sensor/Probe

Sensor Type	Thermoset polymer based capacitive
Sensor Accuracy	±2, 3, or 5% RH (5% to 95% RH)
Output Signal	4-20 mA current loop, 0-1 Vdc, 0-5 Vdc, or 0-10 Vdc
Range	0 to 100%RH
Response Time	15 seconds typical
Hysteresis	±1.5% RH maximum
Repeatability	±0.5% RH typical
Linearity	±0.5% RH typical
Stability	±1% RH typical at 50% RH in 5 yrs.

Enclosure

Material	Grey polycarbonate with gasket, UL94-V0, IP65 (NEMA 4X)
Shipping Weight	220g (7.8 oz) including probe
Dimensions	117 W x 102 H x 53 D (4.6” x 4.0” x 2.1”)
Electrical Conduit Connection	½” NPT knockout for conduit connections and M16 adapter and cable gland in Europe

Electrical

Power Supply	18 to 35 Vdc, 15 to 26 Vac
Consumption	22 mA Maximum
Output Drive at 24 Vdc	550 Ω Max for Current Output 10 kΩ Min for Voltage Output
Internal Adjustments	Clearly marked ZERO and SPAN pots
Input Voltage Effect	Negligible over specified operating range
Termination	Screw terminal block (14 20 22 AWG / 2.08 mm^2 to 0.326 mm^2)
Protection Circuitry	Reverse voltage protected and output limited

Temperature Sensor

Type	1000Ω Platinum. IEC751, 385 Alpha, thin film, Class B (RTD)
Accuracy Sensor	±0.3 C at 0°C
Accuracy Transmitter	±0.1% of span

Agency Approval

Material[1]	UL94-V0
Country of Origin	Canada

ISO 9001

1. All materials and manufacturing processes comply with the RoHS directive

Dimensions