

HWL SERIES



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Wall Mount Humidity Sensor

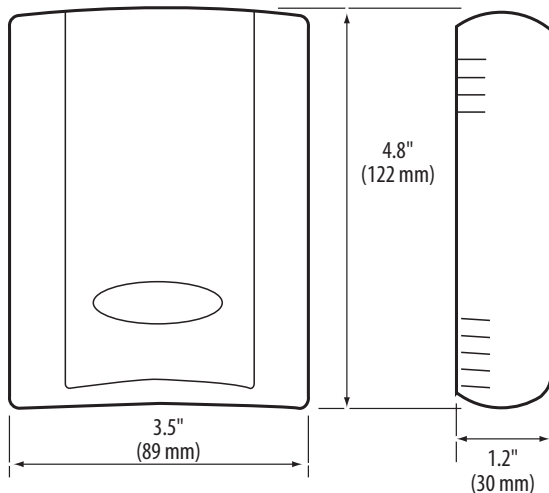
Installer's Specifications

HS Element	Digitally profiled thin-film capacitive (32 bit mathematics) U.S. Patent 5,844,138
Accuracy at 25°C from 10-80% RH*	2%, 3%, or 5% models; ±1% at 12-60% RH in voltage output mode; ±1% at 12-60% RH in mA output mode with temp. transmitter; ±1% at 20-40% RH in mA output mode (Multi-point calibration, NIST traceable)
Reset Rate**	24 hours
Stability	±1% @ 20°C (68°F) annually, for two years
Operating Humidity Range	0 to 100% RH (non-condensing)
Hysteresis	1.5% typical
Linearity	Included in Accuracy spec.
Temperature Coefficient	±0.1% RH/°C above or below 25°C (typical)
Analog Output	4-20mA version: 2-wire, polarity insensitive, (clipped and capped) 0-5V/0-10V versions: 3-wire, observe polarity
Scaling	0-100% RH
Operating Temperature Range	10° to 35°C (50° to 95°F)
Input Power***	4-20mA version: loop powered 12-30VDC only, 30mA max. 0-5V/0-10V versions: 12-30VDC/24VAC, 15mA max.
Optional Temperature Transmitter Output	Digital, 4-20mA, (clipped and capped) or 0-5V/0-10V output; accuracy ±0.5°C (±1°F) typical
EMC Conformance – CE Option	EN 50081-1, EN 50082-1, EN 61000-4-4, EN 61000-4-5, EN 61000-4-3, ENV 50204, EN 61000-4-6

NOTICE

- This product is not intended for life or safety applications.
- Do not install this product in hazardous or classified locations.
- Read and understand the instructions before installing this product.
- Turn off all power supplying equipment before working on it.
- The installer is responsible for conformance to all applicable codes.

DIMENSIONS



*Specified accuracy with 24VDC supplied power with rising humidity. RTD/Thermistors are not compensated for internal heating of product.

**Reset Rate is the time required to recover to 50% RH after exposure to 90% RH for 24 hours.

***One side of transformer secondary is connected to signal common, so an Isolation transformer or dedicated power supply may be required.

Shielded cabling is required for conformance to EMC standards. Technical information is available from factory upon request or is available on our website: www.veris.com

QUICK INSTALL

1. Select a mounting location away from ventilation sources. The sensor should be mounted on a vertical wall, about 4 ½ feet above the floor.
2. Affix the backplate to the wall.
3. Wire the device. Refer to wiring diagram.
4. Install Cover.

