

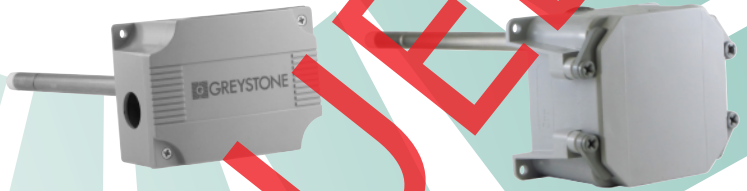


## HIGH ACCURACY DUCT HUMIDITY /TEMPERATURE TRANSMITTER HAHTD Series

The HAHTD series uses highly accurate and reliable Thermoset Polymer based capacitance humidity sensor and Platinum RTD temperature sensor together with state-of-the-art digital linearization and temperature compensated circuitry to monitor humidity levels. The sensors are encapsulated in a 228.60 mm (9") long by 12.7 mm (0.5") diameter S/S probe. A 60 micron HDPE filter protects the sensor for contaminants.

### SPECIFICATION:

Humidity Sensor Type.....Thermoset polymer based capacitive  
 Accuracy .....±1% (20 to 80% RH) or  
 ±2% (5 to 95% RH)  
 Measurement Range.....0 to 100% RH  
 Temperature Dependence.....±0.05% RH/ °C  
 Hysteresis .....±1.5% RH maximum  
 Repeatability.....±0.5% RH typical  
 Linearity.....±0.5% RH typical  
 Stability.....±1% RH typical at 50% RH in 5 yrs.  
 Sensor Response Time.....15 seconds typical  
 Sensitivity.....0.1% RH  
 Sensor Type.....Platinum RTD 1000 Ω,  
 385 Alpha @ 0°C  
 Sensor Accuracy.....**RTD Class A:** ±0.15°C @ 0°C  
**RTD 1/3 DIN:** ±0.1°C @ 0°C  
**RTD 1/10 DIN:** ±0.03°C @ 0°C  
 Accuracy.....±0.25% of span  
 Operating Temperature .....-40° to 85°C (-40° to 185°F)  
 Operating Humidity .....0 to 95% RH non-condensing  
 Power Supply.....18 to 35 Vdc, 15 to 26 Vac  
 Consumption.....22 mA maximum  
 Input Voltage Effect.....Negligible over specified operating  
 range  
 Protection Circuitry.....Reverse voltage protected and  
 output limited  
 Output Signal.....4-20 mA current loop, 0-1, 0-5  
 or 0-10 Vdc  
 Output Drive at 24 Vdc.....550 ohms max for current output  
 10K ohms min for voltage output  
 Internal Adjustments.....Clearly marked ZERO and SPAN pots  
 Wiring Connections.....Screw terminal block (14 to 22 AWG)  
 Enclosure.....(A) Grey ABS - UL94-V0 - IP61 (NEMA 2)  
 (C), PVC - IP65 (NEMA 4X)  
 Probe.....304 series stainless steel  
 w/ 60 micron HDPE filter



### PART NUMBER SELECTED

### PRODUCT SELECTION INFORMATION:

MODE	Product Description
HAHTD	High Accuracy Duct Humidity/Temperature Transmitter

CODE	Enclosure
A	ABS Enclosure
C	PVC Enclosure

CODE	RH Accuracy
1	1%
2	2%

CODE	High Accuracy Temperature Sensor
18	1000 Ω Platinum, IEC 751, 385 Alpha, thin film, Class A
48	1000 Ω Platinum, IEC 751, 385 Alpha, thin film, 1/3 DIN
22	1000 Ω Platinum, IEC 751, 385 Alpha, thin film, 1/10 DIN

CODE	Output Signals (RH and Temperature)
A	4-20 mA
D	0-5 Vdc
E	0-10 Vdc

CODE	Scaled Temperature Range
1	0° - 35°C (32° - 95°F)
2	0° - 50°C (32° - 122°F)
3	0°C - 100°C (32°F - 212°F)
6	-50°C - 50°C (-58°F - 122°F)

Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.

