

# HT0D Value Series Duct Humidity/Temperature

2% or 3% accuracy  
0-5/10V/4-20mA RH/Temp (thermistors optional)



## DESCRIPTION

Designed for use with energy management systems in buildings, the HT0D series combines excellent stability and reliable operation. Analog output options and thermistor options accommodate any installation.

## APPLICATIONS

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

## FEATURES

### Senva's high efficiency duct probe

- Designed to mount easily in any duct
- Ideal for schools, hotels, offices, etc.

### Options for any job

- Thermistor outputs for temperature (optional)
- 0-5V, 0-10V, 4-20mA 2-wire, or 3-wire options available

### Superior RH sensing

- 2% or 3% RH accuracy options
- On-board temperature compensation eliminates temperature coefficient errors and achieves high repeatability and offset stability
- Achieve better accuracy for more efficient control

### Industry-leading warranty

- 7-year limited warranty on electronics; sensor element 2 years



### Field replaceable element

- Ideal for harsh environments
- Accurate dual RH/Temp IC sensing



ORDERING

HT0D -

Accuracy

2 = 2%  
3 = 3%

Output Type

A = 0-5VDC, 3-wire  
B = 0-10VDC, 3-wire  
C = 4-20mA, 2-wire  
D = 4-20mA, 3-wire

Temperature

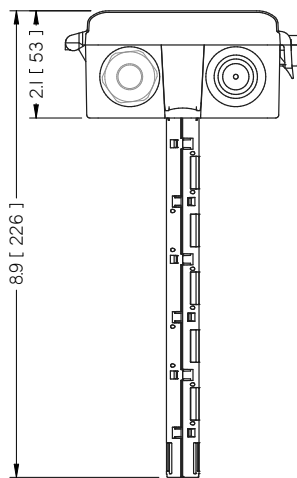
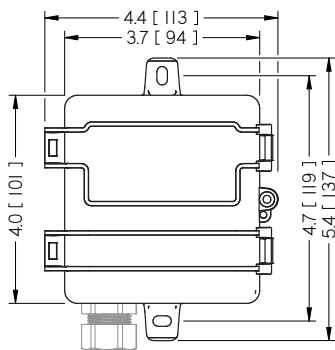
A = None  
C = 100Pt (385)  
D = 1000Pt (385)  
E = 10k type 2  
F = 10k type 3  
G = 10k type 3 w/11k shunt  
H = 3k  
I = 2k2  
J = 1k8  
K = 20k  
L = 100k

SPECIFICATIONS

|                    |  |  |
|--------------------|--|--|
| Power Supply       |  | 12-30VDC/24VAC <sup>(1)</sup> , 24mA max   |
| Output             | RH%  | 3-wire 0-5, 10V <sup>(4)</sup> , or 4-20mA, 2-wire 4-20mA(optional)              |
| Output scaling     | RH%  | 0-100% RH  |
| 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<br>3% models, ±3% over 0 to 100% RH Range |
|                    | Resolution   | 0.01%RH  |
|                    | Hysteresis   | ±0.8%RH  |
|                    | Non-Linearity                                      | factory linearized <1%RH   |
| Relative Humidity  | 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  |
| Enclosure          | Dimensions   | 4.0"h x 4.4"w x 2.1"d (+6.8" probe)  |
|                    | Unit Temp Rating                                   | -40 to 158°F (-40 to 70°C)   |
| Agency             | Compliance   | RoHS   |

- (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



**Warning:** Refer to installation instructions that accompany product and heed all safety instructions.