PRODUCT IDENTIFICATION

HW	Display <input checked="" type="checkbox"/> X = No	Accuracy <input type="checkbox"/> 1 = 1% <input type="checkbox"/> 2 = 2% <input type="checkbox"/> 3 = 3% <input type="checkbox"/> 5 = 5%	NIST <input type="checkbox"/> N = NIST (1% and 2% only) <input checked="" type="checkbox"/> X = No (2%, 3%, and 5% only)	US or EU <input type="checkbox"/> S = Standard <input type="checkbox"/> C = CE	Temp. <input type="checkbox"/> T = Temp* <input checked="" type="checkbox"/> X = No Temp (Stop here)	Sensor Type <input type="checkbox"/> A = Transmitter: 10° - 35°C (50° - 95°F and 0° - 50°C (32° - 122°F) (switchable) <input type="checkbox"/> B = 100R Platinum, RTD <input type="checkbox"/> C = 1k Platinum, RTD <input type="checkbox"/> D = 10k T2, Thermistor <input type="checkbox"/> E = 2.2k, Thermistor <input type="checkbox"/> F = 3k, Thermistor <input type="checkbox"/> G = 10k CPC, Thermistor <input type="checkbox"/> H = 10k T3, Thermistor <input type="checkbox"/> J = 10k Dale, Thermistor <input type="checkbox"/> K = 10k with 11k shunt, Thermistor <input type="checkbox"/> M = 20k NTC, Thermistor <input type="checkbox"/> N = 1800 ohm TAC, Thermistor <input type="checkbox"/> Q = 1uA/C, Linitemp <input type="checkbox"/> R = 10k US, Thermistor <input type="checkbox"/> S = 10k 3A 221 <input type="checkbox"/> T = 100k, Thermistor <input type="checkbox"/> U = 20k "D", Thermistor	Options Available <table border="0"> <tr> <td>Temp Cal Cert <input type="checkbox"/> X = No Cert <input type="checkbox"/> 1 = 1pt Cal <input type="checkbox"/> 2 = 2pt Cal</td> <td>Option <input type="checkbox"/> 1 = Push Button Override <input type="checkbox"/> 2 = Set Point Slider <input type="checkbox"/> 3 = Push Button Override and Set Point Slider</td> <td>Value <input type="checkbox"/> A = 1k <input type="checkbox"/> F = 10k <input type="checkbox"/> G = 20k <input type="checkbox"/> K = 50k <input type="checkbox"/> M = 100k</td> </tr> </table>	Temp Cal Cert <input type="checkbox"/> X = No Cert <input type="checkbox"/> 1 = 1pt Cal <input type="checkbox"/> 2 = 2pt Cal	Option <input type="checkbox"/> 1 = Push Button Override <input type="checkbox"/> 2 = Set Point Slider <input type="checkbox"/> 3 = Push Button Override and Set Point Slider	Value <input type="checkbox"/> A = 1k <input type="checkbox"/> F = 10k <input type="checkbox"/> G = 20k <input type="checkbox"/> K = 50k <input type="checkbox"/> M = 100k
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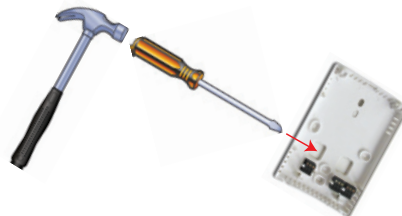
** In order for unit to display both temp and RH, use the TA or D temp selection.
Temp displayed on LCD is read from temperature transmitter, not resistive element.*

INSTALLATION

1. Remove the cover by pressing the tab at the top of the sensor while pulling outward from the top of the cover.



3. Punch out openings in the backplate.



2. Remove the backplate by unfastening the sensor from the bottom of the backplate and pivoting the sensor outward.



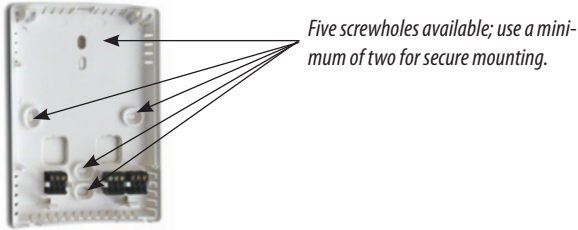
4. Position the sensor vertically on the wall, 4 1/2 feet above the floor.



