Standard Wall Humidity Sensors

2%, 3%, and 5% Accuracies

IDEAL FOR BID SPEC!

HEW

DESCRIPTION

HEW Standard Series wall mount humidity transmitters offer high performance in an easy to install housing at an affordable price. The thin-film capacitive sensor element provides high accuracy and performance, great long-term stability, and full recovery from saturation. Temperature sensing options are also available.

The wall housing was created using sophisticated thermal analysis techniques for optimum airflow. It is ideal for schools and other applications requiring exceptional durability and a discrete appearance. All Standard models come with a standard one-year warranty.

FEATURES

- Monitor humidity and temperature with a single device...reduces installation costs
- Semiconductor, temperature transmitter, or popular thermistor/RTD sensors available
- Housing is low-profile...perfect for schools and museums

APPLICATIONS

- HVAC economizer control
- Managing energy systems
- Facilitating ASHRAE standards for environmental control

HUMIDITY

SPECIFICATIONS

1 Year Warranty

Input Power:

Input Power, Voltage Version	12-24VDC or 24VAC
Input Power, mA Version	12-24VDC
AC Voltage Tolerance	±10%
AC Frequency	50-60 Hz
Max. Inrush Current after 1 msec (mA version)	25mA

Output Power:

mA Output	4-20mA, 2-wire, not polarity sensitive
mA Max. Loop Resistance	500Ω at 24VDC input voltage; 250Ω at 12VDC input voltage
Voltage Output	0-5V or 0-10V (jumper selectable)
Voltage Min. Load Resistance	5kΩ
Voltage Min. Sinking Current	0.2mA

Humidity:

RH Element	Digitally profiled thin-film capacitive, non-removable
Accuracy	±2%, 3%, or 5% (10-90% RH, 20° to 30°C)
Temperature Effect (Outside 20° to 30°C)	≤0.1% RH per °C
Response Time (to 90% change at 20°C)	110 sec
Annual Drift	≤1%
Output Scaling	0-100% RH

Temperature:

Active Output Accuracy	±0.5°C
Active Output Temperature Scaling	10° to 35°C (50° to 95°F)
Self-Heating Error (Resistive temperature only)	≤±0.5°C at 20° to 30°C (68° to 86°F); ≤±0.75°C outside of 20° to 30°C (68° to 86°F)

Operating Environment:

Operating Temperature	0° to 50°C (32° to 122°F)
Operating Humidity	0-100% RH noncondensing (Unit will recover from saturation)

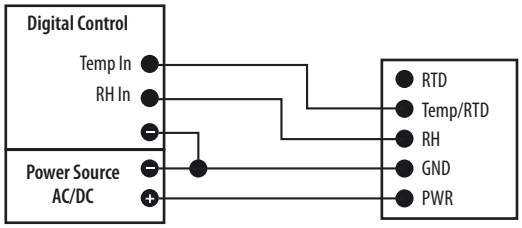
Housing:

Material	ABS plastic with UL V-0 5VB Flame Class
Mounting Holes	US and European junction box

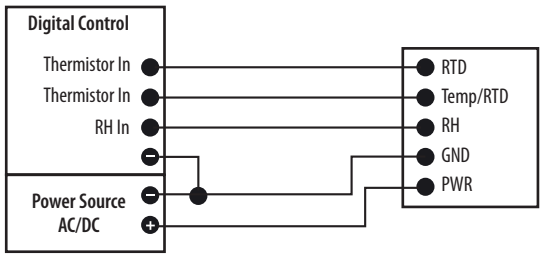
EMC Conformance: EN61000-6-3:2007+A1:2011 Class B; EN61326-1:2006 Class B; EN61000-6-1:2007

APPLICATION/WIRING DIAGRAMS

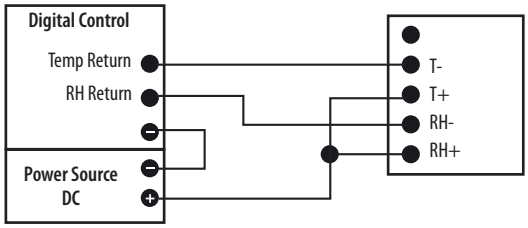
0–5V/0–10V Models, No Thermistor



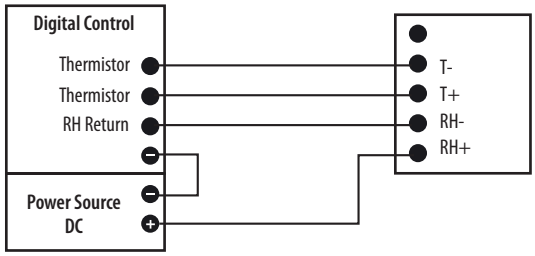
0–5V/0–10V Models, Thermistor



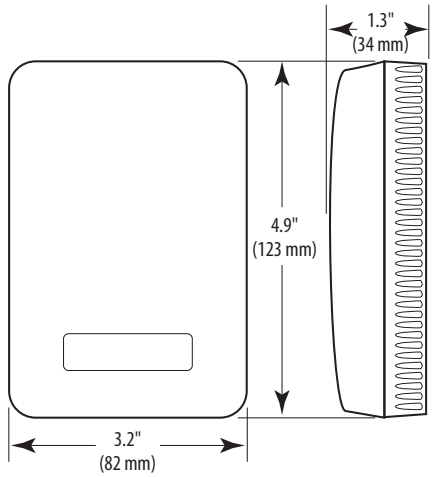
4-20mA Models, No Thermistor



4-20mA Models, Thermistor



DIMENSIONAL DRAWING



ORDERING INFORMATION

RoHS Compliant

HEW [Accuracy] [Output] [US or EU] [Temp.] [Sensor Type]

Accuracy
- **2** = 2%
- **3** = 3%
- **5** = 5%

Output
- **M** = 4-20mA
- **V** = 0-5VDC/0-10VDC

US or EU
- **S** = Standard

Temp.
- **T** = Temp
- **X** = No Temp (Stop here)

Sensor Type
- **A** = Temp. Transmitter
- **B** = 100R Platinum, RTD
- **C** = 1k Platinum, RTD
- **D** = 10k T2, Thermistor
- **E** = 2.2k, Thermistor
- **F** = 3k, Thermistor
- **G** = 10k CPC Thermistor
- **H** = 10k T3, Thermistor
- **J** = 10k Dale, Thermistor
- **K** = 10k with 11k shunt, Thermistor
- **M** = 20k NTC, Thermistor
- **N** = 1800 ohm TAC, Thermistor
- **R** = 10k US, Thermistor
- **S** = 10k 3A 221 Thermistor
- **T** = 100k, Thermistor
- **U** = 20k "D", Thermistor
- **W** = 10k T2 high accuracy, Thermistor
- **Y** = 10k T3 high accuracy, Thermistor
- **Z** = 10k E1, Thermistor

Example:

With Temp

HEW | 3 | M | S | T | C

Without Temp

HEW | 3 | V | S | X | *Stop Here*