



Featured RH Temperature Transmitter Product

Duct/NEMA 4X



Outside Air/NEMA 4X



Room



Room

RH TT

RH with Temperature Transmitter Output

The A/RH Series relative humidity transmitters (with temperature transmitter output) utilize a capacitive sensing element to deliver a proportional analog output. This series features on board DIP switches which allow the user to select the desired output signal. In addition, field calibration can be performed by using the on board increment and decrement DIP switches. Duct and Outside Air configurations feature conformally coated RH circuit boards for moisture resistance. These enhancements provide increased flexibility and outstanding long-term performance. An N.I.S.T. certificate is provided for the temperature output on all -TTM Series devices and can be requested for relative humidity outputs as well. Robust, high-end performance, in addition to N.I.S.T certification, makes this series suitable for applications such as pharmaceutical or scientific laboratories.



SPECIFICATIONS

RH Supply Voltage (4 to 20 mA)	(250 Ohm Load): 15 to 40 VDC/18 to 28 VAC
RH Supply Voltage (4 to 20 mA)	(500 Ohm Load): 18 to 40 VDC/18 to 28 VAC
RH Supply Voltage (0-5 VDC)	12 to 40 VDC/18 to 28 VAC (4K Load minimum)
RH Supply Voltage (0-10 VDC)	18 to 40 VDC/18 to 28 VAC (4K Load minimum)
Supply Current	Voltage Output: 8 mA maximum Current Output: 24 mA maximum
RH Measurement Range	0-100%
RH Output	2-wire: 4 to 20 mA (standard) 3-wire: 0-5, 0-10 VDC or 4 to 20 mA
Accuracy @ 77°F (25°C)	+/- 1% over 20% span (between 20 to 90%) +/- 2%, 3%, or 5% from 10 to 95%
Long Term Stability	Less than 2% drift/5 years
Min/Max Calibrated Temp Range	50°F (28°C) minimum/1000°F (550°C) maximum (See Operating Environment Below)
Repeatability	0.5% RH
Sensitivity	0.1% RH
Operating Environment: Duct/Outside	0 to 90% RH (non-condensing) -40 to 140°F (-40 to 60°C)
Operating Environment: Room	0 to 90% RH (non-condensing) 32 to 122°F (0 to 50°C)
RH Sensor Type	Capacitive
Product Dimensions (Duct)	Enclosure: (H) 3.70" (W) 3.70" (D) 2.22" Probe: (L) 7.30"
Product Dimensions (Outside Air/NEMA 4X)	(H) 3.70" (W) 3.70" (D) 2.22" Probe: (L) 4.80"
Product Dimensions (Room 2)	(H) 4.50" (W) 2.75" (D) 1.12"
Product Dimensions (Room)	(H) 4.51" (W) 2.75" (D) 2.90"

TEMPERATURE TRANSMITTER SPECIFICATIONS

Supply Voltage	8.5 to 32 VDC 249 Ohm Load: +13.5 to 32 VDC 499 Ohm Load: +18.5 to 32 VDC
Output Current	25 mA
Transmitter Transmitter Input	2-wire Platinum 100/1K Ohm Class A RTD
Transmitter Transmitter Output	2-wire, Linear 4 to 20 mA DC Current (standard), 1 to 5 VDC, or 2 to 10 VDC
Calibrated Accuracy	+/-0.2% of full scale for spans <500°F (275°C) +/-0.5% of full scale for spans >500°F (275°C)
Temperature Effect	+/-0.02% of full scale for spans >100°F (55°C) +/-0.04% of full scale for spans <100°F (55°C)
Transmitter Operating Temperature	-40 to 185°F (-40 to 85°C)
Transmitter Operating Humidity	0-90% RH non-condensing
Minimum & Maximum Span	minimum: 50°F (28°C)/maximum: 1000°F (550°C)
Sensor Output [1]	1 to 5 VDC
Sensor Output [2]	2 to 10 VDC
Sensor Output [4]	4 to 20 mA
Product Dimensions	Please reference pages 5, 6, 7 & 8

ORDERING

Please select an Accuracy (A), Temperature Sensor (B), Configuration (C) & TT Model Output (D). Please note that RH model is defaulted to a 4 to 20 mA output. For the TT output of (1 to 5 VDC) or (2 to 10 VDC), the RH would have an output of either (0 to 5 VDC) or (0 to 10 VDC), respectively. You can change your RH output in the field between 4 to 20 mA, 0 to 5 VDC, or 0 to 10 VDC, as well. Please indicate the required temperature calibration span at the time of your order. **NOTE:** Part numbers containing RH1% and/or TTM100 are not available in Room (R or R2) configurations. *TTM100's are not available in Room (R or R2) configurations.

A Accuracy	B Temperature Sensor	C Configuration	D TT Model Output
<input type="radio"/> A/RH1 (+/-1%) (Specify 20% Range)	<input type="radio"/> TT1K	<input type="radio"/> D-4X (Duct/NEMA 4X)	<input type="radio"/> 4 (4 to 20 mA) (Specify Span)
<input type="radio"/> A/RH2 (+/-2%)	<input type="radio"/> TT100	<input type="radio"/> O-4X (Outside Air/NEMA 4X)	<input type="radio"/> 1 (1-5 VDC) (Specify Span)
<input type="radio"/> A/RH3 (+/-3%)	<input type="radio"/> TTM1K	<input type="radio"/> R2 (Room) Not available with TTM100*	<input type="radio"/> 2 (2-10 VDC) (Specify Span)
<input type="radio"/> A/RH5 (+/-5%)	<input type="radio"/> TTM100*	<input type="radio"/> R (Room) Not available with TTM100*	

BUILD PART NUMBER

After completing (A), (B), (C) & (D) from the above table, fill in the Part Number Table below. An example part number is offered.

A	B	C	D

EXAMPLE: A/RH3 - TT1K - D - 1 (Temp span: 20 to 120)

The NEMA 4X enclosure has a UL94-V2 flammability rating.