### Custom Scaled Temperature Range:

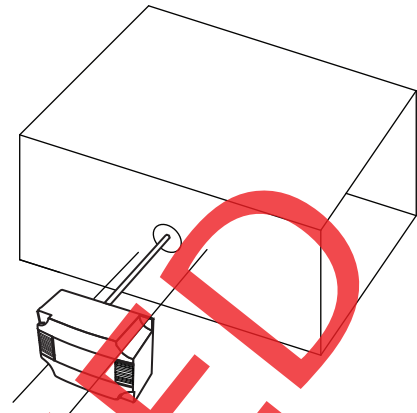
## TYPICAL INSTALLATION:

For complete installation and wiring details, please refer to the product installation instructions.

The duct type probes are installed through a hole in the side of the duct to monitor a single point humidity within the duct. Install the probe in a straight section of duct at a suitable distance downstream from any heating, cooling or humidification devices.

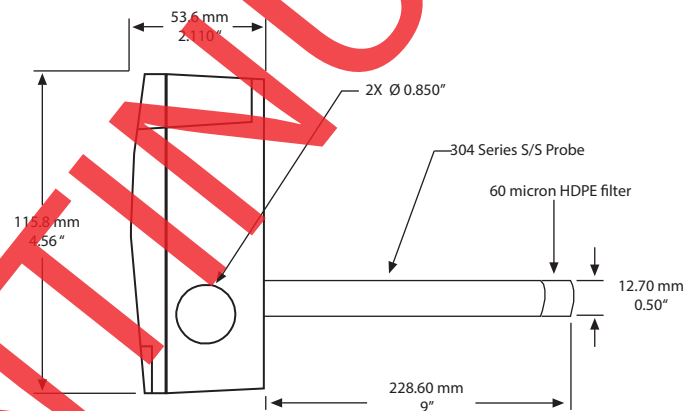
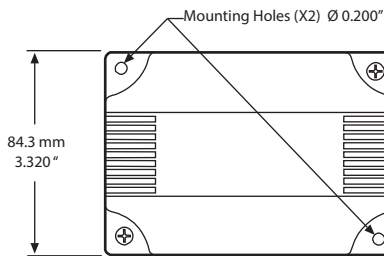
Mounting tabs on the outside of the enclosure for ease of installation.

A terminal block connection is provided for connection to the Building Automation System.

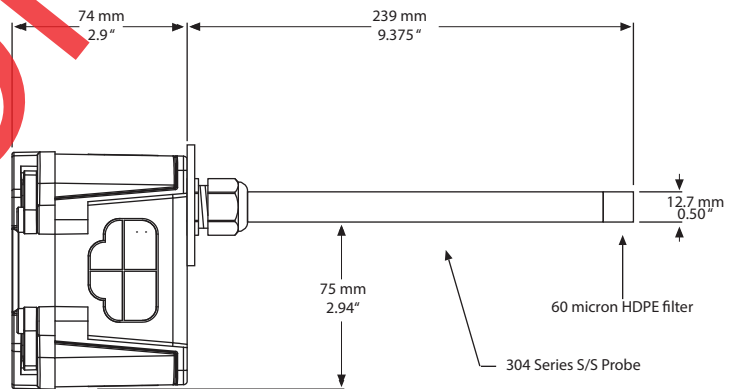
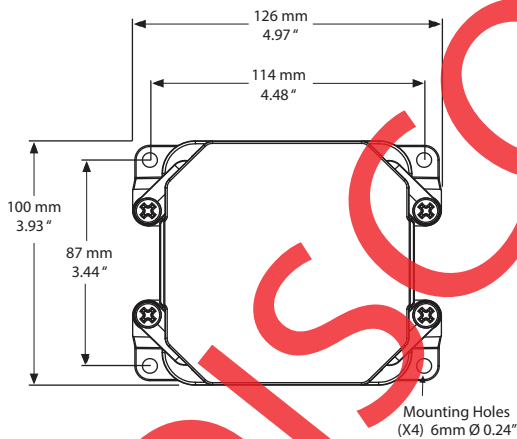


## DIMENSIONS:

ABS Enclosure (A)



PVC Enclosure (C)



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**RoHS**  
COMPLIANT



*Greystone Energy Systems Inc. is one of North America's largest ISO registered manufacturers of HVAC/R sensors and transmitters for Building Automation Management Systems. We have conscientiously established a worldwide reputation as an industry leader by maintaining leading-edge design technology, prompt technical support, and a commitment to on-time deliveries. We take pride in our Quality Management System which is ISO 9001 certified, assuring our customers of consistent product reliability.*

GREYSTONE HAS AN ISO 9001 REGISTERED QUALITY SYSTEM