

HT1 Series Humidity/Temp Recessed/Wall

2% and 3% RH accuracy options

Universal analog output provides 0-5V, 0-10V, 2-wire or 3-wire 4-20mA

Thermistor outputs for temperature optional

Optional LCD display



DESCRIPTION

The new Senva HT1 Series comes in our newly engineered enclosure making it the most attractive and quickest-installation humidity sensor on the market. Designed with a universal analog output and a variety of thermistor options allows flexibility on-site. It mounts easily in any junction box or it can be unobtrusively mounted directly to drywall using Senva's built-in drywall clamps. Save installation time and energy costs with this versatile product.

APPLICATIONS

- Facilitating compliance with ASHRAE 62.1 standard for air quality
- Indoor air comfort and control in HVAC systems
- Maintain healthy air quality, minimize mold and other contaminants
- Museums, hospitals and other critical environments
- Offices, conference rooms, and public assembly areas
- Industrial process control environments



Attachable dry wall clamps for easy retrofit installation



Optional "Wall" version for surface-mount applications

TAMPER PROOF



Tamper proof push-in lock tabs - great for schools!



Meets Buy American Act Certification

FEATURES

- Fast and attractive installation: mounts easily in standard wall recepticals or order the surface-mount version
- Low profile installation is ideal for schools and other harsh environments
- Innovative drywall clamps allow unobtrusive and secure mounting without a junction box
- Ideal for schools and institutional environments
- Field calibration with LED or LCD allows easy adjustment of calibrated RH value as needed to maintain certification
- On-board temperature compensation for RH. Eliminates temperature coefficient errors and achieves an excellent measurement accuracy as well as high repeatability and offset stability.

ORDERING

HT1



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Enclosure

R = Recessed Wall
W = Surface Wall

Accuracy

2 = 2%
3 = 3%
N = 2%/ with
NIST Cert.

Temperature

A = None
B = Transmitter
C = 100PtRTD
D = 1000PtRTD
E = 10K Type 2
F = 10K Type 3
G = 10K W/ 11K
H = 3K
I = 2K2
J = 1K8
K = 20K
L = 100K

Output

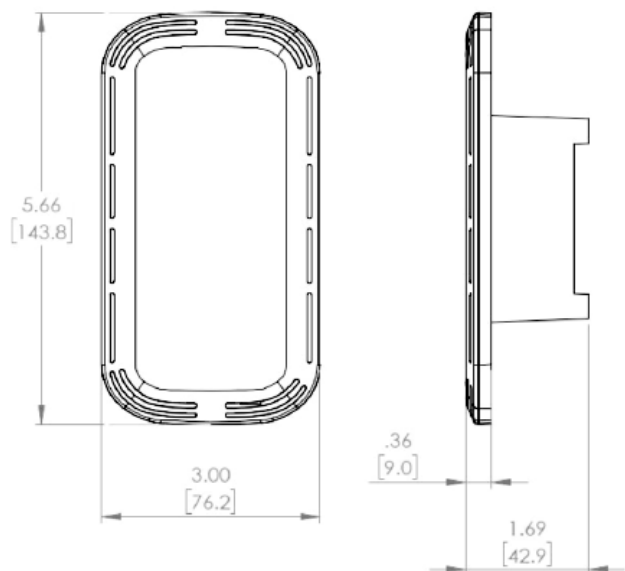
U = Universal
(4-20mA,
0-5V,0-10V)
2 or 3-Wire
Connection

Display (LCD)

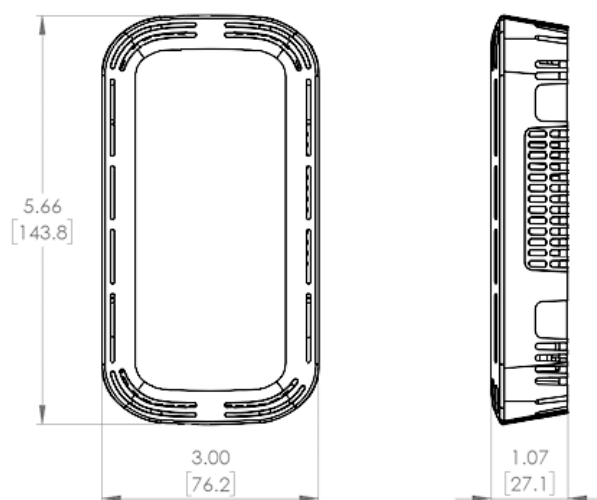
X = None
D = Display

DIMENSIONS

CT1R



CT1W



Warning: The datasheet is designed for reference only. Refer to installation instructions that accompany the product and heed all safety instructions. Product improvement is a continuing process at Senva. Changes may occur to products without prior notice.

SPECIFICATIONS		
Power Supply		12-30VDC/24VAC (1), 100mA max.
Outputs	RH% and Temperature	3-wire 0-5, 10V (4), or 4-20mA, 2-wire 4-20mA(selectable)
Output scaling	RH%	0-100% RH
	Temperature	50-95° F (10-35° C) or 32-122°F (0-50°C)
Thermistor Options		Yes, see ordering table
Media filter		PTFE membrane, IP54 protection
Relative Humidity	Accuracy	2% models: $\pm 2\%$ max 0 to 100% RH 3% models: $\pm 3\%$ max 0 to 100% RH
	Resolution	0.01%RH
	Hysteresis	$\pm 0.8\%$ RH
	Non-Linearity	factory linearized <1%RH
	Temperature coefficient	fully compensated by on-board temp sensor
	Response time (2)	8s
	Output update rate	0.5s
	Operating range	0 to 100%RH (non-condensing)
	Long term drift	<0.25%RH per year
	Normal Operating conditions (3)	41 to 140°F (5 to 60°C) @ 20 to 80%RH
Temperature	Accuracy	2% models, $< \pm 1^\circ \text{C}$; 0.5° C typ @ 25°C 3% models, $< \pm 2^\circ \text{C}$; 0.5° C typ @ 25°C
	Resolution	0.01° C
	Repeatability	0.04° C
	Response time (2)	2s
	Temperature Scaling	50-95°F (10-35° C)
	Output update rate	0.5s
	Operating range	-40° C to 140°F (-40 to 60°C)

1. One side of transformer, secondary is connected to signal common. Dedicated transformer is recommended.
2. Time for reaching 63% of reading at 25° C and 1 m/s airflow.
3. Long term exposures to conditions outside normal range at high humidity may temporarily offset the RH reading (+3%RH after 60 hours).
4. 15-30VDC/24VAC power supply voltage required for 10 volt output.

* Product improvement is a continual process at Senva and product features and specification may change without prior notice. Refer to instructions that accompany the product for installation and wiring.