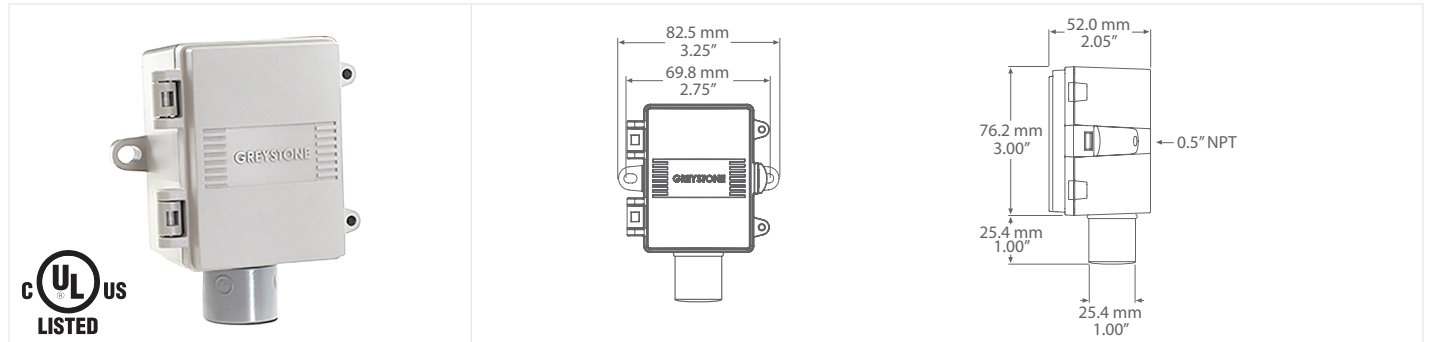




## OUTSIDE HUMIDITY TRANSMITTER



### HSOS SERIES

## PRODUCT DESCRIPTION

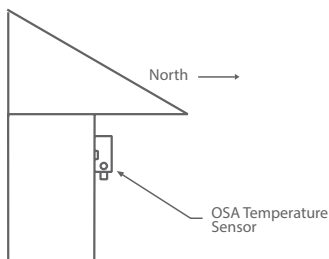
The outside humidity transmitter uses a highly accurate and reliable Thermoset Polymer based capacitance humidity sensor and state-of-the-art digital linearization and temperature compensated circuitry to monitor humidity levels. The sensor is encapsulated in a field replaceable sensor hub for protection from the elements. A weatherproof enclosure that provides ease of installation is provided. An optional integrated temperature sensor is available.

## TYPICAL INSTALLATION

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

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

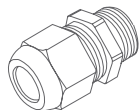
The outside transmitter can be mounted directly to buildings wall face using the provided mounting holes. There is a 0.86 inch hole for conduit connection of the back of the enclosure.



## SPECIFICATIONS

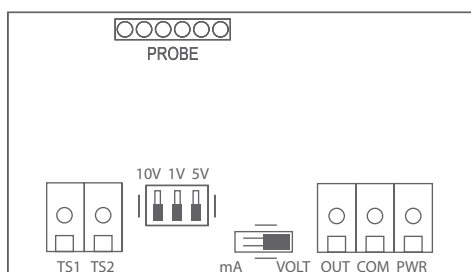
SENSOR TYPE	Thermoset Polymer-based Capacitive Sensor Chip
SENSOR ACCURACY	±2, 3, or 5 %RH (5 to 95 %RH) @ 25°C
MEASUREMENT RANGE	0 to 100 %RH
RESOLUTION	±0.01 %RH
HYSTERESIS	±0.8 %RH @ 25°C (77°F)
RESPONSE TIME	8 seconds
STABILITY	<0.25% RH/year
AMBIENT OPERATING RANGE	-40 to 60°C (-40 to 140°F)
POWER SUPPLY	24 Vac/dc ~ ±10% typical
OUTPUT DRIVE @ 24 VDC	<b>Current:</b> 550Ω max <b>Voltage:</b> 10,000Ω min
OPTIONAL TEMPERATURE SENSOR	<b>Feed Through Sensor:</b> Various RTD's and thermistors available as 2 wire resistance output
ENCLOSURE	<b>A:</b> Polycarbonate, UL94-V0, IP65 (NEMA 4X) <b>E:</b> Same as A, with cable gland fitting
TERMINATION	Screw terminal block (14 to 22 AWG)
PROTECTION CLASS	III
POWER SOURCE UL	24 Vac/dc ±10% typical, SELV (Class 2)
CONSUMPTION	22 mA @ 24 Vdc, 70 mA @ 24 Vac
EU CONFORMITY	CE
CERTIFICATION	UL 60730 & CSA E60730
PURPOSE OF CONTROL	Operating Control
ENCLOSURE	UL Enclosure Type 3R, Raintight
TYPE OF ACTION	Type 1
IMPULSE VOLTAGE	330V
POLLUTION DEGREE	4
COUNTRY OF ORIGIN	Canada

## OPTIONAL ACCESSORIES - INCLUDED WITH E ENCLOSURE OPTION



CABLE GLAND FITTING

## WIRING INFORMATION



### TERMINAL

### FUNCTION

PWR  
COM  
OUT

24 Vac/dc of controller or power supply  
GND or COMMON  
Analog Output

TS1  
TS2

Resistance Output  
Resistance Output

## ORDERING

PRODUCT	HSOS	Outside Humidity Transmitter
ENCLOSURE	A E	Polycarbonate with hinged and gasketed cover Same as A, with cable gland fitting
RH ACCURACY	2 3 5	2% 3% 5%
OPTIONAL TEMPERATURE SENSOR	00 02 05 06 07 08 12 13 14 20 24 59	No Temperature Sensor Option 100Ω Platinum, IEC 751, 385 Alpha, thin film, 3 wire 1801Ω NTC Thermistor, $\pm 0.2^{\circ}\text{C}$ 3000Ω NTC Thermistor, $\pm 0.2^{\circ}\text{C}$ 10,000Ω Type 3, NTC Thermistor, $\pm 0.2^{\circ}\text{C}$ 2.252KΩ NTC Thermistor, $\pm 0.2^{\circ}\text{C}$ 1000Ω Platinum, IEC 751, 385 Alpha, thin film 1000Ω Nickel, Class B, DIN 43760 10,000Ω Type 3, NTC Thermistor, $\pm 0.2^{\circ}\text{C}$ c/w 11K shunt resistor 20,000Ω NTC Thermistor, $\pm 0.2^{\circ}\text{C}$ 10,000Ω Type 2, NTC Thermistor, $\pm 0.2^{\circ}\text{C}$ 10,000Ω 25°C, $\pm 9\%$ , B = 3435 $\pm 1\%$ (25/85)

## PART NUMBER

HSOS

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