

HW SERIES

HW Series wall mount humidity transmitters combine state of the art digital electronic design with an esthetically pleasing enclosure making them ideal for space monitoring. In addition, they provide excellent accuracy, long-term stability and are the best in the industry for serviceability. The thin-film capacitive HS sensor elements are factory calibrated using NIST traceable calibration equipment, are field replaceable, and never require field calibration. LCD models provide local display of humidity/temperature.

Applications

- Energy management systems
- HVAC control for improved comfort and energy savings
- Museums, schools, printing shops and other locations requiring humidity control
- Facilitate compliance with ASHRAE standards for environmental control and indoor air quality

Wall Mount Humidity Sensors

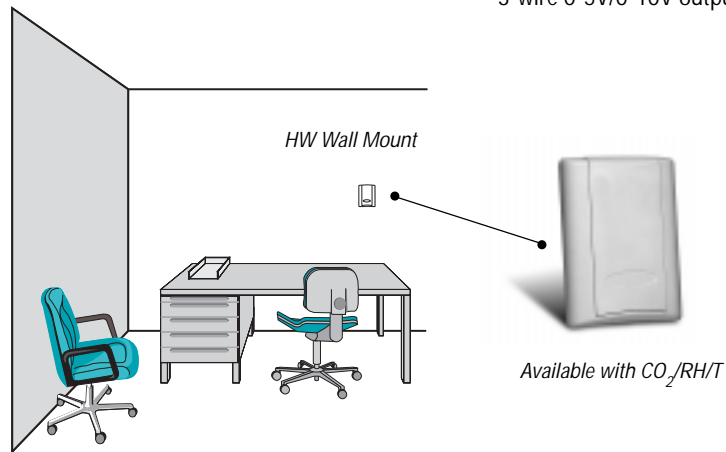
1%, 2%, 3%, or 5% Accuracy
NIST certificate available

Reduce installation costs with combination sensors

- Monitor humidity and temperature with a single device—reduce installation cost
- Fully interchangeable RH sensor element—calibration-free
- Semiconductor temperature transmitter or popular thermistor/RTD sensors available

Calibration-free interchangeable NIST traceable HS element

- Replace digital sensor quickly without calibration...maintain accuracy and eliminate downtime
- Multi-point digital calibration to NIST standards
- Recovers from 100% saturation...no damage to sensor
- Field-selectable two-wire 4-20mA or 3-wire 0-5V/0-10V output



Compact room sensor can be surface or single gang mounted



ORDERING INFORMATION



	(Display)	(Accuracy)	(NIST)	(US or EU)	(Temp.)	(Sensor Type)
HW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	L = LCD Display X = No Display	1 = 1% 2 = 2% 3 = 3% 5 = 5%	N = NIST X = None	S = Standard C = CE	T = Temp X = No Temp (Stop here)	A = Transmitter B = 100R PT RTD C = 1k PT RTD D = 10k T2 RTD E = 2.2k Thermistor F = 3k Thermistor G = 1k Balco Thermistor H = 10k T3 Thermistor J = 10k Dale Thermistor K = 10k w/11k with Shunt Thermistor M = 20k NTC Thermistor

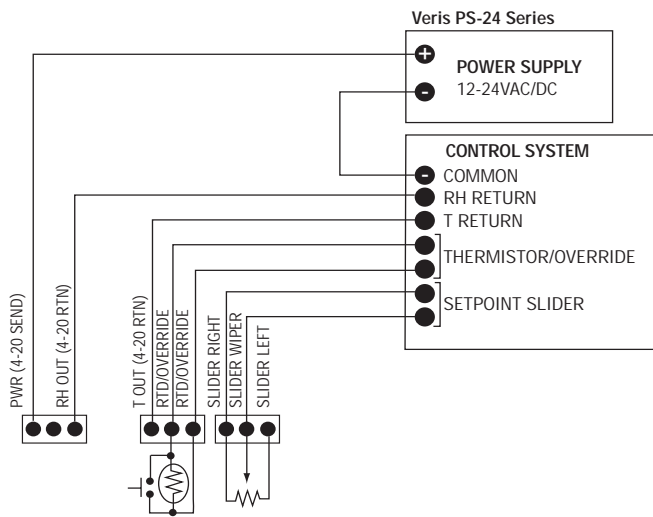
Example:

