

*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.

The A/RH Series is covered by ACI's Five (5) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's web site, www.workaci.com.



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"

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.

A Accuracy

- ☐ A/RH1 (+/-1%) (Specify 20% Range)
☐ A/RH2 (+/-2%)
☐ A/RH3 (+/-3%)
☐ A/RH5 (+/-5%)

B Temperature Sensor

- ☐ TT1K
☐ TT100
☐ TTM1K
☐ TTM100

C Configuration

- ☐ D-4X (Duct/NEMA 4X)
☐ O-4X (Outside Air/NEMA 4X)
☐ R2 (Room)
☐ R (Room)

D TT Model Output

- ☐ 4 (4 to 20 mA) (Specify Span)
☐ 1 (1-5 VDC) (Specify Span)
☐ 2 (2-10 VDC) (Specify Span)

Build your 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.