

Wall Mount Humidity and Temperature Transmitter

Description:

The Series H5 Wall Mount Humidity/Temperature/Dew Point Transmitteris the most versatile room transmitter on the market. The stylish housing is well vented to provide air flow across the sensor to improve measurement accuracy. The LCD display indicates the ambient temperature along with the humidity or dew point. The transmitter has internal dip switches to select the temperature engineering units and whether the transmitter outputs humidity or dew point. The humidity and dew point can have either a current or voltage output, while the optional temperature output can be a current, voltage, RTD or thermistor. For models with current or voltage for the temperature output, the temperature range is field selectable.



Application:

- An optional LCD display can be integral to the transmitter or a remote display can be ordered for building balancing or LEED® validation.
- The humidity and temperature sensors are field replaceable to reduce service cost and inventory.
- The humidity and the dew point are measured using a capacitive polymer sensor that completely recovers from 100% saturation.

Specifications:

Relative Humidity Range : 0 to 100% RH.

Temperature Range : -40 to 140°F (-40 to 60°C) for thermistor and RTD

sensors. -20 to 140°F (-28.9 to 60°C) for solid state

band gap temperature sensors.

Dew Point Temperature Range : -20 to 140°F (-28.9 to 60°C); 0 to 100°F (-17.8 to

37.8°C); 40 to 90°F (4.4 to 32.3°C); -4 to 140°F

(-20 to 60°C) field selectable ranges.

Accuracy:

RH: Model H5-2XXX ±2% 10-90% RH @ 25°C

Model H5-3XXX ±3% 20-80% RH @ 25°C;

Model H5-5XXX ±5% 20-80% RH @ 25°C;

Thermistor temperature sensor: ± 0.36 °F @ 77°F (± 0.2 °C @ 25°C); RTD temperature sensor: DIN Class B; ± 0.54 °F @ 32°F (± 0.3 °C @ 0°C);

Solid state band gap temperature sensor: ±0.9°F @ 77°F (±0.3°C @ 25°C).

Hysteresis $: \pm 1\%$.

Repeatability : $\pm 0.1\%$ typical.

Temperature Limits : Operating: -40 to 140°F (-40 to 60°C);

Storage: -40 to 176°F (-40 to 80°C).



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Compensated Temperature Range: -4 to 140°F (-20 to 60°C).

4-20 mA Loop Powered Outputs:

Power requirements: 10 to 35 VDC;

Output signal: 4 to 20 mA, 2 Channels for humidity/solid state temperature sensor models (loop powered on RH). Switch selectable RH/dew point. Switch selectable normal or reverse output.

0-5/10V Outputs:

Power requirements: 15 to 35 VDC or 15 to 29 VAC;

Output load: 5 mA max., 2 channels for humidity/solid state temperature sensor models. Switch selectable 0-10V/2-10V or 0-5V/1-5V output. Switch selectable RH/dew point. Switch selectable normal or reverse output.

Solid State Band Gap Temperature Sensor Output Ranges:

Switch selectable, -20 to 140°F (-28.9 to 60°C); 0 to 100°F (-17.8 to 37.8°C); 40 to 90°F (4.4 to 32.3°C); -4 to 140°F (-20 to 60°C).

Response Time : 15 seconds.

Electrical Connections : Screw terminal block.

Drift : <1% RH/year.

RH Sensor : Capacitance polymer.

Enclosure Material : Warm gray polycarbonate.

Display : Optional LCD, backlit on 0-5/10V models.

Switch selectable %RH or dew point, °F/°C.

: RH: 1%; Temperature: 0.1°F (0.1°C); **Display Resolution**

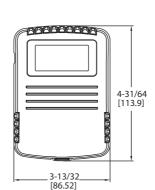
Dew Point: 1°F (1°C).

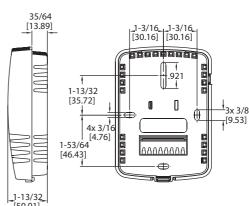
Weight : 0.3 lb (0.14 kg).

Dimensions:



Shown with optional LCD display







Wall Mount Humidity and Temperature Transmitter

HOW TO ORDER

Basic Mo	odel:	Н5
Н5	Humidity/Temperature/ Dew Point Transmitter	
Accuracy	<i>/</i> :	2
2 3	2% Accuracy 3% Accuracy	
5	5% Accuracy	Ö
Housing	•	W
		VV
W	Wall Mount	
Humidity	/ Dew Point Output :	4
4	4-20mA/0-5 VDC/0-10 VDC	
Tempera	ture Output :	A
Tempera 0	ture Output : None	A
O 4	None 4-20mA/0-5 VDC/0-10 VDC	A
0	None 4-20mA/0-5 VDC/0-10 VDC 10KΩ @ 25°C Thermistor	A
O 4	None 4-20mA/0-5 VDC/0-10 VDC	A
O 4 A B	None 4-20mA/0-5 VDC/0-10 VDC 10KΩ @ 25°C Thermistor Type III 10KΩ @ 25°C Thermistor Type II	A
0 4 A B	None 4-20mA/0-5 VDC/0-10 VDC 10KΩ @ 25°C Thermistor Type III 10KΩ @ 25°C Thermistor Type II 3KΩ @ 25°C Thermistor	A
O 4 A B C D	None 4-20mA/0-5 VDC/0-10 VDC 10KΩ @ 25°C Thermistor Type III 10KΩ @ 25°C Thermistor Type II 3KΩ @ 25°C Thermistor 100Ω RTD DIN 385	A
0 4 A B	None 4-20mA/0-5 VDC/0-10 VDC 10KΩ @ 25°C Thermistor Type III 10KΩ @ 25°C Thermistor Type II 3KΩ @ 25°C Thermistor	A
O 4 A B C D E F	None 4-20mA/0-5 VDC/0-10 VDC 10KΩ @ 25°C Thermistor Type III 10KΩ @ 25°C Thermistor Type II 3KΩ @ 25°C Thermistor 100Ω RTD DIN 385 1KΩ RTD DIN 385	
O 4 A B C D E F	None 4-20mA/0-5 VDC/0-10 VDC 10KΩ @ 25°C Thermistor Type III 10KΩ @ 25°C Thermistor Type II 3KΩ @ 25°C Thermistor 100Ω RTD DIN 385 1KΩ RTD DIN 385 20KΩ @ 25°C Thermistor	
O 4 A B C D E F	None 4-20mA/0-5 VDC/0-10 VDC 10KΩ @ 25°C Thermistor Type III 10KΩ @ 25°C Thermistor Type II 3KΩ @ 25°C Thermistor 100Ω RTD DIN 385 1KΩ RTD DIN 385 20KΩ @ 25°C Thermistor	LCD