



# GREYSTONE

ENERGY SYSTEMS INC

## OUTSIDE TEMPERATURE / HUMIDITY TRANSMITTER HTOS Series

The HTOS series uses a 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. A hinged, gasketed weatherproof Polycarbonate enclosure provides easy of installation and protection from the elements.

### SPECIFICATIONS:

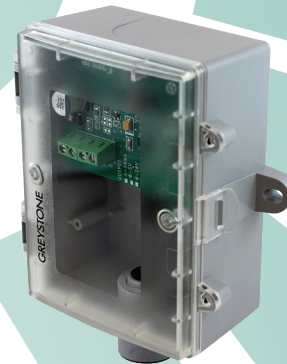
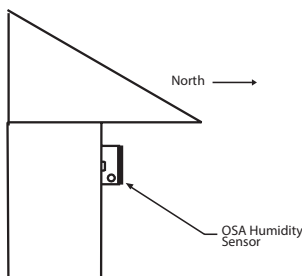
Humidity Sensor Type ..... Thermoset Polymer based capacitive  
Accuracy .....  $\pm 2, 3$ , or 5% RH, (5% to 95% RH)  
Measurement Range ..... 0 to 100% RH  
Hysteresis .....  $\pm 1.5\%$  RH maximum  
Repeatability .....  $\pm 0.5\%$  RH typical  
Linearity .....  $\pm 0.5\%$  RH typical  
Sensor Response Time ..... 15 seconds typical  
Stability .....  $\pm 1\%$  RH typical at 50% RH in 5 yrs.  
Temperature Sensor Type ..... 1000 $\Omega$  Platinum, IEC 751,  
385 Alpha, thin film  
Sensor Accuracy .....  $\pm 0.1\%$  of span  
Operating Temperature .....  $-40^{\circ}$  to  $85^{\circ}\text{C}$  ( $-40^{\circ}$  to  $185^{\circ}\text{F}$ )  
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 & output limited  
Output Signals ..... 4-20 mA, 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)  
Enclosures ..... Grey polycarbonate with gasket,  
UL94-V0, IP65  
117 W x 102 H x 53 D mm (4.6" x 4.0" x 2.1")  
Weight ..... 220g (7.8 oz) including Probe  
Country of Origin ..... Canada

### TYPICAL INSTALLATION:

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

The HTOS should be mounted on an outside North facing wall, under the eaves which will provide protection from direct sunlight and wind.

The HTOS can be mounted directly to buildings wall face using the four provided mounting holes. There is a 0.85" hole for conduit connection on rear of enclosure.



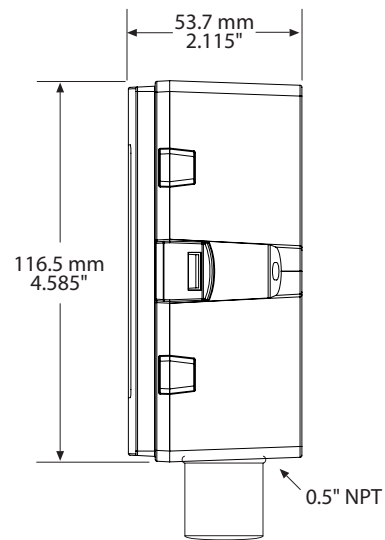
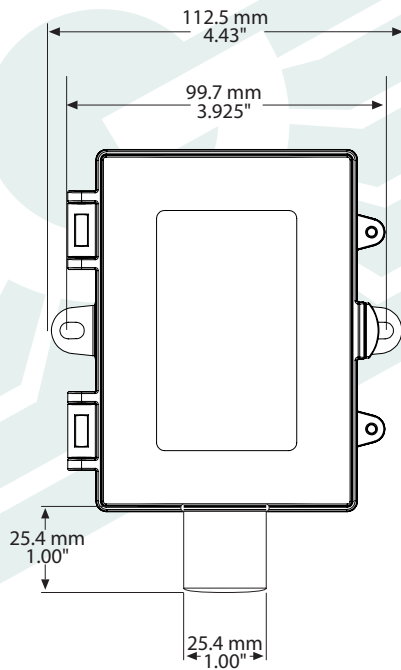
### PART NUMBER SELECTED

### PRODUCT SELECTION INFORMATION:

| MODEL | Product Description                                   |
|-------|---|
| HTOS  | Outside Air - Humidity/Temperature Transmitter Series |
| CODE  | Enclosure   |
| B     | Polycarbonate with hinged and gasketed cover          |
| CODE  | RH Accuracy   |
| 2     | 2 %   |
| 3     | 3 %   |
| 5     | 5 %   |
| CODE  | Temp Sensor   |
| 12    | 1000 $\Omega$ Platinum, IEC 751, 385 Alpha, thin film |
| CODE  | Output Signals (RH and Temp)                          |
| A     | 4 - 20 mA   |
| D     | 0 - 5 Vdc   |
| E     | 0 - 10 Vdc  |
| CODE  | Temperature Span                                      |
| 001   | 0°C - 35°C (32°F - 95°F)                              |
| 002   | 0°C - 50°C (32°F - 122°F)                             |
| 003   | 0°C - 100°C (32°F - 212°F)                            |
| 006   | -50°C - 50°C (-58°F - 122°F)                          |

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

## DIMENSIONS:



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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