

HT1R 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 HT1R 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

- 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.



ORDERING

HT1R - **U**

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 ⁽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 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 ⁽²⁾	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 ⁽³⁾	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 ⁽²⁾	2s
	Output update rate	0.5s
Enclosure	Dimensions	5.7" h x 3.0" w x 1.7" d
	Unit Temp Rating	-40 to 158°F (-40 to 70°C)
Compliance	CE	

Need surface-mount?

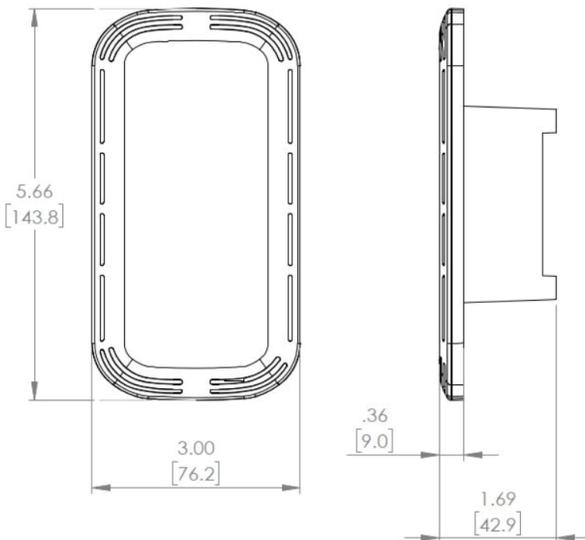
- Order the HT1W (same options) and we'll provide a fitted electrical box and hardware



(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.

DIMENSIONS

HT1R



HT1W