HW X 2 N S T F

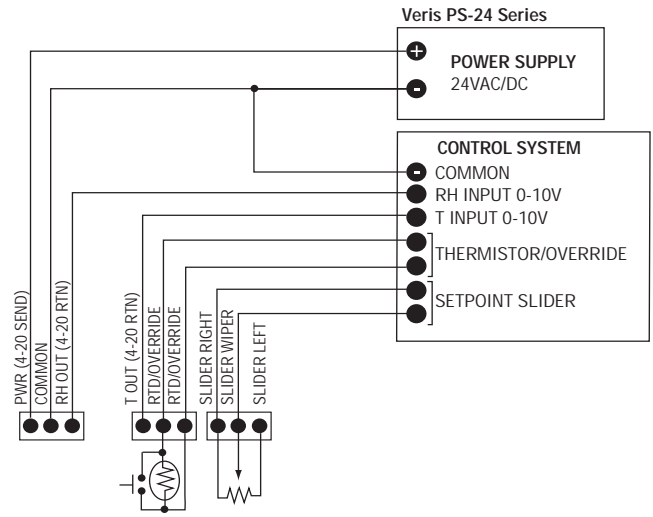
*Custom ranges available upon request

WIRING DIAGRAMS

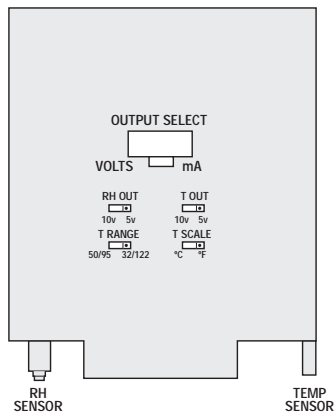
Current Output (2-Wire, 4-20mA)



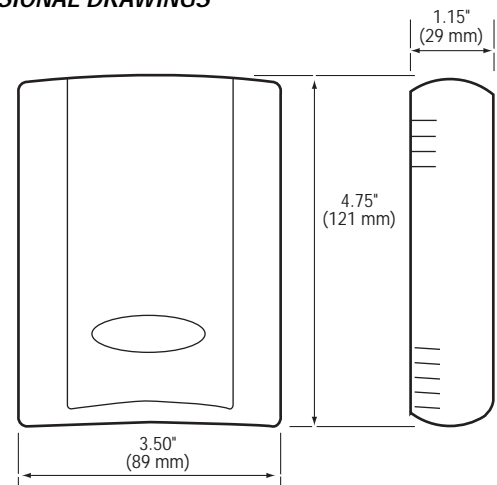
Voltage Output (3-Wire, 0-5V/0-10V)



CONFIGURATION



DIMENSIONAL DRAWINGS



SPECIFICATIONS

HS Element	Digitally profiled thin-film capacitive (32-bit mathematics) U.S. Patent 5,844,138
Accuracy	±1%, 2%, 3%, or 5% (specify) @ 10 to 90% RH; Multi-point calibration NIST traceable (±5% 2-point calibration)
Stability	±1% @ 20°C (68°F) annually, for two years
Operating Humidity Range	0 to 100% RH
Temperature Coefficient	±0.03% RH/°C over 0 to 60°C (32° to 122°F)
Analog Output	4-20mA mode; 2-wire, polarity insensitive 0-5V/0-10V mode; 3-wire, observe polarity
Scaling	0 to 100% RH
Input Power	4-20mA mode; loop powered 12-30VDC, 30mA max. 0-5V/0-10V mode; 12-30VDC/24VAC, ±0.2°C/±0.5°C (±0.5°F/±1°F) 15mA max.
Physical	High impact ABS plastic, plenum rated UL94-5VA, White
Optional Temperature Output	
<i>Transmitter option</i>	Digital, 4-20mA/0-5V/0-10V output; resolution/accuracy, ±0.2°C/±0.5°C (±0.5°F/±1°F) typical. Range specified on sensor
<i>Resistance option</i>	Customer specified thermistor or RTD
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

*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