correct

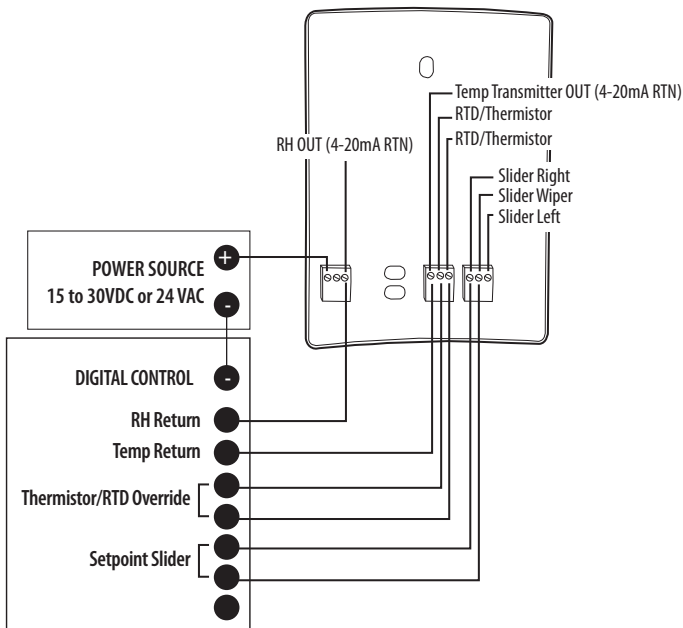
incorrect

5. Mount the backplate onto the wall using the screws provided.

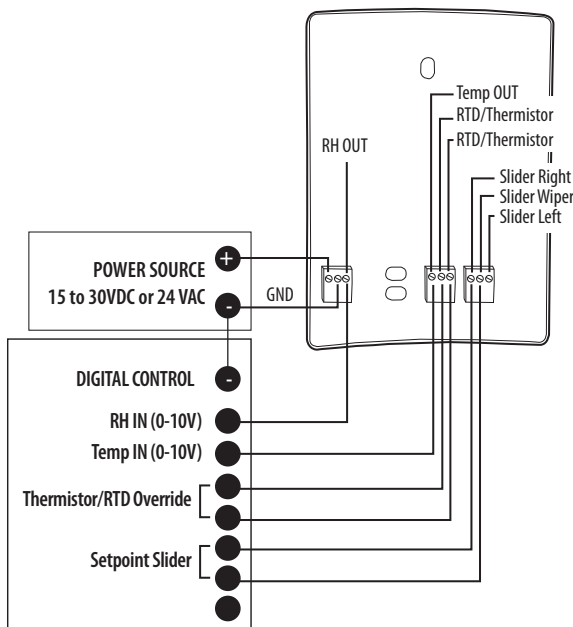


6. Wire the backplate.

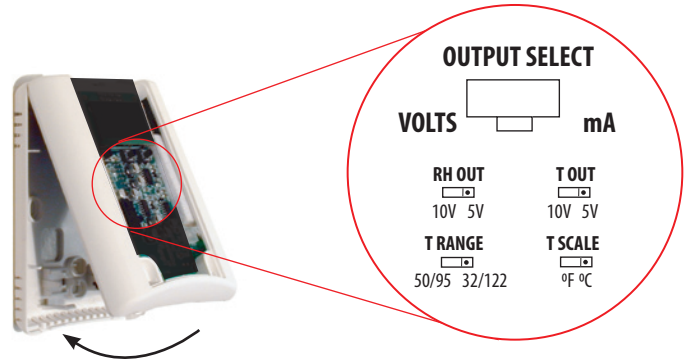
Current Output (2 wire, 4-20mA)



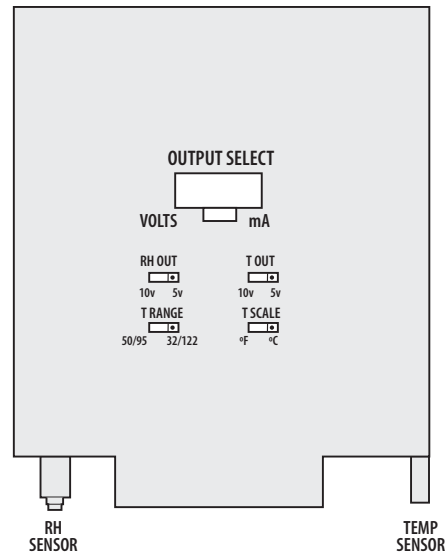
Voltage Output (3 wire, 0-10V)



7. Install and configure the sensor.



WARNING: Output select must be correct before applying power.



8. Install the cover and snap into place.

