

# HT1R and HT1W Select Series Recessed/Wall Humidity/Temperature

LCD, 2% or 3% accuracy  
0-5/10V/4-20mA RH/Temp (thermistors optional)  
Digital field offset calibration  
Durable and attractive low-profile design



## 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. Also available in a surface-mount enclosure.

Save installation time and energy costs with this versatile product.

## APPLICATIONS

- HVAC room humidity and temperature measurement and control
- Energy management/building control

## FEATURES

### Attractive and low-profile design

- Enclosure mounts easily in junction boxes
- Innovative drywall clamps allow unobtrusive and secure mounting without a junction box
  - Ideal for schools, offices, etc

### Field calibration with LCD or LED

- Field calibration scaled adjustment allows for the calibrated RH value to be changed as needed to maintain certification.
- Dip-switch selectable 0-5V/0-10V/4-20mA universal output

### Options for any job

- Thermistor or transmitter outputs for temperature (optional)

### Superior RH sensing

- 2%, 3%, and 2% NIST calibrated RH accuracy options
- Field-replaceable humidity element
- On-board temperature compensation eliminates temperature coefficient errors and achieves high repeatability and offset stability



### Innovative Drywall Clamps

- Clamps allow mounting to drywall without adding the cost and time required for a junction box or trim ring (recessed version only).



## ORDERING

HT1  -    **U**

### Enclosure

W = Wall/Surface  
R = Recessed

### Accuracy

2 = 2%  
3 = 3%  
N = 2% NIST

### Temperature

A = None  
B = Transmitter  
C = 100Pt (385)  
D = 1000Pt (385)  
E = 10k type 2  
F = 10k type 3  
G = 10k type 3 w/11k shunt  
H = 3k  
I = 2k2  
J = 1k8  
K = 20k  
L = 100k

### Output Type

U = Universal (2-wire and 3-wire  
4-20mA, 0-5V, 0-10V)

### Display (LCD)

D = Display  
X = None

## SPECIFICATIONS

Power Supply	12-30VDC/24VAC <sup>(1)</sup> , 100mA max.	
Outputs	RH% and Temperature 3-wire 0-5, 10V <sup>(4)</sup> , or 4-20mA, 2-wire 4-20mA(selectable)	
Output scaling	RH% 0-100% RH Temperature Transmitter 50-95° F (10-35°C) or 32-122°F (0-50°C) (selectable)	
Thermistor Options	Yes, see ordering table on left	
Media filter	PTFE membrane, IP54 protection	
Relative Humidity	Accuracy	2% models, ±2% over 0 to 100% RH Range; ±1.5% typ 3% models, ±3% over 0 to 100% RH Range; ±2% typ
	Resolution	0.01%RH
	Hysteresis	±0.8%RH
	Non-Linearity	factory linearized <1%RH
	Temperature coefficient	fully compensated by on-board temp sensor
	Response time <sup>(2)</sup>	8s
	Output update rate	0.5s
	Operating range	0 to 100%RH (non-condensing)
	Long term drift	<0.25%RH per year
	Element Normal Operating conditions <sup>(3)</sup>	41 to 140°F (5°C to 60°C) @ 20% to 80% RH
Temp Transmitter	Accuracy	2% models, <±0.25°C; 0.1°C typ @ 25°C 3% models, <±0.3°C; 0.25°C typ @ 25°C
	Resolution	0.01°C
	Repeatability	0.04°C
	Response time <sup>(2)</sup>	2s
Enclosure	Dimensions	5.7" h x 3.0" w x 1.7" d (1.07" d for surface mount)
	Unit Temp Rating	-40 to 158°F (-40 to 70°C)
	Compliance	CE

- (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.

### Need surface-mount?

- Order the HT1W



## DIMENSIONS

